Rainier Beach Urban Farm and Wetlands:
Strengthening Diversity for Community Resilience

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Abstract

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This thesis examines the relationship of cultural diversity and public space design in the context of an 8.25-acre site in the Rainier Beach neighborhood of Seattle, Washington. Though existing research directly on this topic is limited, related research from fields such as psychology and urban planning is drawn upon to inform a Design Framework for Cultural Diversity. This framework is applied through the design of Rainier Beach Urban Farm and Wetlands to support a welcoming and culturally-rich environment. The design is organized by three themes–connect, convey and cultivate–that were informed through site and context analyses and interviews with site managers and potential user groups. Just as the health and resiliency of ecosystems are bolstered by biological diversity, this framework and design application aim to enhance the health and resilience of human communities by strengthening cultural diversity.

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1 INTRODUCTION



CULTURAL DIVERSITY + PUBLIC SPACE DESIGN

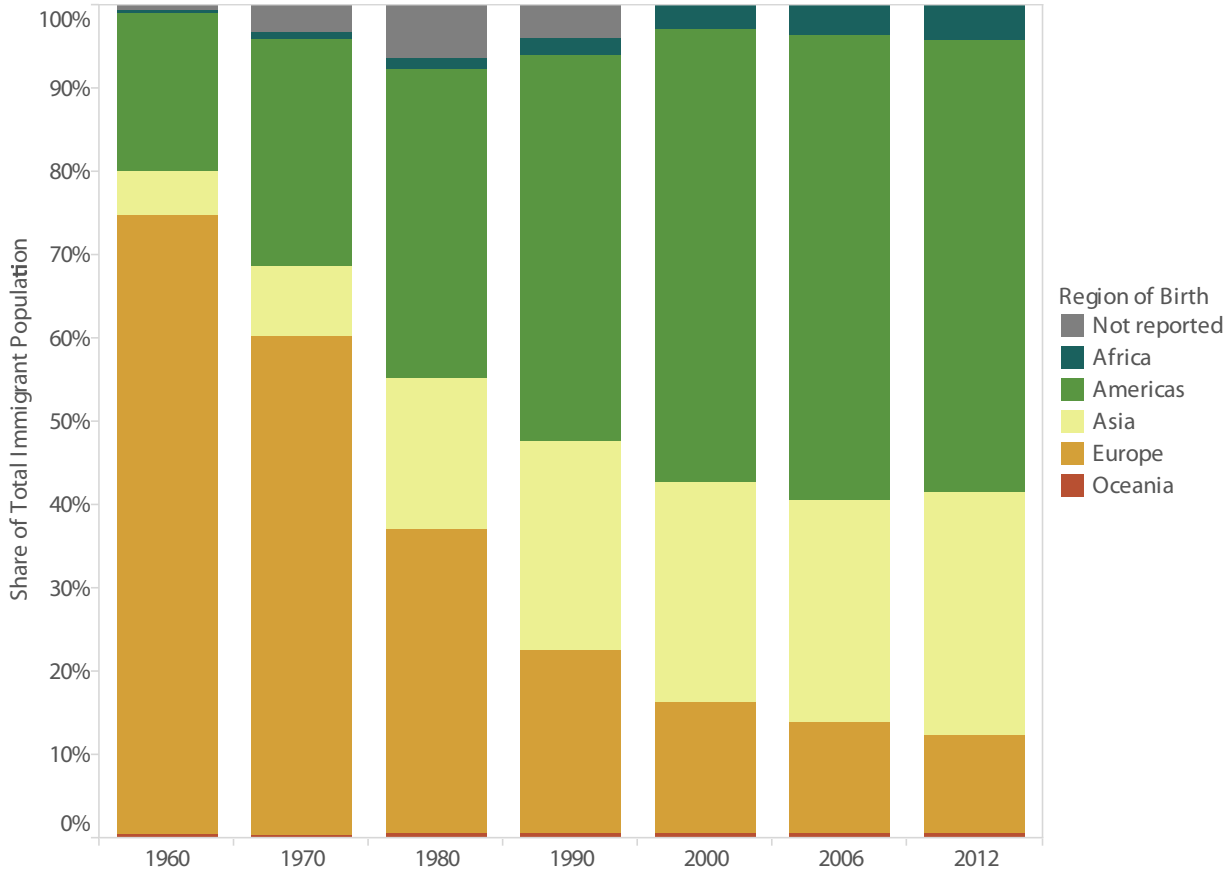
Just as biological diversity supports the vitality of natural systems, cultural diversity is crucial to the vitality of human systems. Anthropologist Wade Davis discusses this cultural diversity as forming an 'ethnosphere' which he defines as being "the sum total of all thoughts and intuitions, myths and beliefs, ideas and inspirations brought into being by the human imagination since the dawn of consciousness" (Davis 2009, 2). With the forces of globalization, the diversity of the 'ethnosphere' is under severe threat. As Davis puts it, "just as the biosphere, the biological matrix of life, is being severely eroded by the destruction of habitat and the resultant loss of plant and animal species, so too is the ethnosphere, only at a far greater rate. ... The most apocalyptic scenario in the realm of biological diversity scarcely approaches what we know to be the most optimistic scenario in the realm of cultural diversity. The key indicator... is language loss" (Davis 2009, 2-3). Approximately half of all world languages currently face extinction, and, when a language becomes extinct, it carries with it knowledge, stories, and artistic imaginings developed by a culture over hundreds or even thousands of years (National Science Foundation 2014).

While global trends reveal such extreme threats to cultural diversity, the trend in the United States, could be seen to be the opposite. Adding to the existing cultural and ethnic diversity among the native born population, the size of the foreign born population in the United States is over four times that of any other country in the world, and accounts for 14.3% of the entire U.S. population (UNDESA 2014). This percentage has been steadily increasing since 1970, when the foreign born population was only 4.8% of the U.S. total (Kandel 2011). During this time period, the

immigrant population itself has also become increasingly diverse, as illustrated in the chart below. This diversity is particularly concentrated in urban areas, where 92.2% of the foreign born population resides (compared with 74.6% of the native born population) (Kandel 2011).

Through most of American history, parks and public space have been conceived of as central to the process of integrating immigrant populations within their new communities. Frederick Law Olmsted (1822-1903), often considered the father of American landscape architecture, believed that a thriving park system was a key feature of any

U.S. IMMIGRANT POPULATION BY WORLD REGION OF BIRTH, 1960-2012



While, in 1960, Europeans composed three quarters of all immigrants arriving in the United States, in 2012, they made up less than 12%. Today, Mexico is the largest contributor of immigrants to the United States, however, significant percentages of immigrants also arrive from East, Southeast, and South Asia as well as other parts of the Americas. Data from the Migration Policy Institute (2014).

democratic society because it allowed people of diverse cultural, social and economic backgrounds to encounter one another in a setting that invites amicable encounters (Low, Taplin, and Scheld 2005). Several theorists have additionally proposed that this ability of public spaces to bring diverse groups of people together is necessary to reducing prejudice and intolerance (Franck and Stevens 2007). This potential is of particular importance in a country long suffering from systemic inequalities, often based on skin color. Today, the average household income of African- and Hispanic- Americans is 58% and 70%, respectively, that of whites. Rather than representing an improvement, these percentages have actually decreased slightly since the American Civil Rights Movement of the '50s and '60s (Infoplease 2014).

However, current political and societal trends may be compromising these historically celebrated conceptions of public space. In *Rethinking Urban Parks*, the authors claim that "in this new century, we are facing a … threat to public space … of patterns of design and management that exclude some people and reduce social and cultural diversity. In some cases this exclusion is the result of a deliberate program to reduce the numbers of undesirables, and in others, it is a by-product of privatization, commercialization, [or] historic preservation" (Low, Taplin, and Scheld 2005, 1). Exclusivity, however, is not the only concern. There is also a history in public space design and management of suppression, rather than celebration, of cultural diversity. As Randy Hester puts it, "parks display the standards of the dominant mores and have often been a means of teaching new immigrants 'how to behave' by reducing deviance, homogenizing the population, and ridding our cities of unwanted subcultures" (Hester 2006, 185). As with exclusivity, this homogenizing quality of public space is sometimes unintentional. Karen Franck and Quentin Stevens argue that this can occur when universal models of 'the public,' or 'the common good' are unquestioningly applied to define community needs. "Such terms suggest a commonality and an homogeneity among citizens … and implicitly (but forcefully) exclude those considered marginal and … reduce difference" (2007, 20).

Returning to the metaphor of biological diversity, spaces designed in this way could be conceived of as public space 'monocultures.'

Just as crop monocultures are more fragile and susceptible to harsh climates and disease, public space monocultures result in communities that are likewise more fragile and susceptible to threats such as gentrification and displacement, conflict, prejudice, inequality, and cultural loss through assimilation.

This thesis presents an alternative design framework to such public space monocultures that draws upon the diverse and dynamic qualities of urban populations to build communities that are more resilient to such threats. This framework aims to foster meaningful public space designs that:

1. increase respect and understanding among people with diverse cultural and ethnic backgrounds; and
2. bolster and enhance the cultural resources and social capital of urban communities.



An example of what could be considered public space 'monocultures.' Standardized furniture and site elements form indistinguishable spaces and accommodate limited types of site use that appeal to an equally limited number of possible user groups. Photograph from lonsdale.govoffice.com (accessed May 2014).



A group of students from a neighborhood school with produce they harvested at Rainier Beach Urban Farm and Wetlands. Photograph from Seattle Tilth (accessed May 2014).

CONCEPT APPLICATION: RAINIER BEACH URBAN FARM AND WETLANDS

The design framework developed in this thesis, through exploration into the relationship between cultural diversity and public space, is applied to the design of a particular site in South Seattle. Rainier Beach Urban Farm and Wetlands (RBUFW) is an 8.25-acre, publicly-owned site, managed by the local nonprofit Seattle Tilth since 2011 (Seattle Parks & Recreation 2014). Seattle Tilth's mission is to "inspire and educate people to safeguard our natural resources while building an equitable and sustainable local food system" (Seattle Tilth 2014). At RBUFW, this mission is serviced by such activities as growing organic produce that is distributed at subsidized rates to families in need and providing environmental education to school groups.

RBUFW is situated in the Rainier Beach neighborhood, one of the most diverse neighborhoods in the city of Seattle, and the entire United States. There is no racial majority, and a third of the population was born abroad (U.S. Census Bureau 2014). These neighborhood characteristics of the site render it well suited for an exploration of the relationship between public space and cultural diversity. Furthermore, the nascent character of the site's current usage creates flexibility for future designs.

METHODS + MEANING

RESEARCH METHODS

The research methods involved in developing this thesis combined field investigations and interviews with a thorough review of related existing literature.

As part of developing RBUFW as a new public amenity, the Seattle Parks Department held a series of public meetings to solicit community input. While these meetings predated my involvement in the project, the meeting notes are available online. I supplemented this information by conducting interviews with meeting attendees. Additional interviews were conducted with Rainier Beach residents, Seattle Tilth staff, Seattle Parks Department staff, Seattle Department of Neighborhood staff and other experts. Interviews with residents were conducted at RBUFW and King Donuts, a popular neighborhood hangout. (A full list of interviews is available in the bibliography). While these resident interviews were limited in number, and didn't provide statistically relevant information, they proved quite valuable in offering qualitative insights into the varying interests and desires of different Rainier Beach populations. Given more time, I believe this thesis could have been strengthened through more such interviews, reaching a wider sample of the community.

In addition to the initial interviews conducted, I also presented a preliminary design to Seattle Tilth staff midway through the thesis process. The feedback from this meeting was very important in steering the final design decisions made, and ensuring that they were well suited to the needs of the site stewards.

Site investigations were conducted through a combination of field observations and GIS analysis. I mapped important site features

using a portable GPS device and combined that data with existing aerial photographs and maps. Other useful neighborhood and site information existed in city documents and reports such as the *Rainier Beach Neighborhood Plan Update*.

The researched-based and theoretical literature that informed this thesis was drawn from a variety of academic and professional fields including urban planning, landscape architecture, psychology, anthropology, and park management. The design created for this project was informed by an even wider range of fields including wetland management and educative design, though this research was typically more cursory.

While very little has been written about the specific topic explored here–the relationship between public space design and cultural diversity–by casting a wide net, I discovered an array of related research that formed the theoretical foundation for this thesis. Such research included studies on environmental perception, park use patterns, and intergroup relations, (each discussed in the following chapter). Though these related inquiries are quite informative to the topic at hand, I believe that more directly related future research would be of great benefit. Suggestions for the direction of this research are provided in the final chapter.

PERSONAL CONNECTION

Before I had chosen a clear theoretical direction with this project, I decided to work with Rainier Beach Urban Farm and Wetlands because I strongly supported the work Seattle Tilth is engaged in there. I wanted the efforts put into my overall thesis project, and design work in particular, to benefit a local community space, and I knew of no better place than RBUFW. Not only is the work being done there inspiring to me, but the fact that it is a new space and still in a transition process, made it ideal for this type of project.

As I learned more about the site, I was inspired by the exceptional diversity and cultural resources of the Rainier Beach neighborhood. Though I considered other approaches, I was ultimately most intrigued by focusing on ways to highlight and celebrate this community resource through my design.





Bottom: A Uyghur family in Kashgar, China who invited me to their home for the celebration of the holiday Eid al-Adha. Top: Traditional Uyghur homes along an alleyway in Kashgar, most of which had been in the same family since the early years of the Silk Road. Since my visit the homes have all been bulldozed and replaced with modern highrise apartments. Photographs by Cayce James (2008).

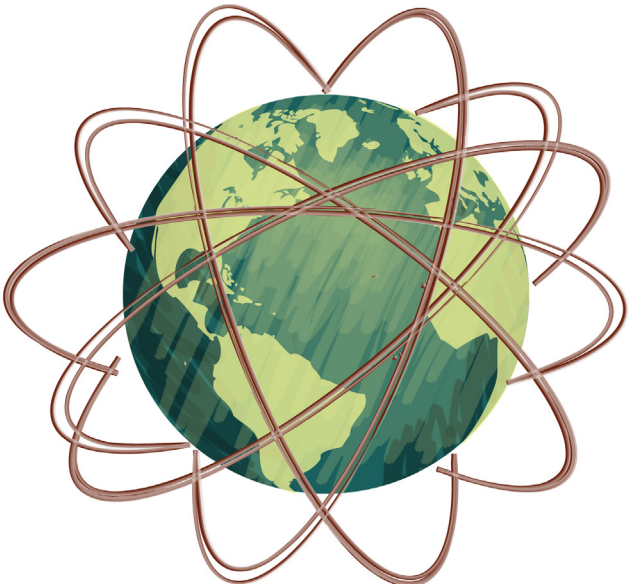
Having lived abroad myself for many years in Asia and the Middle East, I found it somewhat easier to relate to the experiences that the immigrant population in Rainier Beach (a third of the total) might have. I believe this experience also helped me stay more cognizant of the limitations of my own perspectives, and more capable of recognizing when my instincts as a designer might be overly connected to my cultural background. Furthermore, a good portion of my time abroad was spent living and working with ethnic minority communities whose languages and cultures were under very immediate threat. My friends from these communities had often witnessed the culture of their grandparents either be commodified as a tourist attraction, or become all but forgotten as attentions turned to television and mainstream pop culture. Learning about their traditional cultures and seeing these changes take place provided me with a much deeper connection to what is at stake as languages and cultures disappear. This project is part of my attempt to counteract these losses through efforts to support and celebrate the contributions of cultural diversity.

THESIS STRUCTURE

The following chapter begins with an exploration of the relationship between public space design and cultural diversity. It reviews concepts from existing literature and applies those ideas to form the Design Framework for Cultural Diversity. It then presents three precedent studies of public space design in culturally diverse contexts, and explores ways in which the Design Framework relates to these sites. The following chapter introduces Rainier Beach and Rainier Beach Urban Farm and Wetlands in greater depth, looking at historical and existing conditions as well as possibilities for future improvements. Chapter Four then presents a design for RBUFW, applying the concepts and framework developed in earlier chapters. The final chapter concludes with reflections on the lessons learned through this thesis project and suggests areas for future inquiry into the topic.

2 THEORY + PRECEDENTS





Simultaneous trends of globalization and urbanization have caused urban centers, particularly in the global North, to become increasingly diverse. In 2013, 232 million people, or 3.2 percent of the world population, lived abroad. About a fifth of this population resides in the United States, where, as previously noted, international migrants compose 14.3 percent of the nation's total population (UNDESA 2014).

Despite these growing numbers, very little scholarly work has explored how public spaces might be better designed to attract, and be relevant to, a wider diversity of potential users or to facilitate positive interactions between diverse user groups. However, much more work has been produced from social science, management, and planning perspectives. There are three distinct bodies of work from these fields that relate directly to the topic of public space and cultural diversity. The first of these bodies of work examines how ethnic background influences environmental perception. The next investigates variances in patterns of use and accessibility of public space among different groups. The last branch studies how urban environments shape intergroup relations. This chapter explores each of these lines of inquiry, then reviews the small body of literature that has dealt directly with design considerations. Finally, the lessons gleaned from each of these bodies of work are consolidated to form a Design Framework for Cultural Diversity.

ENVIRONMENTAL PERCEPTION

The field of environmental perception investigates questions pertaining to how humans perceive, interpret, and evaluate their environment. This information is key to interpreting and predicting decisions as to whether an environment is safe, navigable, aesthetically pleasing, or welcoming. Researchers have hypothesized that ethnic background can significantly influence environmental perception tendencies in individuals, and studies that have compared racial or ethnic background with other demographic characteristics such as age, gender, and income level have found race or ethnicity to have the greatest predictive power over public space preferences and behaviors (Payne, Mowen, & Orsega-Smith 2002; Sasidharan, Willits, & Godbey 2005).

It is important to point out here that in many of the studies discussed in this chapter, racial or ethnic distinctions have been used as a proxy for cultural orientation. This is due to typically unspoken assumptions that there are cultural similarities across ethnic groups and that ethnicity can be determined from direct observation for research purposes. Such assumptions are problematic, however, and have degraded the quality of some of the work done in this field by relying on skin color as a marker of ethnicity, and in turn, of culture. The literature review that follows pulls the language used to distinguish between different populations (such as ethnicity and race) directly from the sources cited, exposing the assumptions embedded in the work.

NOSTALGIA PREFERENCE

Several studies have examined the relationship between environmental preference and ethnicity or country of origin. Most of these studies have focused on whether

there is a stronger preference for environments that are familiar or exotic by recording subjects' responses to visual stimuli such as photographs or videos (Rishbeth 2010). Different studies have produced opposite conclusions to this question. With research being conducted in laboratory settings, these studies did not account for other sensory inputs such as scent and sound, and also tended to use students as subjects, who might not be representative of wider populations (Rishbeth 2010). Another important shortcoming of most of these studies is their failure to account for the subjects' current place of residence as a critical variable. For someone who has lived in one place their whole life, familiar environments might be taken for granted and a brief interlude to the exotic is more likely to appeal. However, for someone who has migrated abroad, a reference to her home environment might be far more appreciated.

One study that did focus solely on immigrants confirmed a nostalgia preference among that population, which was expressed most strongly among those who had negative reasons for needing to leave their home country (Churchman & Mitrani 1997). Environments or objects can acquire different meanings when someone transitions to a new environment; what was once considered trite or mundane can become cherished. Herng-Dar Bih (1992) discovered this phenomenon among Taiwanese students living in America. He found that objects from home were used to provide a sense of continuity, social cohesion, ritual, and respite from the demands of navigating an unfamiliar culture, however, the same objects might not have been particularly significant to the students back in Taiwan.

Far more conclusive results on preference between the familiar and exotic would be achieved if more studies looked specifically at migrant populations. Once these results are established, an important follow up question for designers to address will be what types of familiar environmental elements tend to provide the most positive psychological response. Design style? Scent? Plantings? Social space? Furthermore, how can diverse community preferences be incorporated within a single place so as to compliment rather than compete with one another?

ETHNIC/RACIAL PREFERENCES

There is a smaller body of environmental preference research that has examined relationships between race or ethnicity and preferred public space attributes. Comparing only the preferences of blacks and whites, Kaplan and Talbot (1988) found that, while both groups appreciate the presence of nature and trees in urban areas, blacks tend to prefer more formal designs and settings with higher levels of maintenance, order, openness, and visibility. Blacks were also found to be less critical of built structures and facilities, which whites are more likely to consider an intrusion on a natural setting.

Paul Gobster (2002), researching a large lakeside park in Chicago, found that whites, Asians and Latinos were all drawn to the natural features of the park, however, they preferred different aspects. Asians most commonly mentioned its scenic beauty, Latinos most enjoyed the lake, while whites most appreciated the trees and vegetation. Blacks were less interested in natural features, and more appreciative of the facilities and park activities. These groups also varied in their interpretation of the park's negative aspects. Asians most desired more parking space and Latinos more restrooms and facilities. Blacks and whites on the other hand, were more concerned about other users than park design and facilities. Blacks reported prejudicial behavior among other users, staff, and police, while whites complained of crowding, user conflicts, and the homeless. Whites were also more than twice as likely than any of the other groups to report feeling unsafe.

USE PATTERNS + ACCESSIBILITY

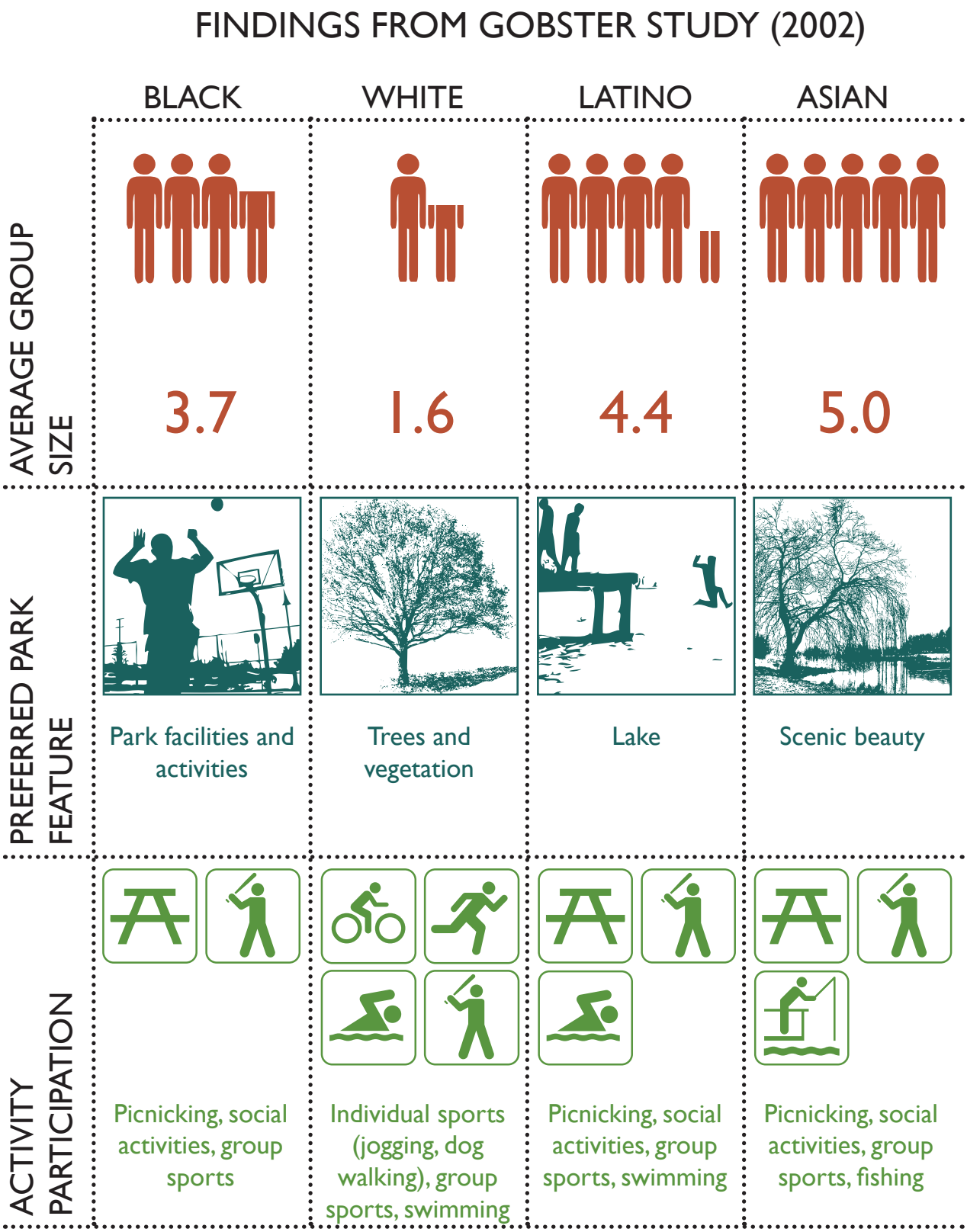
DIFFERENCES IN PARK USE PATTERNS BY RACE AND ETHNICITY

Ethnic and racial background has also been found to correlate with different patterns of use of public space. Earlier studies of this issue tended to describe the recreational patterns of one racial group (typically blacks) or compare the patterns of two or three racial groups (typically blacks and whites and occasionally Latinos) (Craig 1972; Hutchinson 1987; Kaplan & Talbot 1988; Kronus 1971; Washburne 1978). Subsequent inquiries expanded to compare the patterns of several different racial or ethnic groups (Gobster 2002; Loukaitou-Sideris 1995), and more recent studies have considered country of ancestry as well (Sasidharan et al. 2005). While finer grained distinctions might help to resolve some of the shortcomings in the assumption of intra-racial homogeneity, there are still several other complicating variables to consider such as degree of acculturation, geographic location, and individual preference. With future studies, it may be possible, however, to isolate which factors have the greatest predictive power and use that knowledge to make advancements in the research quality of the field.

One of the more well-known investigations of this topic was conducted by Anastasia Loukaitou-Sideris (1995) who compared patterns of use by Hispanics, African-Americans, whites, and Asians in four public parks in Los Angeles. This study combined direct observation with follow up interviews of approximately 300 subjects. Hispanics were found to be "the most enthusiastic users of parks," visiting more frequently than any other group (94). They tended to come to the parks with family groups and participate in stationary, "gregarious" activities such as parties, weddings, and picnics (94). They were also the most likely to appropriate

park space, distinguishing territories through balloons, music, blankets, and streamers, and creating activity spaces with personal equipment like soccer goals. African-Americans were more likely to visit the parks with peers or in parent/child pairings. They participated in group sports more than any other group and reported the sports facilities as their most appreciated park quality or feature. Whites were the most likely to come to the park alone and mostly engaged in "reclusive, self-oriented" uses such as jogging, reading, dog-walking, or sunbathing (95). Elderly whites engaged in group games and parent/child combinations were also common. Asians used the parks the least relative to their population size, and follow up interviews were conducted to investigate the reasons for this. The interviews discovered that, "Chinese perceive the ideal park as an aesthetic element of gorgeous design, 'an outdoor garden filled with colorful flowers, ponds, pavilions, and tea houses for passive enjoyment, sightseeing and relaxation'" (96).

Gobster (2002) conducted a similar study in Lincoln Park, Chicago (mentioned previously), conducting interviews with approximately 900 park users categorized as black, Asian, Latino and white. These categories were subdivided by national/regional roots, but the sample sizes of these subgroups were too small for reliable statistical comparison. Gobster presented similar results to Loukaitou-Sideris in the racial/ethnic patterns of group composition and size. Whites had the lowest average group size at 1.6, while blacks, Latinos, and Asians averaged 3.7, 4.4, and 5.0 respectively and all tended to visit in extended family groups. In terms of activity participation, a core group of activities was discovered among all groups that included walking, swimming and picnicking. As in the Loukaitou-Sideris study, however, minority groups were found more likely to participate in social activities while whites were found more likely to engage in active individual sports like jogging and biking. All groups commonly participated in active group sports, though preferences between sports varied. Whites and Latinos displayed the greatest interest in water activities, primarily swimming, while Asians had greater participation in fishing than other groups. When use patterns were compared amongst the subdivided four racial/ethnic groups, Asians were found to have the most intra-group variance. The patterns of Filipinos, in particular, were unique. Filipinos were most likely to come in large groups and participate in social activities



Visualization of the preference and use patterns findings from Gobster's (2002) study of Lincoln Park in Chicago. Illustration by Cayce James.

such as picnicking and barbecuing. They also shared with Southeast Asians a higher participation in fishing than other subgroups.

Sasidharan et al. (2005) examined a similar topic—comparing the urban recreation patterns of white, African American, Hispanic, Chinese, Japanese, and Korean populations in the U.S.—however, they employed significantly different methodologies. Sasidharan et al. sent out self-administered surveys to random samples of individuals in two metropolitan areas. This method allowed researchers to include information from non park users, but the data was more subject to being compromised by respondent reporting errors. Furthermore, researchers could not report on the interaction between park design and use. Possibly due to these differences in methodology, this study produced some results contradictory to the two studies previously discussed. Sasidharan et al. found social activities to be the most common park use for all six groups studied, and the tendency to visit parks alone was low for all groups. Physical exercise and food related activities were the next most popular activities for all groups, though there were variances in preference between the two. Whites, Hispanics and Koreans were more likely than other groups to participate in physical activity, and African Americans, Koreans, and Hispanics were more likely to participate in food-related activities. Other statistically significant findings were that whites and Hispanics were most likely to participate in land and water activities, and African Americans and Hispanics had the highest levels of participation in team sports. The researchers did not discover significant differences by isolating level of acculturation (measured by language use) as a variable among the four ethnic groups. This last finding, however, contradicts results from earlier studies such as that conducted by Carr and Williams (1993) in which Hispanics with higher levels of acculturation were found to have behavior patterns that aligned closely with whites and varied from Hispanics with low levels of acculturation.

BARRIERS TO PARTICIPATION

Looking specifically at the Seattle context, the Seattle Parks Race and Social Justice Change Team, in partnership with the nonprofit Neighborhood House, conducted an outreach campaign to discover how

Seattle parks might better serve underrepresented communities in the city (Seattle Parks & Recreation 2013). This campaign was spurred by a recognition that, while Seattle has a fairly robust public participation process, conventional participatory methods are not always effective at drawing input from a diverse range of community members. Sharing this concern, Jeff Hou states that "methods and techniques that work for mainstream communities may not have the same efficacy for engaging social groups that do not share the same values or protocols of interaction." He adds that among immigrant communities there are often additional cultural and linguistic barriers to participation (2013, 222). The Race and Social Justice Change Team attempted to overcome some of these barriers by engaging with underrepresented communities in their "back yard" (Seattle Parks & Recreation 2013, 1). Their main findings were that respondents desired an increase in:

1. culturally-relevant Park programs (such as festivals and concerts),
2. affordable Park programs,
3. outreach to underrepresented communities, and
4. diversity and cultural competency among Parks staff (Seattle Parks & Recreation, 2013).

These and other barriers to participation for minority groups have been described in several other research studies conducted outside of the Seattle context as well. Socioeconomic situation and low rates of car ownership in particular are significant barriers to the visitation of regional parks and attractions, as well as to participation in local park programs, as noted above. Other identified barriers include a lack of awareness of recreational opportunities and lack of accessible interpretative and wayfinding information (Morris 2003).

Fear is often an important barrier to minority participation in public space as well. Specific fears include that of racist attack, animals and dogs, muggings, and sexual attack (Madge 1997; Rishbeth 2010).

The interviews conducted with Rainier Beach residents as part of this study uncovered particularly strong fears of outdoor environments among African American respondents (all elder males). The African Americans

interviewed displayed the least interest in spending time in natural environments, and expressed a particular fear of "the woods"– describing it as a place where dangerous animals or people "lurk." While one man comically explained this fear of animals, exclaiming "there's bears in there gonna steal your K.F.C.!" another man took a more serious angle and discussed how their history living in the South led them to fear "the woods." In the South, "the woods" had been the territory of alligators as well as lynch mobs and other racially-motivated predators (Interview with African American patrons at King Donuts 2014). This fear of "the woods" has also been documented by previous researchers who suggest that African Americans may prefer built and open environments because they associate forested areas with acts of discrimination (Virden & Walker 1999).

Fear of dogs is a particularly prevalent concern among East Africans. In East Africa, dogs encountered are often dangerous guard dogs or wild dogs (Interview with Biruk Belay 2014). This immigrant group composes approximately 14% of the population in Rainier Beach (U.S. Census Bureau 2014).

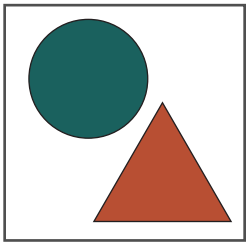
Achieving stronger representations of minority interests in park design and management would help to address many of the above mentioned barriers to participation. However, this last issue of a fear of dogs among East African populations brings up an important point. While the presence of dogs in parks may be a significant barrier to participation among some communities, dog walking is also an important form of outdoor recreation for others. Diverse cultural orientations can be a source of conflicting interests that may be challenging to negotiate. Though not a panacea, better representation of historically underserved populations will help to uncover areas where such conflicts of interest occur. Managers and designers will then be able to work with this knowledge to experiment with new solutions to these challenges.

INTERGROUP RELATIONS

The design of a site may affect the interactions (or lack thereof) between different cultural groups. There is a wide body of theoretical work that has examined the interaction between different cultural and ethnic groups in urban environments and has questioned how urban planning decisions might influence these interactions (Wessel 2009). Some scholars have also looked at these issues at the site scale, but this work tends to be rather abstract in nature (Loukaitou-Sideris 1995).

While the subject is enormously complex, this thesis proposes that cultural transactions between groups or individuals can be placed into four basic categories. By understanding these four basic types of transactions, it is easier to comprehend the possible ways in which site design might influence interactions between different cultural groups. These four distinct types of cultural transactions are as follows:

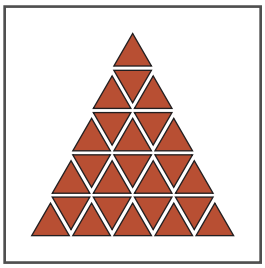
1. Encountering



This type of transaction does not necessarily produce a direct effect on the cultural identities of those involved. It occurs when people from diverse cultural backgrounds come into contact. This contact could range from distant observation to a much more involved interaction. Many theorists believe that "when people encounter others unlike themselves, they grow accustomed to difference, are encouraged to accept it;" additionally, many argue that "differences are a resource for learning," not only about others, but about oneself as well (Franck & Stevens 2007, 19). This belief, however, has been met with various lines of critique. Some theorists argue that contact alone does not

always lead to productive interaction, while others go further and claim that, in some contexts, diversity can breed social isolation (Wessel 2009). The conditions under which contact occurs are important toward producing a positive outcome. In 1954, psychologist Gordon Allport suggested that when diverse individuals interact, prejudices are more likely to be reduced in situations where everyone has equal status and is in pursuit of common goals. He added that "the effect is greatly enhanced if this contact is sanctioned by institutional support (i.e. by law, custom or local atmosphere)" (Allport 1954, 281). Subsequent research has supported Allport's hypothesis (Wessel 2009).

2. Fortifying



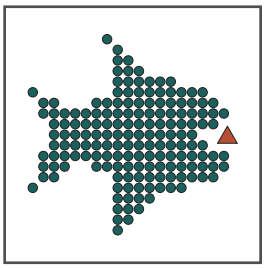
The second type occurs among people who share a common cultural heritage. Through their interaction, this common cultural heritage can be enriched, reinforced, or passed on to younger generations. In this type of interaction, shared linguistic and cultural background can facilitate both depth and ease of communication. For migrant populations, it can provide a comforting sense of familiarity and continuity (Manzo 2013).

3. Constructing



This type of transaction results in novel cultural identities, practices, or values, and occurs among individuals with diverse backgrounds who share a common goal or physical space. Rachel Miller (2013) discusses this phenomenon in the context of West African immigrants living in the area just north of Rainier Beach, observing the ability of migrant populations to adapt to their new homes by forging fluid, hybrid identities that draw from multiple wells of cultural influence. Another contemporary urban theorist, Adam Prince, posits that community gardens are particularly potent spaces for engendering "emergent transcultural forms that are allied through systems of food-related values, knowledges, and practices" (2013, 245).

4. Assimilating



The final type of transaction refers to instances in which one culture (typically the dominant or majority culture) supplants the influence of another. This process often occurs over a long time frame, spanning generations, rather than through short-term interactions. However, it can also be forced or accelerated in political environments where one cultural or ethnic group tries to erase the influences of another. The United States has a very long history of these practices from the nineteenth century when Native American children were forced to attend English only boarding schools and relinquish every aspect of their cultural identity including their name, to contemporary political movements to ban bilingual education and enforce English as the official language (Reyhner 2001).

In considering how the above types of transactions might affect the wider social, cultural, and political fabric of a community, two key questions arise. First, will the result be increased intergroup tolerance or respect, or, on the contrary, will it be the maintenance of or an increase in prejudice or conflict? Second, will the cultural transaction add to or subtract from the cultural resources of a community?

In terms of the first question, constructing is most likely to create positive intergroup relationships through the creation of hybrid identities, while fortifying and encountering are situationally dependent. Assimilation processes might reduce incidents of prejudice or conflict while not necessarily increasing tolerance for difference. Regarding the second question, encountering once more is situational, fortifying and constructing both help to strengthen or increase the cultural resources of a community, while assimilating results in a loss.

DESIGN + ETHNIC DIVERSITY

To date, Clare Rishbeth (2004; 2010) from the University of Sheffield has produced the most extensive exploration of how landscape design relates to ethnic diversity. She identifies three main methods under which ethnic identity has been articulated in the landscape, drawing on case studies primarily from the UK. These are "symbolic reference," "experiential reference," and "facility provision" (2010).

SYMBOLIC REFERENCE

Rishbeth (2010) defines this approach as "one where designers create landscapes or landscape elements that symbolize in a simplistic form another country or world region. It is the most recognizable response to an ethnic minority presence since it relies on an identifiable stereotype… Images from one place are transposed to a new location, often exaggerated or idealized" (2010, 357). She offers Chinatowns as a prime example of this method. Here, traditional Chinese design motifs are imported as symbolic references, however, the contextual application methods of these design motifs are left behind. The result might be a pagoda-style telephone booth or temple-style security gate, combining to form an overall landscape that is very far removed from a typical streetscape in China.

Rishbeth believes that symbolic references have "a double edge in their power to exclude as well as include, contain as well as give space, stereotype as well as celebrate" (2004, 314). Additionally, they can "inadvertently perpetuate stereotypes and emphasize difference to the majority culture at the expense of difference within the minority culture" (2004, 315). Another potentially problematic consideration is that symbols

might also "visually re-enforce a sense of conflict" by exaggerating difference (2010, 359).

EXPERIENTIAL REFERENCE

This approach takes a more holistic and experiential approach to cultural representation in the landscape, and is thus more open to interpretation. Experiential reference can be achieved through measures such as design style and planting palettes. Rishbeth states that "even small groups of plants can evoke a connection to countries through sight, touch and, importantly, scent. … A landform, a planting mix or even a particular density of woodland can provide a trigger for memories" (2010, 360).

FACILITY PROVISION

The final approach can be understood as a more grassroots approach to the articulation of cultural difference and is exemplified by allotment gardens, known in Seattle as P-Patches. In such gardens, immigrants have the opportunity to "nurture a small plot of land or be involved in artwork, … to take control, to make their own decisions and to contribute to their new community. These activities can aid the process of settlement and contribute to a sense of well-being" (2010, 362). Rishbeth argues that, by not defining particular areas for ethnic communities, it is the most inclusive approach of the three.



Public phones in Boston's Chinatown (left) and in Beijing (right) demonstrate how the symbolic reference style of design typically used in Chinatowns tends to reference cultural stereotypes rather than a particular cultural landscape. Photographs from prideinphotos.com (left), and otrwjam.wordpress.com (right), (accessed May 2014).

DESIGN FRAMEWORK FOR CULTURAL DIVERSITY

Given the dearth of existing research on this topic and limited scope of this thesis, the following guidelines should be considered as more of a hypothesis than a conclusion. Derived from the related research reviewed in this chapter, they offer a framework that can help guide planners, designers and public space managers.

1. Create flexible environments.

In *Loose Space*, Frank and Stevens (2007) discuss the importance of flexibility in honoring urban diversity. They explain, "through the diversity of actions and actors it invites, loose space nurtures particularity in the urban public realm, sustaining local practices and allowing the identity of place and culture to flourish." By contrast, design and management decisions "intended to increase order in public space, reduce the diversity of activities and occupants" (20). Flexible space can accommodate a wide variety of activities, and is thus important for a community with diverse interests and needs. Furthermore, migration patterns and community needs and identities are continually shifting–flexibility allows spaces to evolve to reflect these changes. To be successful, however, it is important that flexible spaces retain a sense of uniqueness, definition, and character.

2. Allow for community participation in shaping the landscape.

It is very difficult for a designer to represent a community's cultural identities with a competence to match that of the community themselves. Community participation in the formation of public space should start from the very beginning phases of the design process with efforts to solicit input from underrepresented populations in a linguistically and culturally sensitive manner. Once constructed, management and staff teams should continue to seek representation

from these populations. The community can also be invited to help shape the landscape through participation in art projects, gardening, and other activities. It is important that this participation continue throughout the life of a place, allowing it to remain relevant and meaningful to the community as it evolves over time.

Community participation offers excellent opportunities for both "fortifying" and "constructing" cultural transactions, as defined above. Groups who share a common cultural background can bolster their identities through a shared project that celebrates their identity, such as painting a mural or stewarding a garden of culturally-meaningful plant varieties. Returning to Allport's (1954) theories, cooperative participation in place-making projects creates a supportive environment for diverse groups to interact as well. Through these activities, such groups can begin to construct new shared cultural identities, rooted in place.

3. Facilitate opportunities for positive interpersonal interactions.

Public spaces should support both "fortifying" transactions among those with a shared identity and "encountering" and "constructing" transactions among diverse groups. The design of a space can facilitate such opportunities by providing culturally appropriate spaces for people to gather and socialize.

More research is needed to understand how this can best be accomplished. This research could shed light on what typologies of social space best support "fortifying" transactions among different cultural groups. A perhaps more challenging question, however, would be what characteristics of a space make it more supportive of positive interactions between diverse groups. Having several groups in close proximity does not in and of itself necessarily facilitate positive interaction, and, at times, it can even lead to dispute and conflict, especially of a territorial nature. A combination of design explorations and post-occupancy evaluations could be used to better understand both how to minimize conflicts and encourage productive "encountering" and "constructing" transactions.

Management is as important in facilitating positive interactions as design, if not more. Organized events, festivals, and programs have been found to be successful in the past

at drawing a wider diversity of users to a site and creating a supportive environment for positive interactions (Rishbeth 2010).

4. Develop a diverse and evocative plant and material palette.

A cohesive yet diverse and evocative plant and material palette can be used to create distinction between different areas within a site, and lend interest to the site as a whole. Selecting plants and materials that originate from different areas of the world can also give sites a special meaning for immigrant populations. It produces the possibility of referencing natural environments in their homelands and thus creating threads of familiarity that can help connect immigrants to the natural environments of their new homes. Scent can be very powerful conduit to memory, therefore fragrant and flowering plants can be particularly evocative.

5. Use visual rather than linguistic communication.

While translation can help to allow linguistically diverse communities to access wayfinding and interpretive information, it may be very difficult to include every language needed, and impossible to predict future trends. Visual communication techniques allow the information presented to be accessible to most everyone regardless of their native language or literacy level.

6. Incorporate a diversity of environments, activities and gathering spaces.

Ideally, the diverse range of community needs will be studied as part of the design process, and the constructed result will reflect those needs. The more diverse the array of environments and spaces available on a site, the more likely it is to appeal to wide variety of potential user groups both in the immediate and distant future.

7. Facilitate connection between people and place.

In a culturally diverse neighborhood, the shared physical space might be the strongest possible source of connection between people. Therefore, enhancing the connection between people and the place where they live can also mean building a stronger sense of community. Furthermore, for recent immigrant populations, developing a connection to their new environment can help to create a comforting sense of belonging.

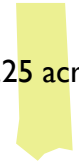

Design Framework for Cultural Diversity
Develop a diverse and evocative plant and material palette
Use visual rather than linguistic communication
Incorporate a diversity of environments, activities and gathering spacess
Facilitate connection between people and place
Create flexible environments
Allow for community participation in shaping the landscape
Facilitate opportunities for positive interpersonal interactions

PRECEDENTS

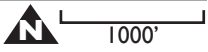
This section explores how the design and management practices of three different public parks have responded to cultural diversity and applied the Design Framework set forth in the preceding section. These parks were chosen for their multicultural nature and, in some cases, for programming similarities to RBUFW (i.e. urban gardening, ecological restoration, environmental education, etc). The parks studied are: Bradner Gardens in Seattle, WA; Superkilen in Copenhagen, Denmark; and Troy Gardens in Madison, WI. Basic information about each park and the demographics of its surrounding neighborhood are provided in the chart on the right. This section first provides a brief description of each park then examines each park in relation to the Design Framework for Cultural Diversity.

BRADNER GARDENS

Bradner Gardens is an eclectic neighborhood park located atop a hill in central Seattle. Originally purchased by the city in 1971, then developed as a community allotment garden in 1987, the site was almost sold off again in 1994 to market-rate housing developers interested in the property's stunning views of the Seattle skyline. However, the community banded together to form Friends of Bradner Gardens and lobbied the city to protect the park. When these initial efforts failed, the group took on a more comprehensive effort to protect park land across Seattle. Working with other activists, they created a "Protect Our Parks" initiative which successfully became a city ordinance in 1997 stating that park land could not be sold for nonpark uses without being "replaced with like kind in the same neighborhood" (Hou, Johnson, and Lawson 2009, 111).

NAME	**RBUFW** 1	**Bradner Gardens** 2	**Superkilen** 3	**Troy Gardens** 4
LOCATION	Seattle, WA	Seattle, WA	Copenhagen, DK	Madison, WI
SIZE 5	 8.25 acres	 2.1 acres	 8.65 acres	 31 acres
CITY POPULATION 6	635,000	635,000	560,000	240,000
NEIGHBORHOOD DEMOGRAPHICS 7	36% Black 26% Asian 24% White 9% Latino 6% Other 34% Foreign born	54% White 19% Asian 16% Black 7% Latino 5% Other 21% Foreign born	28.3% Immigrants or their descendents	69% White 17% Black 7% Latino 6% Asian 4.5% Foreign born
YEAR ESTABLISHED	2011	1987	2012	2001
MANAGED BY	Seattle Tilth and Friends of Rainier Beach Urban Farm and Wetlands	Friends of Bradner Gardens Park in cooperation with Seattle Dept of Parks and Recreation	City of Copenhagen	Community Groundworks (formerly Friends of Troy Gardens)
OWNED BY	Seattle Dept of Parks and Recreation	Seattle Dept of Parks and Recreation	City of Copenhagen	Madison Area Community Land Trust and City of Madison

1 All facts in column from Seattle Tilth 2014 unless otherwise noted.
2 All facts in column from Hou, Johnson, and Lawson 2009 unless otherwise noted.
3 All facts in column from ArchDaily 2014 unless otherwise noted.
4 All facts in column from Community GroundWorks 2014 unless otherwise noted.
5 Areas calculated by author based on Google Earth imagery.
6 All statistics in row from google.com.
7 American statistics in row from "Social Explorer" 2014. Danish statistics from Wikipedia 2014.





View of park and city skyline from southeast entrance. The lawn area doubles as a demonstration of sustainable lawn care practices and a popular community gathering space. Photograph by Cayce James (2011).

After successfully preserving the property for public use, Barker Landscape Architects began working with the community to develop a master plan for the site. Many of the existing gardeners were Mein immigrants from Laos, and public meetings were translated for this population. Over the next five years, the site was developed incrementally through a collaborative effort from community members, artists, professionals, and students from the University of Washington's Neighborhood Design/Build Studio. Improvements include a leaf-shaped central pavilion, a community building and public restroom, a basketball court, a children's play area, entrance arbors, a pond, and wheelchair accessible paths. Additionally, the original 39 garden plots were expanded to 61 and supplemented with a children's garden, edible and ornamental demonstration gardens, and a native plant area. Though completed by different groups at different times, the various park elements maintain a cohesive appearance through a common language of construction materials and techniques. In addition to site structures, art works created by local artists, residents, and youth are found throughout the site and serve as a unifying element, while also lending a unique

and inviting character to Bradner Gardens (Hou, Johnson, and Lawson 2009).

The site is managed and maintained by volunteers and partner organizations including the Washington Native Plant Society, WSU King County Extension Master Gardener program, the Seattle P-Patch Program, the Seattle Tilth Association, and the Master Urban Gardeners. These organizations maintain the park's demonstration gardens and provide educational programming such as workshops (Hou, Johnson, and Lawson 2009).

The park becomes particularly active during organized community events such as garden concerts, plant sales, and holiday-themed parties. These events help bring community members together while also bolstering community investment in the park. However, organizers sometimes struggle to outreach to non-English speaking community members to involve them in these events (Hou, Johnson, and Lawson 2009).

Overall, Bradner Gardens is a prime example of how community participation and involvement in the creation of public space can result in a highly unique and vibrant place. However, there are very few indicators in the park's appearance or programming of the multicultural makeup of the gardeners or surrounding neighborhood. Perhaps a more focused effort to reach out to non-traditional



Leaf-shaped central pavilion serves as the central gathering and event space for Bradner Gardens. Photograph by Cayce James (2011).



Above fountain constructed of Moroccan tiles is an example of the many objects from around the world that can be found in Superkilen park. Photograph from www.baunetz.de (accessed May 2014).

park users in event planning, further development efforts, and park management could help to remedy this.

SUPERKILEN

Just north of central Copenhagen lies the one-kilometer long Superkilen park, set within the Nørrebro neighborhood. Nørrebro is known as one of Copenhagen's most diverse neighborhoods, home to over 60 different nationalities. The vision for Superkilen was to create a unifying space for the neighborhood's residents that paid homage to their multicultural origins ("Superkilen Celebrates Diversity in Copenhagen" 2013).

A multidisciplinary team of architects, landscape architects, and artists (BIG, Topotek1 and SUPERFLEX) saw the project through from concept to construction. Local residents were also highly involved in the design process. After providing input on the overall design concept, teams of residents travelled across the globe following a particular story or memory accompanied by design team

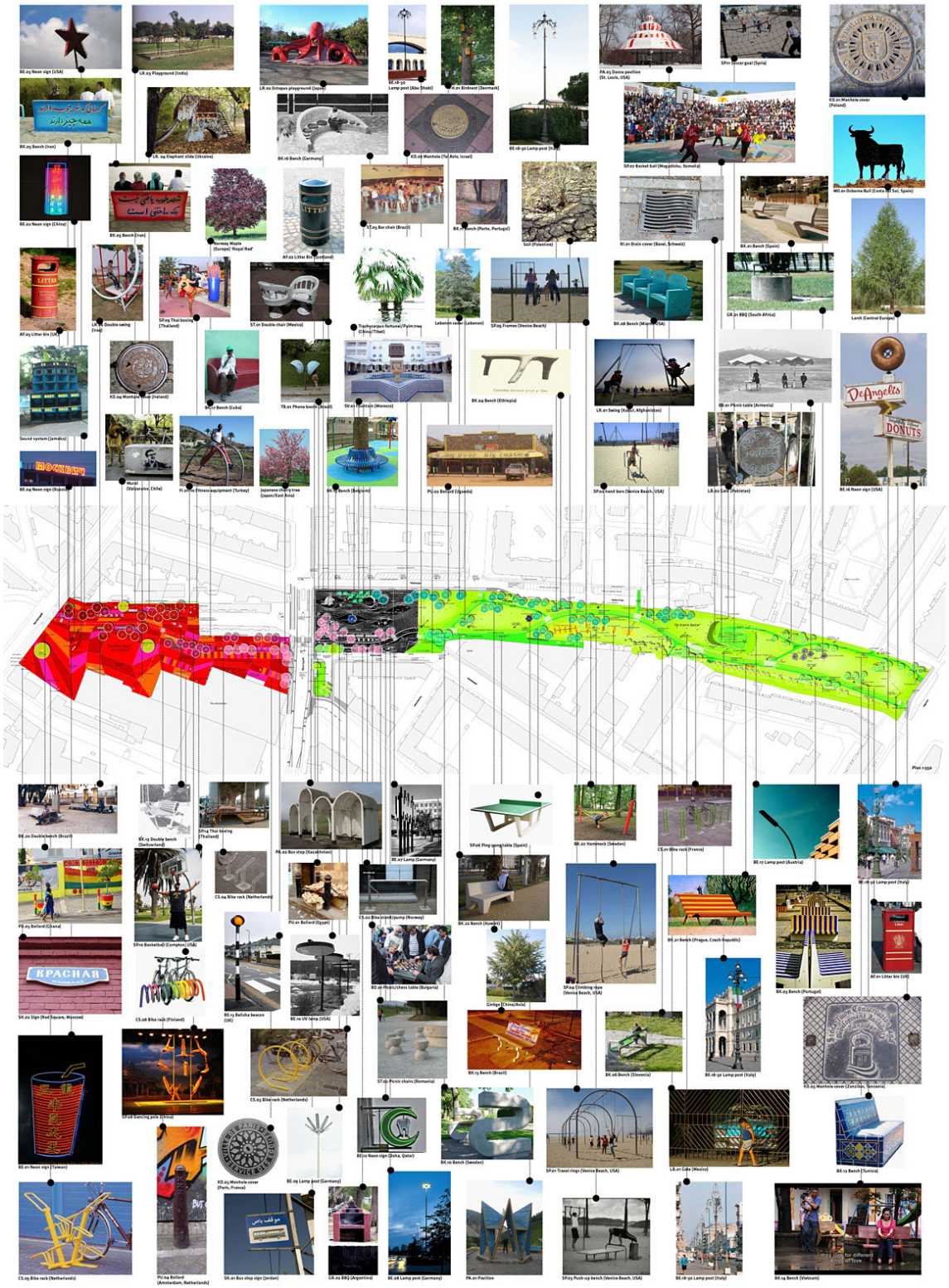


Diagram of Superkilen's design displays the distinct Red Square, Black Market, and Green Park zones with images of the site elements found throughout each zone. Diagram from ArchDaily (accessed May 2014).

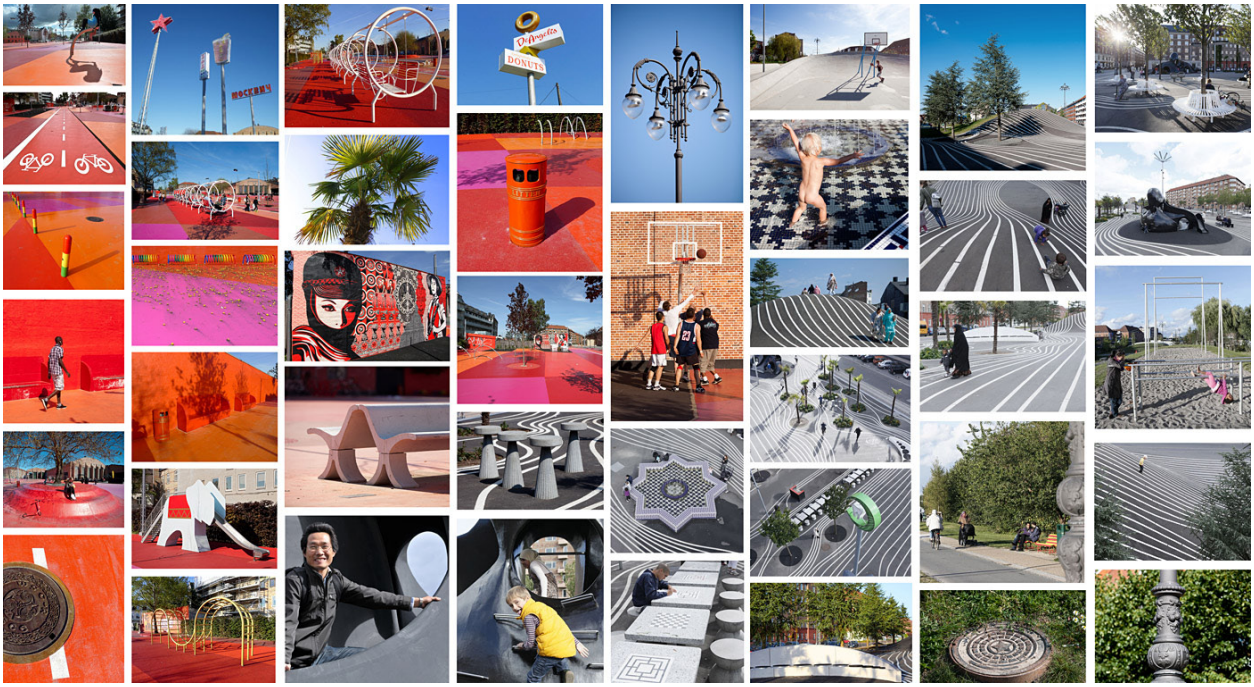


Image collage of Superkilen highlighting site elements imported from around the world. Collage from bustler.net (accessed May 2014).

members. Residents then selected meaningful objects related to their story or memory to either be transported back to Superkilen or recreated as exact replicas within the park. These objects range from a neon dental sign from Qatar, to Thai boxing rings, to an Israeli manhole cover, to a large octupus-shaped play structure from Japan. Each object was placed in the park accompanied by a stainless steel sign describing its meaning, in both Danish and the language of its origin country ("Superkilen Celebrates Diversity in Copenhagen" 2013; ArchDaily 2014).

This highly eclectic collection of objects is held together through a strong design framework based on three unmistakably distinct park zones: the Red Square, the Black Market, and the Green Park (ArchDaily 2014).

The Red Square is envisioned as an outdoor extension of the sports and cultural activities that occur in the adjacent Nørrebro Hall. The ground is blanketed in a patchwork of vibrant shades of red that extend vertically onto the façades of adjacent buildings. Within the square, residents can meet each other through physical activities and games. A flexible central area of the square accommodates a range of different activities from sports games, to movie screenings, to markets,

to winter ice skating. The Black Market is conceived of as an 'urban living room' complete with a central fountain, benches, gathering areas, barbecues, children's play areas and board game tables, held together by white lines painted on the surface that flow around the perimeter of each object. The Green Park and its soft rolling hills is a popular spot for children, young people and families. Most active recreation facilities are located here, from a basketball court to a line dancing pavilion from Texas. Locals also take advantage of the lawn here for sunbathing and picnics (ArchDaily 2014).

In many ways, Superkilen could be viewed as what Clare Rishbeth terms a "symbolic reference" approach to multicultural design (2010, 357). Earlier, this chapter explored her criticisms of this type of approach as relying on and even exaggerating stereotypes, and "visually re-enforc[ing] a sense of conflict" when different cultural design styles are juxtaposed (2010, 359). However, Superkilen appears to have avoided these potential pitfalls in a few important ways. First, the powerful design framework of the three different zones lends cohesion to the otherwise multifarious array of site furniture and objects. Second, it is critical to the success of the design that



Imported tall neon signs serve as a central landmark of the Red Square. Photograph from afasiaarq.blogspot.com (accessed May 2014).



Local school children show off their garlic harvest as they learn valuable knowledge and skills working at Troy Gardens. Photograph from northsidemadison.org (accessed May 2014).

the objects were chosen because of their personal meaning to residents of Nørrebro, and that these meanings are interpreted for visitors to the site. It is because of this, that the objects become conduits of memory and meaning rather than an outsider's stereotyped notion of a culture.

One possible shortcoming of the design process employed in the creation of Superkilen is the lack of flexibility over time. As the neighborhood demographics evolve with time, the park will likely remain static and the objects will become relics that are possibly no longer relevant to the cultural interests or identities or the community. However, this is a challenge that faces most design projects within the built environment. Overall, Superkilen is perhaps the richest and most creative example of multicultural design existing today.

TROY GARDENS

As with Bradner Gardens, Troy Gardens was born out of a grassroots community effort to protect public land from being sold to private interests. Situated in the north side of Wisconsin's state capital, the 31-acre site became the city's first urban farm when it

was successfully established in 2001 (Salinger 2004).

Today, Troy Gardens is a hub of community activity with a five-acre community supported agriculture (CSA) farm, over 300 community garden plots, a mixed income co-housing community, a native prairie restoration area, an ornamental prairie garden, an edible woodland, a kids' garden, a Hmong herb garden, and several more amenities. An interpretive trail winds between these different areas, allowing visitors to learn about plants, wildlife, natural systems and food production as they traverse the site. Community GroundWorks, the site stewards, also produces educational materials related to the site for visitors and school groups. As is true for RBUFW, Troy Gardens is primarily maintained by volunteers. Therefore, the natural areas and edible woodland were designed to mimic natural plant communities and require minimal maintenance once established (Community GroundWorks 2014, ZDA–Ziegler Design Associates 2010).

Troy Gardens offers a wide variety of educational programming to the community. A



Interpretive kiosk in the Troy Gardens prairie restoration area serves as a landmark along the trail while providing visitors with educational information. Photograph form northsidemadison.org (accessed May 2104).



A colorful mosaic welcomes children to the kids' garden within Troy Gardens. Photograph from learngrowconnect.org (accessed May 2014).

popular hub for this activity is within the kid's garden, where children not only learn about where food comes from and how plants grow, they also learn responsibility by caring for their own vegetables to bring back to their families. Older youth and young adults can partake in the Farm and Field or internship programs where they learn sustainable agriculture and restoration skills and participate in educational field trips. Adults are also able to benefit from the educational opportunities at Troy Gardens through tours and workshops ranging from Hmong basket weaving to nature photography (Salinger 2004; ZDA–Ziegler Design Associates 2010).

With over half of the plots in the community garden farmed by Hmong families (Salinger 2004), the Hmong herb garden serves as a symbolic appreciation of the population's contributions to the site and of their culture while also fulfilling the practical need to provide access to traditional Hmong herbs. It seems, however, that this appreciation could also be integrated into other areas of the site and program offerings. In particular, the interpretive and educational information offered could reach more of the community if translated into the Hmong language.

There also seems to be a current missed opportunity to provide more gathering areas within the central part of the site. Currently,

a boulder outcrop and grotto constructed within the prairie is the primary gathering area on site. While it serves as a popular resting spot for visitors and tour groups walking on the interpretive trail, it is far from the main farm and community garden areas where most of the work activity occurs. A central gathering area in these portions of the site, as is found in Bradner Gardens, might increase opportunities for those who work on site to meet and form a stronger community bond.

While there may still be some room for improvement, Troy Gardens has been very successful overall in providing needed access to healthy food within the community and creating educational opportunities for youth and adults alike who, in the urban context, might not otherwise have the experience of growing their own food or learning about native prairies or even being in a natural setting.

SUMMARY

To summarize the lessons learned from the three public spaces explored in this section, the chart on the following page highlights the unique approach each space has taken in addressing the guidelines from the Design Framework for Cultural Diversity. The approach of Bradner Gardens is particularly strong in terms of community involvement, organized activities, and the use of art, and Troy Gardens is strongest in terms of the rich diversity of natural environments combined in one site. Superkilen, on the other hand, is distinct in its use of overt multicultural symbolism. In their different ways, each of these three spaces offer valuable lessons for the design of community spaces, particularly in a multicultural context.

	BRADNER GARDENS	SUPERKILEN	TROY GARDENS
1. Create flexible environments	Simple construction techniques and materials allow for seamless future additions	Spaces designed to accommodate different activities at different times	Individual garden plots are flexible to accommodate the needs of different gardeners
2. Allow for community participation in shaping the landscape	Sculptures and artwork by local artists, youth and volunteers found throughout site	Neighborhood residents chose objects from around the world with personal meanings to be placed on site	Hmong gardeners collectively care for a Hmong herb garden which is open to all site visitors
3. Facilitate opportunities for positive interpersonal interactions	Sheltered central gathering area and organized community events encourage community interaction	Black market conceived of as 'urban living room' where people can gather and meet by the fountain, benches, play area, barbecues, or game boards	Volunteer parties, workshops, and other events regularly bring community members together on site
4. Develop a diverse and evocative plant and material palette	Several community organizations steward different parts of the site, creating distinct native, edible, and ornamental planting areas	Site elements from sewer caps to benches to trash cans to palm trees are conduits to other parts of the world	Diverse assortment of plant communities can be found within the many different sections of the site
5. Use visual rather than linguistic communication	Artwork provides visual artistic interpretation of the site	Tall neon signs and brightly painted pavement help orient visitors and provide visual wayfinding information	Though only in English, interpretive signage relies more heavily on imagery than words
6. Incorporate a diversity of environments, activities and gathering spaces	Variety of site features including basketball court, playground, and garden plots activates site and increases safety	Wide variety of activities, environments, and gathering areas are offered through three distinct zones each with their own distinct subsections	Rich diversity of agricultural and natural areas complements wide variety of site programs
7. Facilitate connection between people and place	Views of city skyline provide orientation and connection to site surroundings	Uniqueness of park imbues surrounding neighborhood with a distinct character and defines it as a place welcoming of difference	Restored prairie and ornamental prairie garden reconnect visitors to the native vegetation and landscape of the region

Chart explores how each park described in this section approaches the different guidelines of the Design Framework for Cultural Diversity.

3 SITE + CONTEXT



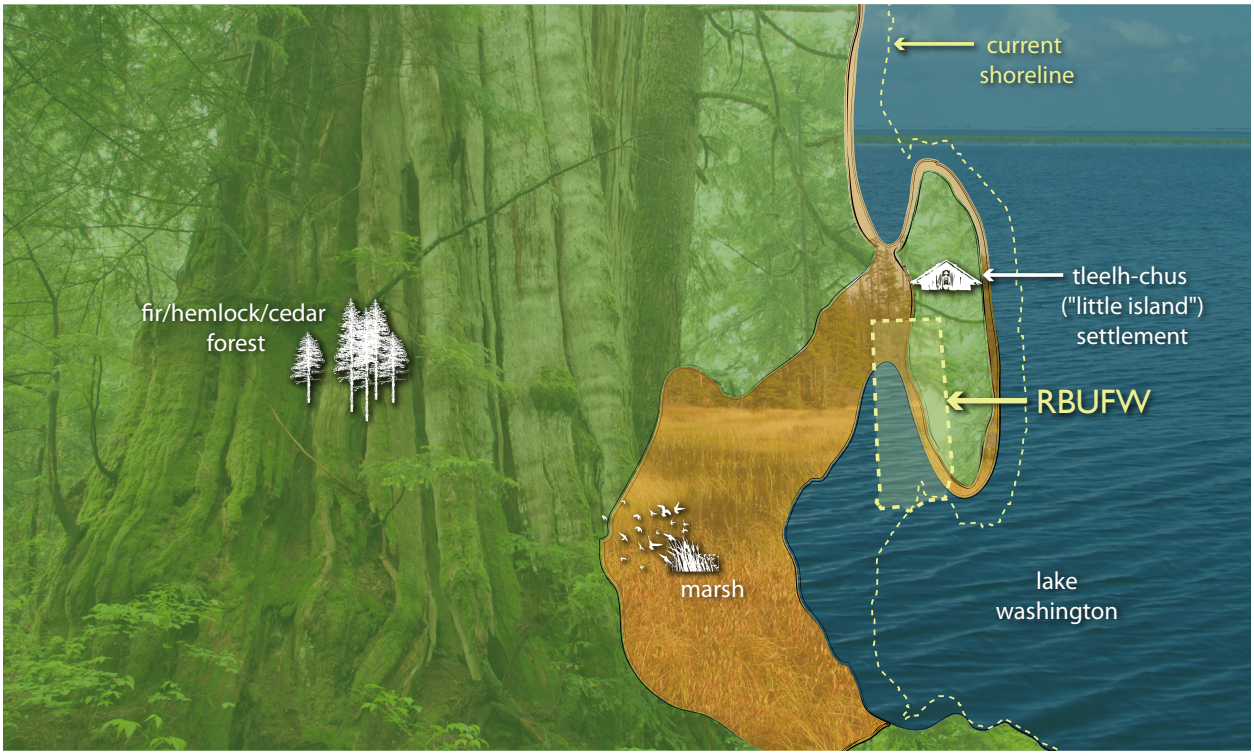
RAINIER BEACH NEIGHBORHOOD

Before 1917, Rainier Beach Urban Farm and Wetlands (RBUFW) lay below the waters of Lake Washington. The higher land just to the east formed Tleelh-chus or 'Little Island,' later named Pritchard Island. Before the arrival of European settlers, the island hosted a village belonging to the Xacuabš (Lake People) of the Duwamish tribe who had lived along the shores of Lake Washington since 8,000 BC. The island was at the base of a trail that led to Elliot Bay and present-day downtown Seattle (Wilma 2001).

The first Euro Americans to settle in the area were the Dunlap family who arrived in the Seattle area in 1869. They built a log house near where the South Shore school currently sits and converted the Native American trail into a corral for farmers bringing their livestock to Seattle. This trail would later become a streetcar track and, later still, modern-day Rainier Ave South (Wilma 2001).

Other pioneers began to settle in the area, but it wasn't until the streetcar line from Seattle was extended to Rainier Beach in 1894 that development really took off. With the new rail line, the trip to Seattle that used to take a whole day now only took two hours. The streetcar continued to connect Rainier Beach to the central city for 43 years until it ceased operation in 1937 (Wilma 2001).

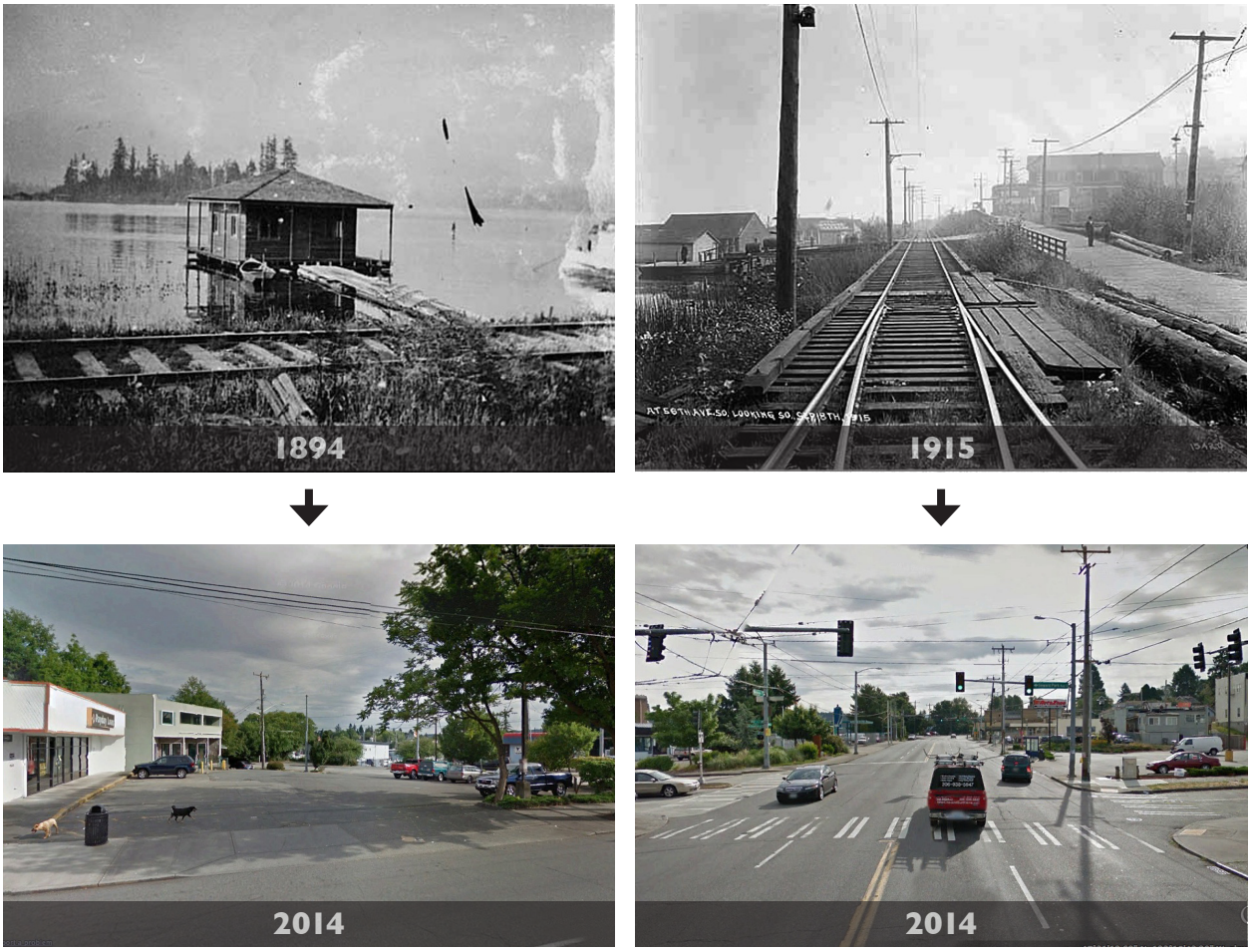
Clarence Hillman and his Hillman Investment Company purchased and developed a tract from the original Dunlap claim and dubbed it Atlantic City after the New Jersey resort. His development included plans for a park, pier, bath house, boat house, and picnic areas. However, he sold the land slated for park use to private developers along with the other properties. Angered buyers sued him for this and won. When Rainier Beach was annexed to the city of Seattle in 1907, the park was passed over to the parks board and became today's Be'er Sheva park. Clarence Hillman was later sent to jail for another scandal in Everett (Wilma 2001).



Rainier Beach before the arrival of European settlers and 1917 lake level drop. Much of today's central Rainier Beach was either under Lake Washington or seasonally flooded marshland, including RBUFW. Diagram by Cayce James.



Rainier Beach in 1895. This early watercolor painting depicts the early European settlements in Rainier Beach before the lake level drop. Photograph from the Rainier Valley Historical Society (accessed February 2014), modified by author to locate site.



The intersection of 56th Ave S. and Rainier Ave S. in 1894 (top left), 1915 (top right) and 2014 (bottom row). In the upper left is a houseboat adjacent to the streetcar tracks pointing north toward Pritchard Island and present-day RBUFW (under water). The upper right photograph is facing east from the same location 19 years later. The bottom two photographs were taken in 2014 from the same location and facing the same directions. While already fairly impacted, the above photographs illustrate the marshy shoreline habitat that once lined the entire lake. The recent photographs show the extreme changes the landscape has undergone through the lowering of Lake Washington and the replacement of rail infrastructure with personal vehicle infrastructure. Top two photographs from Rainier Valley Historical Society, bottom two from Google Earth (accessed May 2014).

In 1917, the construction of the Lake Washington Ship Canal caused the lake level to drop approximately nine feet. This exposed the land where RBUFW sits today, meaning that "Little Island" was now a peninsula. The lowering of the lake level also destroyed much of the marshland that previously lined the lake side in the Rainier Beach area and severely altered the ecology and hydrology of the lake and its surroundings. These changes had perhaps the greatest human impact on the native populations in the area, who had relied on the highly productive marsh ecosystems as their primary food source for millennia (Ott 2012).

During the Second World War, Seattle Housing Authority built Seward Park Estates in the heart of Rainier Beach to house war workers. After the war, it was transformed to low-income housing and later sold to private owners. While once considered quite desirable and modern, the housing complex fell into disrepair and was plagued with crime to the degree that the manager was reported to carry around a shotgun. The surrounding neighborhood suffered from high crime rates as well and several businesses closed. However, in the '80s and '90s momentum built among local residents to improve the neighborhood, and in 1996 a public/private partnership purchased Seward Park Estates and invested $25 million in transforming the property into the present day Lake Washington Apartments. Crime rates dropped in the 1990s and the neighborhood's reputation improved (Wilma 2001; Rainier Beach Touchstones Project 2014).

RAINIER BEACH TODAY

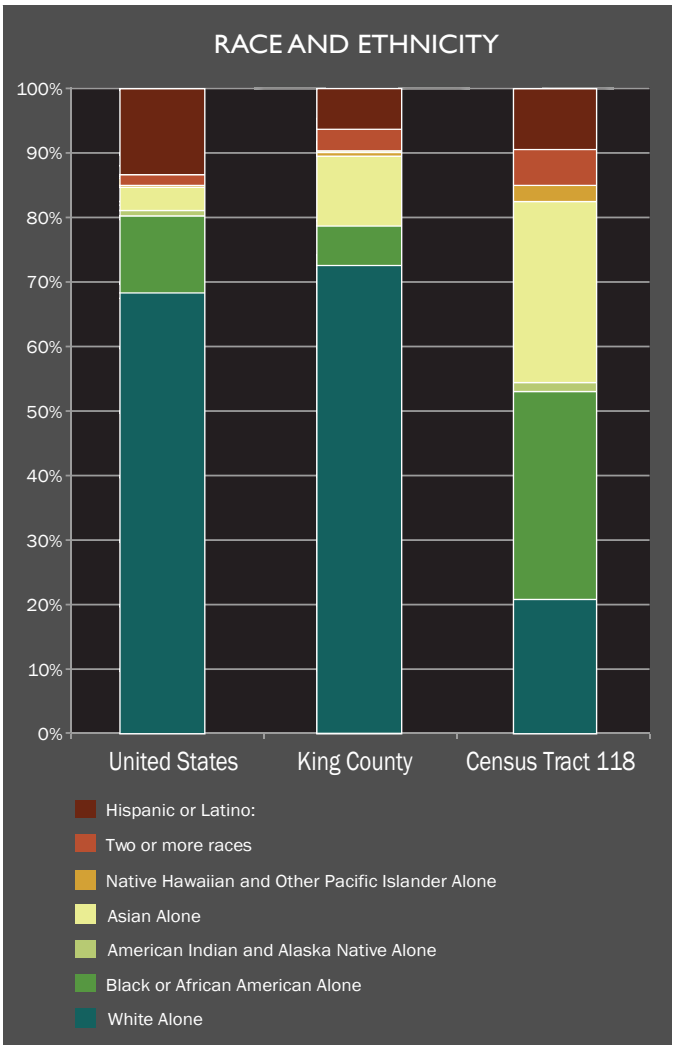
Modern day Rainier Beach is one of the most ethnically and culturally diverse neighborhoods in the city of Seattle, and in the nation. The largest racial/ethnic groups are black and Asian—composing approximately 30% of the neighborhood's total population each—followed by white at around 20%, and Hispanic at 10%. A little over 30% of the population was born abroad and about half of all households speak a language other than English at home. Some of the most common household languages are East African languages, Spanish, Tagalog, and East Asian languages. About a third of the population lives below the poverty line, however, there are also a significant number of affluent households, particularly along the Lake Washington shoreline (U.S. Census Bureau 2014).

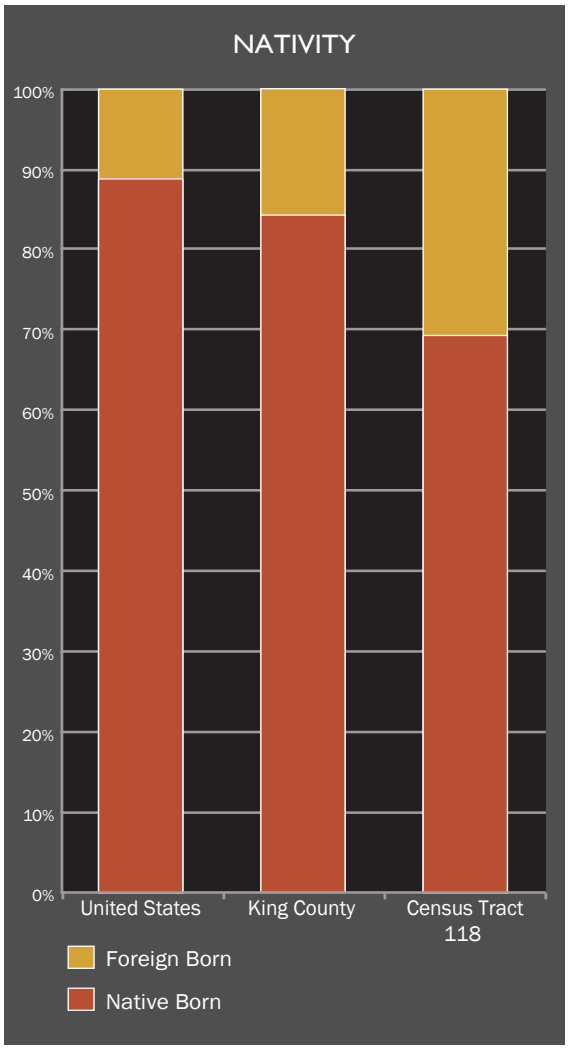
In recent years, the neighborhood has undergone many important transformations. In 2009,



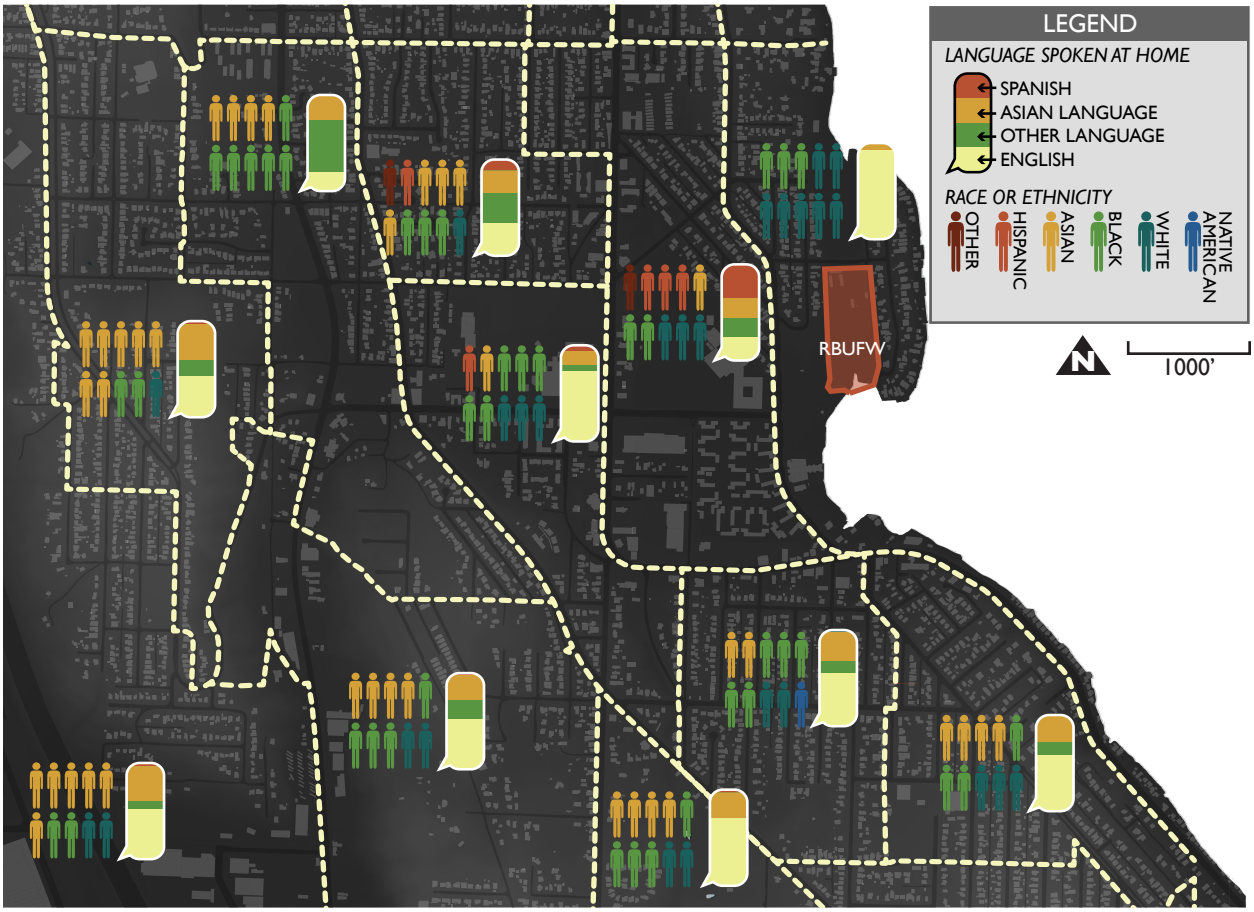
Built from the existing building stock of the former Seward Park Estates, the renovated Lake Washington Apartments now provide 366 units of affordable housing adjacent to Be'er Sheva park and the marina with several community amenities—such as a playground, vegetable garden, clubhouse—and free programs such as art and citizenship classes (SouthEast Effective Development 2014 and "Lake Washington Apartments" 2014). Photographs from "Lake Washington Apartments" 2014.

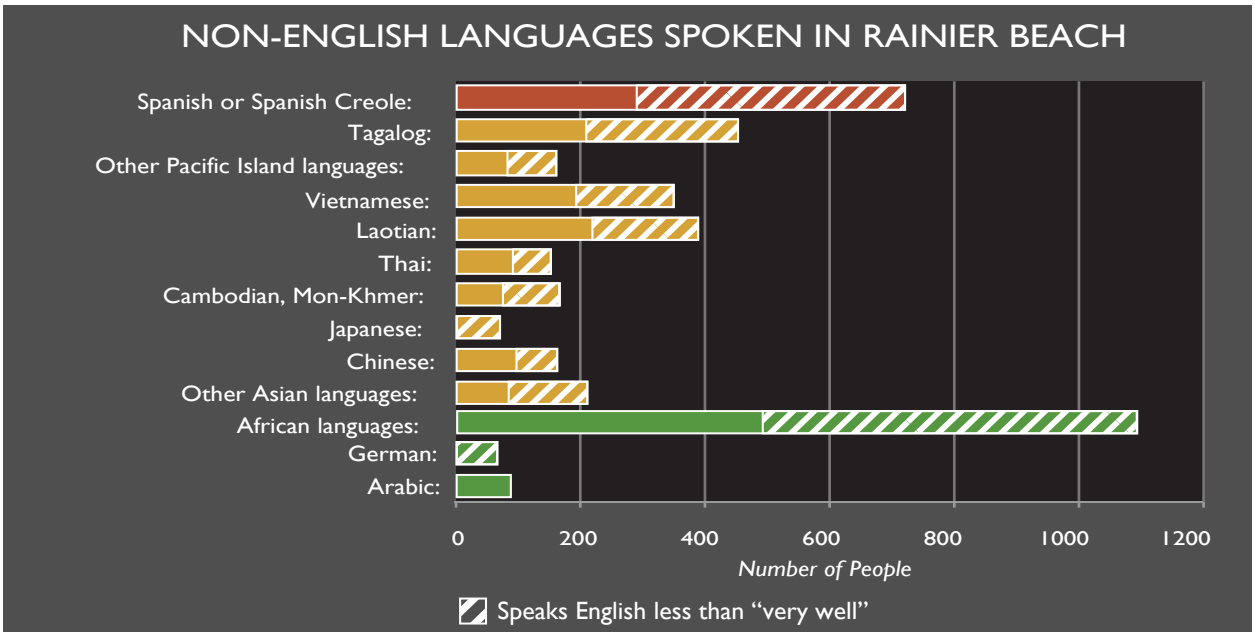






The neighborhood directly surrounding RBUFW is very racially, ethnically and culturally diverse compared with the surrounding county and the United States as a whole. There is no racial or ethnic majority in the neighborhood, and a third of the population was born overseas. Demographic data based on 2010 Census, accessed from socialexplorer.com in December 2013.

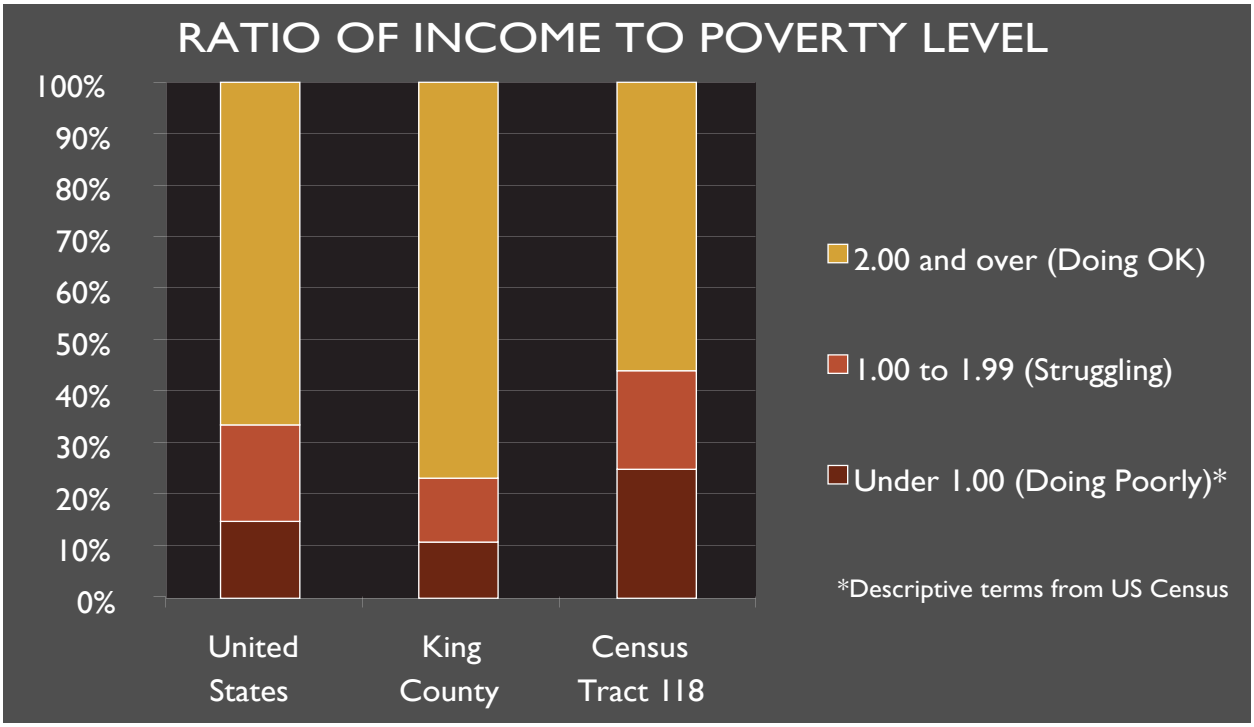




While Rainier Beach neighborhoods are known for being less ethnically segregated than most parts of the city, the above map illustrates that there are marked differences in the ethnic composition of different neighborhoods. The neighborhood adjacent to RBUFW is the only one that is almost entirely English speaking and the only one with a white majority. The chart below shows the specific languages that are most common in Rainier Beach households. While the census does not distinguish among African languages, other records indicate that the most commonly spoken African languages are Somali, Oromo, and Amharic. Data from factfinder2.census.gov and socialexplorer.com (accessed December 2013).

the Rainier Beach light rail station opened on Sound Transit's Central Link ("Rainier Beach (Link Station)" 2014), reconnecting the neighborhood to downtown Seattle by rail for the first time since the streetcar ceased operation in 1937 (Wilma 2001). Other major public investment projects over the last decade include a $25 million new community center ("Rainier Beach Community Center and Pool" 2014) and major expansions to both South Shore K-8 School and the Rainier Beach Branch Public Library ("South Shore School" 2014; "Rainier Beach Branch" 2014). Green space improvements have also been made with the opening of the Chief Sealth Trail in 2007, and the Mapes Creek Walkway and daylighting project, currently under construction ("Chief Sealth Trail" 2014; Rainier Beach Touchstones Project 2014). Major neighborhood improvement projects are anticipated to carry out into the future as well, with master plans currently being drawn up for new high-density developments in the station area (VIA Architecture 2014).

While these major recent improvement projects have helped to improve the quality of life for Rainier Beach residents, crime is still a prominent concern, and some businesses still struggle to stay afloat. However, community groups, such as Rainier Beach Moving Forward, that have been instrumental in bringing about positive change over the last several decades continue to work to bring new vitality to the neighborhood.



While there is a significant middle class population in Rainier Beach, poverty levels are far higher than in the rest of King County. Data from socialexplorer.com (accessed December 2013).



Rainier Beach parks, schools, and community amenities. Photograph credits from top left to bottom right: Cayce James, parentmap.com, rbtouchstones.com, ca-atelierps.com, wikipedia.com, panoramio.com, Janet Wright, rbtouchstones.com (accessed May 2014).

RAINIER BEACH URBAN FARM AND WETLANDS

"The vision for RBUFW is to be a vibrant community hub and model green infrastructure project. ... This ... site has the potential to produce over 20,000 pounds of fresh healthy food each year for families struggling with food security. The site will also provide educational opportunities for at-risk and underserved youth; offer access to and education for a rare in-city natural wetlands environment; improve wetlands habitat for native wildlife; foster economic development; and strengthen community." ("Request for Proposals-Rainier Beach Urban Farm and Wetlands" 2014).

Rainier Beach Urban Farm and Wetlands (RBUFW) grew out of a community vision to transform a surplus Seattle Parks and Recreation Department facility into an organic farm, restored natural area, and learning center. The long-running Atlantic City Nursery closed in 2010, and by 2011 a local nonprofit, Seattle Tilth, was granted co-operatorship of the site, along with Friends of Rainier Beach Urban Farm and Wetlands, and began the process of making this community vision a reality.

In Seattle, community gardens are typically associated with the local P-Patch program, where urban agricultural space is parceled out to individual caretakers. RBUFW, however, is run on a different model. The farm is cared for collectively by volunteers, and food is then distributed to needy families in the community through "Good Food Bags," at a subsidized cost of $5 per bag. Some produce is also used for community dinners and after school cooking programs, or sold at farmers' markets to help with operating costs. So



Scenery and activities at Rainier Beach Urban Farm and Wetlands. Photographs by Seattle Tilth (accessed March 2014).



Delivering 'Good Food Bags' to Tiny Tots day care center. Photograph by Seattle Tilth (accessed May 2014).

far, Seattle Tilth has not struggled to find the volunteer support needed to make this possible. One staff member expressed that volunteers seemed to just "rain from the sky" (Interview with Joanna Stodden 2014).

In addition to food production and distribution, educational programing is a major component of Tilth's work at RBUFW. Tilth takes full advantage of the wide variety of learning opportunities offered by the site. For instance, middle school students learn about ecology on site through water quality monitoring, invasive species removal and restoration work. A group of young mothers from a nearby high school uses produce from the farm to learn how to cook fresh, healthy meals. Elementary students are taught the fundamentals of how food grows and how to care for plants.

RBUFW also hosts community events. Once a month volunteers use produce grown on the farm to prepare a community dinner that they offer for only one dollar per person, and every Friday an Ethiopian and Eritrean elder group gathers on the farm to cook food together also using farm produce.

Since the establishment of RBUFW, a great deal of effort has gone to raising the funds needed to improve the site. Friends of Rainier Beach Urban Farm and Wetlands spearheaded a successful effort to fund the construction of new site facilities and improvements. The Seattle firm, the Berger Partnership, was selected to design these improvements, and construction is anticipated to begin in the fall of 2014.

Even before these improvements have been constructed, the farm is already quite active and having a substantial impact in the community. In 2013 alone, RBUFW grew and distributed 6,000 pounds of organic produce and provided educational programming to 2,886 children (Interview with Joanna Stodden 2014).

The next section explores the site in greater depth, looking specifically at conditions relevant to future design decisions, and considers what additional activities and functions the site could support.



Seattle Tilth staff teaching a visiting group of students at RBUFW. Photograph from seattleschild.com (accessed May 2014).

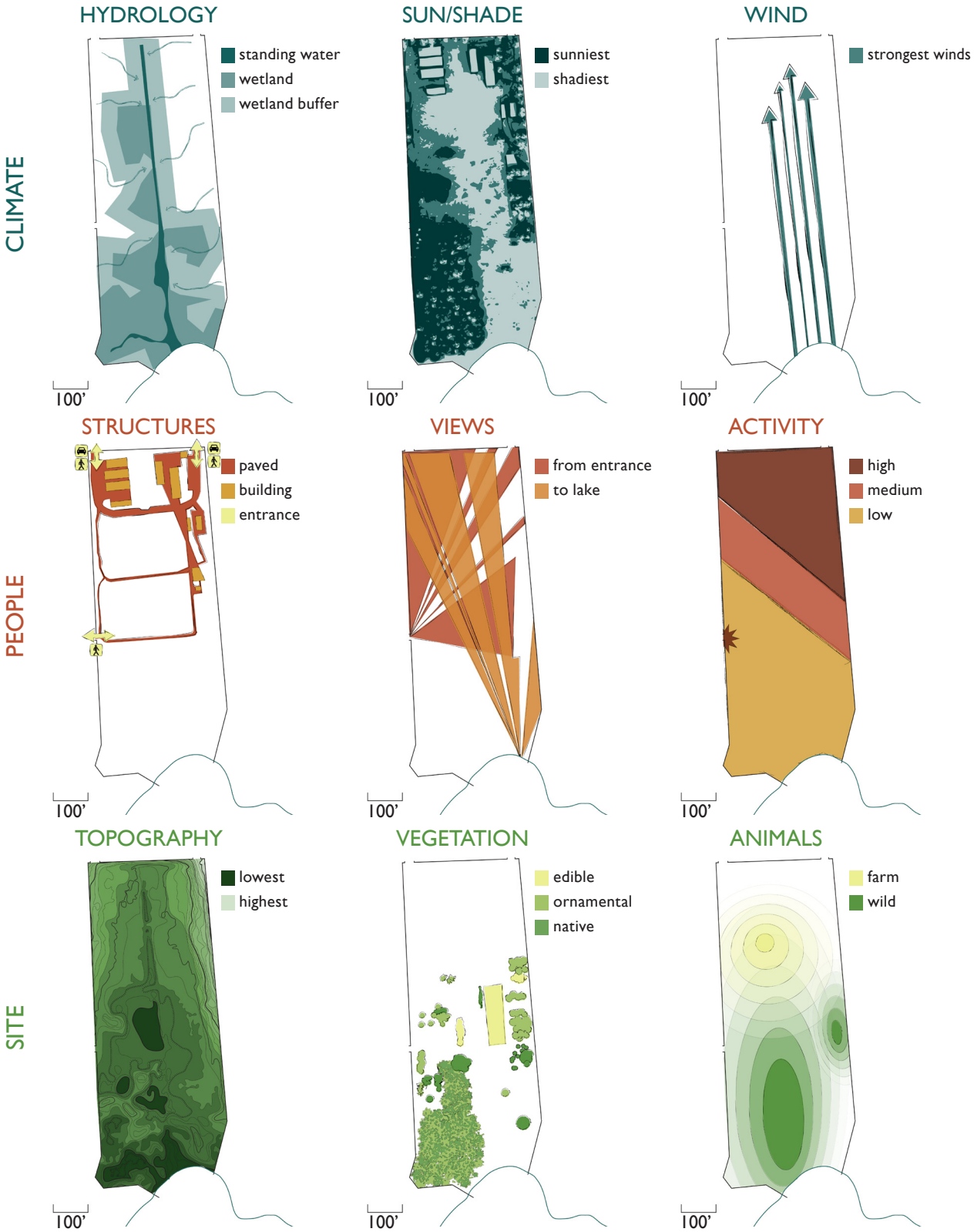
SITE ANALYSIS

SITE DESCRIPTION

The 8.25-acre Rainier Beach Urban Farm and Wetlands sits in a narrow valley between what was once Pritchard Island and mainland Rainier Beach. A linear ditch bisects the site flowing north to south, and is the site's primary hydrological feature. The ditch is fed with surface flows as well as stormwater runoff piped onto the site from the segment of S. Cloverdale street directly to the north. (See next spread for images). One and a half acres of the site are classified as a wetland. However, even in the drier areas of the site, there is enough water in the soil year round that crops do not require irrigation.

The office, greenhouses, and agricultural area are concentrated in the northeast corner of the site. The majority of the rest of the site is currently covered in cardboard, shade cloth, and mulch in an attempt to fight off the invasive plant reed canary grass. There are a large number of trees remaining on site from the Atlantic City Nursery period, most of which are ornamental species. There are also stands of very tall native cottonwood and alder trees that are hubs for bird activity.

The southernmost two acres of the site are fenced off on all sides and designated for mitigation purposes, but not actively maintained. This area is very densely vegetated with a mix of native shrubs and small trees such as red twig dogwood and invasive species such as Himalayan blackberry and English ivy. There is a lot of older litter in this area such as tires and plastic bottles. The proposed construction will not affect this area, however, I include it within the design presented herein.



Site analysis assuming removal of shrub thicket in SE corner and implementation of planned improvements.



RBUFW and surroundings. Aerial photograph from Esri ArcMap, 2014.



Photographs of RBUFW and surroundings. Photographs 1,2, and 4 from Seattle Tilth. Photograph 3 from urbanfarmhub.org. Photographs 5-13 by Cayce James. Photograph 14 from lakewashingtonapts.com. Photograph 15 from maps.google.com (accessed May 2014).

SITE SURROUNDINGS

RBUFW is bordered to the north and south-west by two other public parks. Pritchard Island Beach to the north consists of a trail leading through a restored wetland area to a grassy shoreline area. Be'er Sheva contains typical park elements such as picnic sites and a playground and provides access to Lake Washington through boating piers and a small strip of pebble beach. Single family residential housing surrounds the site to the east and northwest.

RBUFW is currently only accessible from the northeast corner, however, there is a plan to add a western entrance connecting to Be'er Sheva Park. With this new entrance, and the recent construction of Mapes Creek Walkway, there will now be an opportunity for RBUFW to complete a green corridor traversing Rainier Beach from Kubota Gardens to Pritchard Island Beach as illustrated in the map on the right.

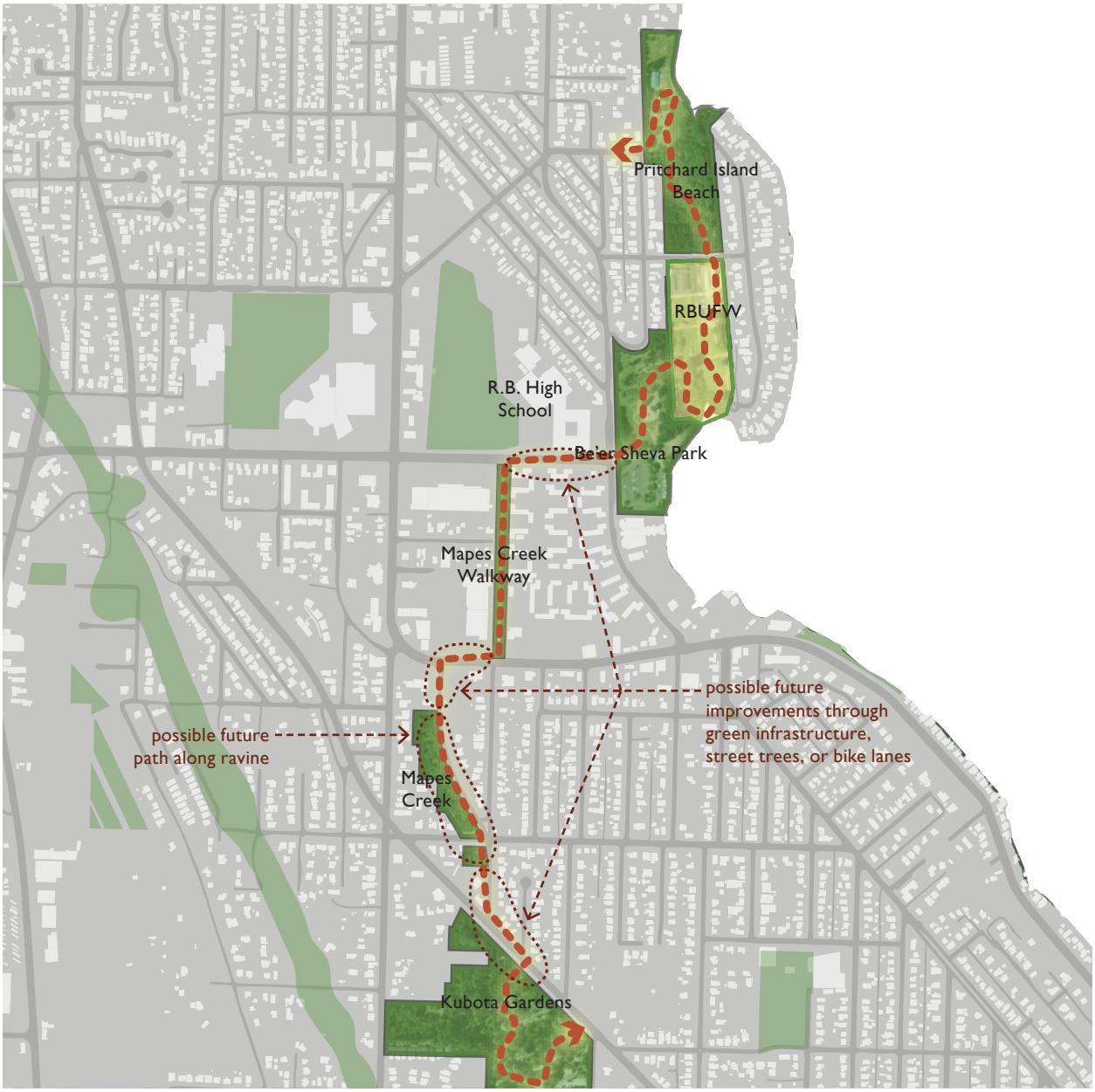
SITE IMPROVEMENT OPPORTUNITIES

There is currently a lack of appropriate facilities on site to support the educational and community programs offered by Seattle Tilth such as cooking classes, site tours, and community dinners. The greenhouses are the only large covered spaces, and the restroom is a portable toilet. The office doubles as a food preparation area, but a sink is the only kitchen appliance. The Berger Partnership design addresses many of these needs by providing a new classroom building with a kitchen, restrooms, and other much needed facilities (illustrated on the following spread). However, the funding for these improvements is limited and therefore the current designs address very few site needs apart from the built structures.

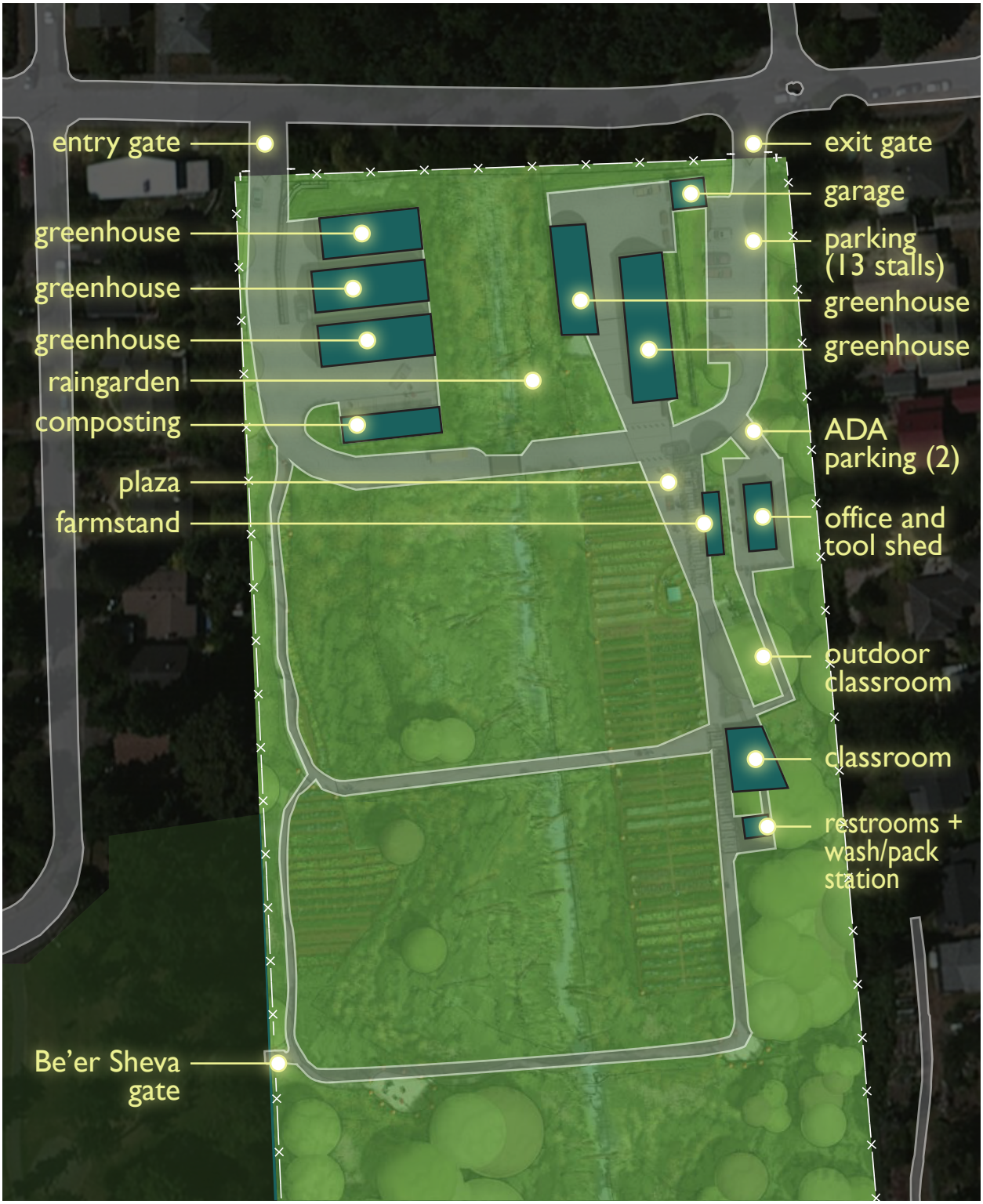
One important remaining need is for areas catering to children. During the interviews, Seattle Tilth staff discussed that a children's play area would make the site more accessible to families and allow adults to bring children when they come to do volunteer work. They would also like to have a place to teach young

children about gardening where they wouldn't need to worry about stepping on the plants.

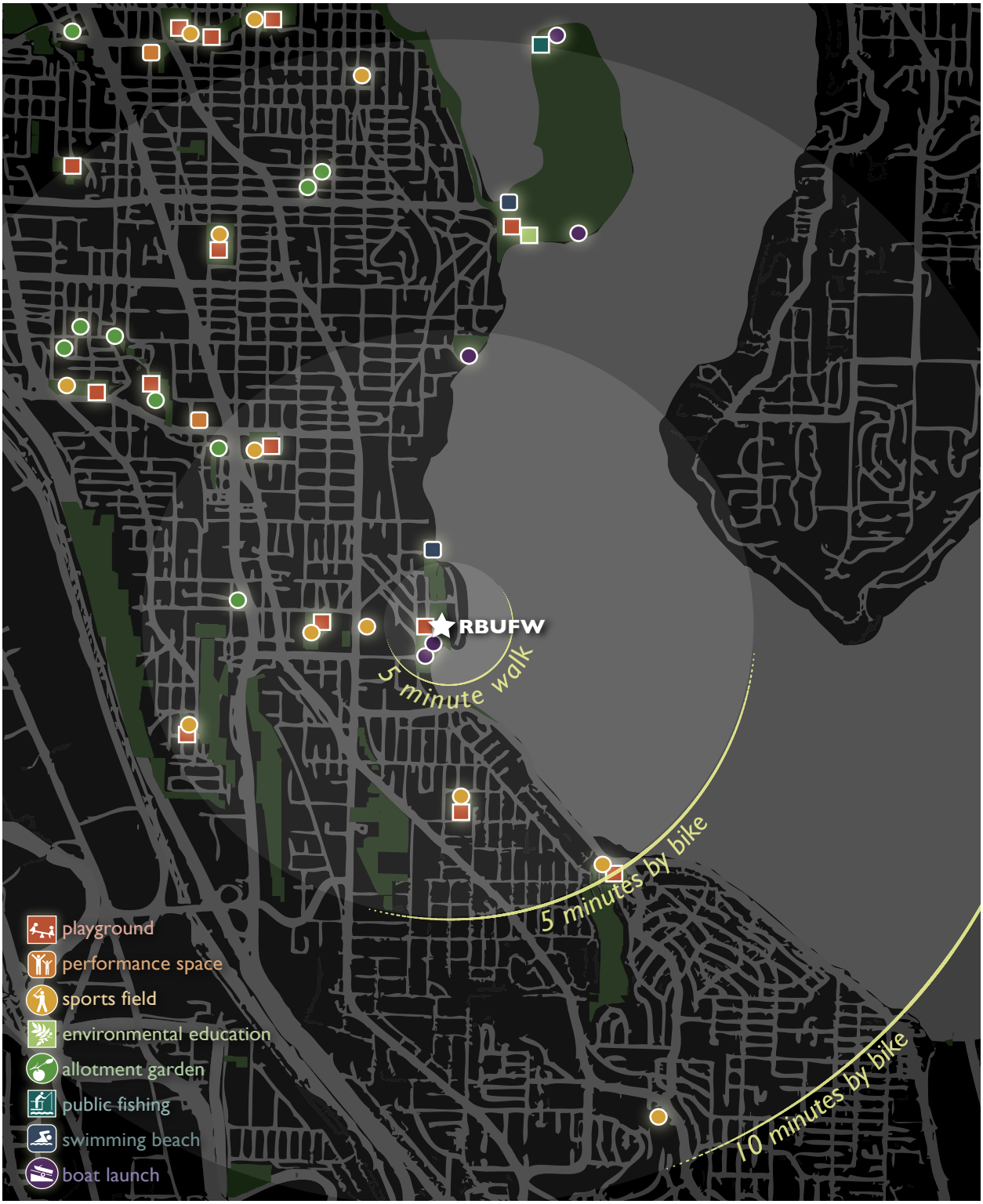
When school groups visit, Seattle Tilth staff would also like to be able to bring them to the wetlands, shoreline, and southern areas of the site where there currently are no trails or paths. They would like to have sheltered areas outdoors where touring groups can take cover on rainy days.



With the newly constructed Mapes Creek Walkway and the planned connection between RBUFW and Be'er Sheva Park, a trail system through RBUFW can now complete a green corridor from Kubota Gardens to Pritchard Island Beach.



Planned site improvements for RBUFW. The office and greenhouses are existing, though the greenhouses will be moved to make more room for agricultural production. The other facilities are planned new additions. Design and background illustration by the Berger Partnership.



Park amenities in Rainier Beach and surrounding Neighborhoods. In close proximity to RBUFW, there are several sports fields, playgrounds, boat launches, and a swimming beach. However, the closest environmental education facility and public fishing area are in Seward Park, approximately 10 minutes away from RBUFW by bicycle. Data from Washington State Geospatial Data Archive and Google Maps.

Interviews with community members also revealed a need for more outdoor gathering areas. The East Africans interviewed were particularly interested in having a campfire space where they could share traditional stories with younger generations.

Despite the name, Rainier Beach actually has a lack of public beaches. Pritchard Island Beach and Be'er Sheva Park both have small shoreline access areas, though neither have a place for fishing. Several community members interviewed would appreciate having a place in Rainier Beach where they could fish and Seattle Tilth staff and volunteers expressed interest in being able to see or visit the lake from RBUFW.

SITE PROGRAM NEEDS

The improvement opportunities discussed above were ultimately used to formulate a list of program needs for the site. The list is as follows:

1. Dock and fishing pier

Both the African American and Filipino groups interviewed all expressed strong interest in having a place to fish, even among those who generally lacked interest in outdoor recreation. When the idea of a dock was proposed to the site stewards they were enthusiastic about the possibility of visiting the lake with school groups and being able to take groups out on boats.

2. Play area

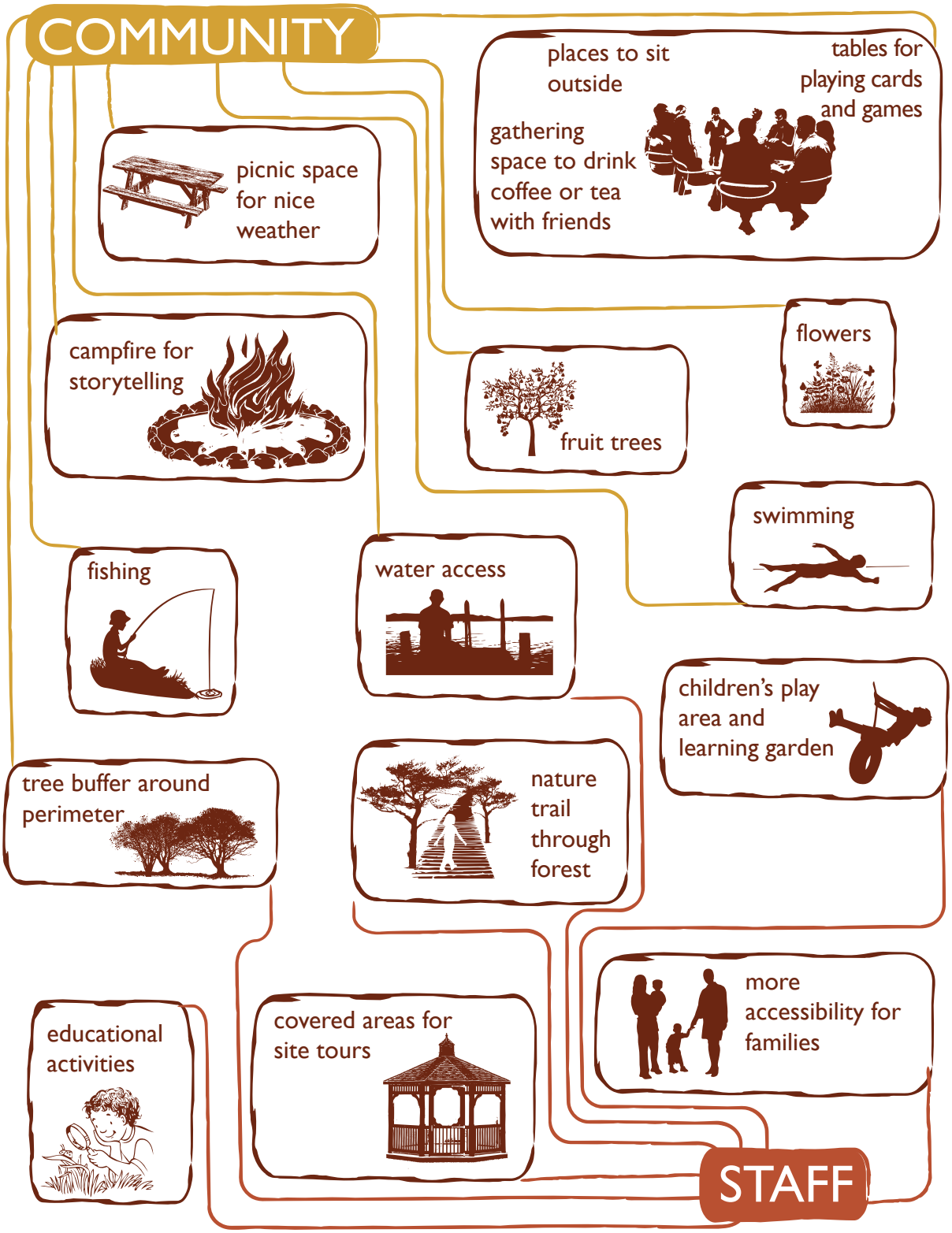
There is no current area dedicated to children's play on site, and it was one of the first needs that the site stewards interviewed expressed. The addition of this feature would create a more child-friendly space that appeals to a wider diversity of recreational visitors and volunteers.

3. Learning garden

This feature would support the education activities led by Seattle Tilth, and create an active learning environment to complement the indoor classroom. Like the play area, it would also make the site more appealing for children and their caregivers.

4. Nature trail

The existing roads and circulation system on site (and those scheduled for construction) are designed as a functional support to the agricultural production work. To fully take



Site improvements desired by community members and RBUFW staff. Based on interviews with staff and community members and meeting notes from community design meetings, accessed through Seattle Parks and Recreation.

advantage of the recreational and educational opportunities of the site, there is a need for a nature trail through the wetland and forested areas, particularly in the southern portion of the site.

5. Shelter

Sheltered spaces are an important complement to a nature trail. Seattle Tilth staff have noticed that visiting school groups lose motivation and interest touring the site when there is no respite from the rain.

6. Gathering areas

Gathering areas can support existing site activities such as teaching and gardening by providing places to learn, rest, socialize and eat. In order to support diverse user groups these areas should vary in size and surrounding environment. Interviewees desired more opportunities to picnic and play games outside.

7. Campfire/performance space

The East African elders suggested that a campfire space would create a great opportunity for story-telling in the evenings. Such a space could potentially be used for other forms of cultural performances such as music and dance.

8. Interpretive elements

The Seattle Tilth staff would appreciate more teaching opportunities and activities built in to the landscape. Interpretive elements would also benefit independent visitors.

9. Entrance

To benefit a wider diversity of Rainier Beach residents, it is important that the entrance clearly indicate that the space is publicly accessible and welcoming to all people.

The following chapter presents ideas for how some of these program needs could be met through further design interventions at RBUFW.

4 DESIGN



THEMES

In addition to the seven guidelines within the Design Framework for Cultural Diversity, the design presented in this chapter was heavily influenced by the mission of Seattle Tilth. Their mission is "to inspire and educate people to safeguard our natural resources while building an equitable and sustainable local food system" (Seattle Tilth 2014). Therefore the design emphasizes opportunities for environmental education and building connections to ecological and agricultural systems in addition to opportunities related to cultural diversity.

The design is organized around three overarching themes: connect, convey, and cultivate. These themes are outlined on the diagram on the right. 'Connect' refers to interventions that aim to strengthen and build human-to-human, human-to-place, human-to-ecology, and site-to-neighborhood relationships. The learning opportunities created through this design are discussed within the theme of 'convey.' Finally, 'cultivate' encompasses the interventions that enhance the food production capabilities and ecological function of the site.

The following sections introduce the proposed design elements organized through these three main themes.

DESIGN THEMES

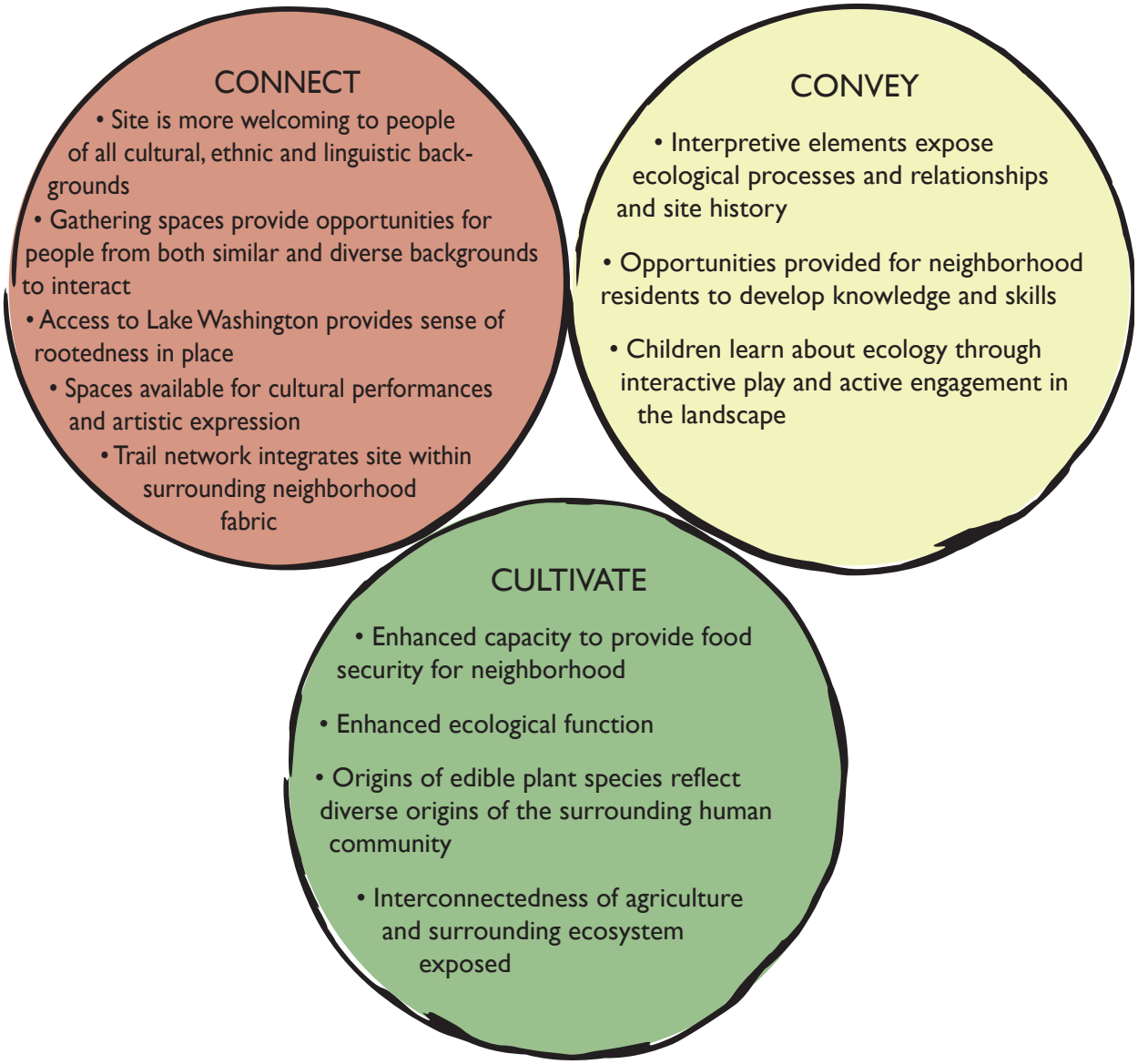


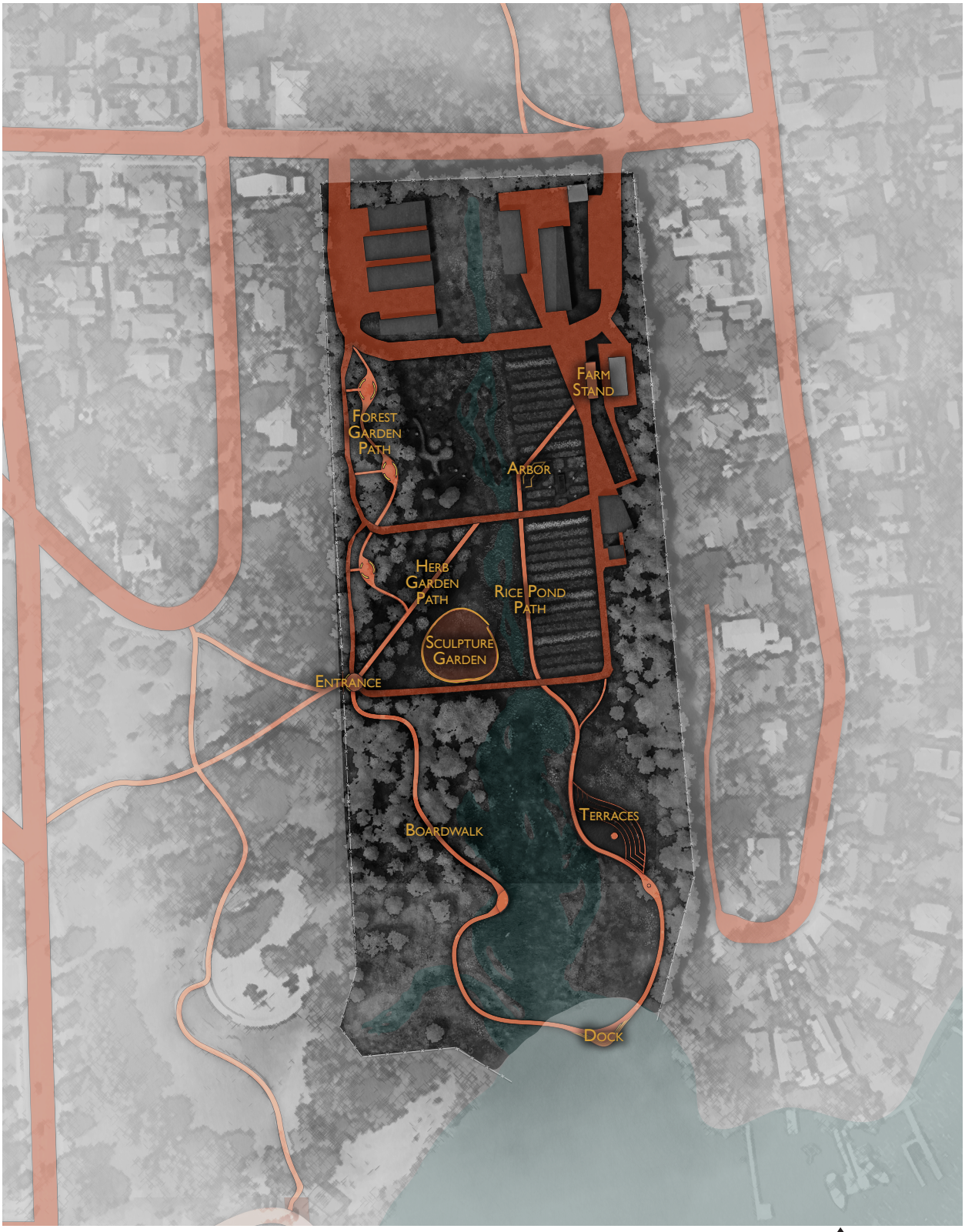
Diagram of the three overarching design themes, each explored in the following sections.

CONNECT

While Rainier Beach Urban Farm and Wetlands is already a very active and productive space for agriculture production and wetland restoration, it is not actively used for recreational purposes by the general public. However, Seattle Tilth staff would like the site to also serve the community in this way. Located between two currently fragmented public spaces, RBUFW has the potential to create a lively green corridor along the lake that offers a wide variety of activities and environments for a diversity of possible users. This section describes elements of this design that aim to strengthen connections between RBUFW and the surrounding community fabric, between the residents of Rainier Beach and their physical environment, and between diverse populations within the Rainier Beach neighborhood.

ENTRANCE AND WAYFINDING

Currently, RBUFW does not attract many visitors from the neighborhood other than those who come for organized activities such as volunteer work parties and educational activities. It does not have the appearance of a public space, and many people in the neighborhood are unaware of its existence. One of the main reasons for this is that the only current entrance is in the northeast corner or the site, off of S. Cloverdale. A chain link fence surrounds the site on all other sides. Due to its location, the only neighborhood residents that would typically have occasion to pass by the entrance are residents of the peninsula. There is no indication from other sides of the site that it is a public space. Furthermore, anyone coming from the central areas of Rainier Beach has to walk



Plan view of the site highlighting the features that compose the "connect" design theme.



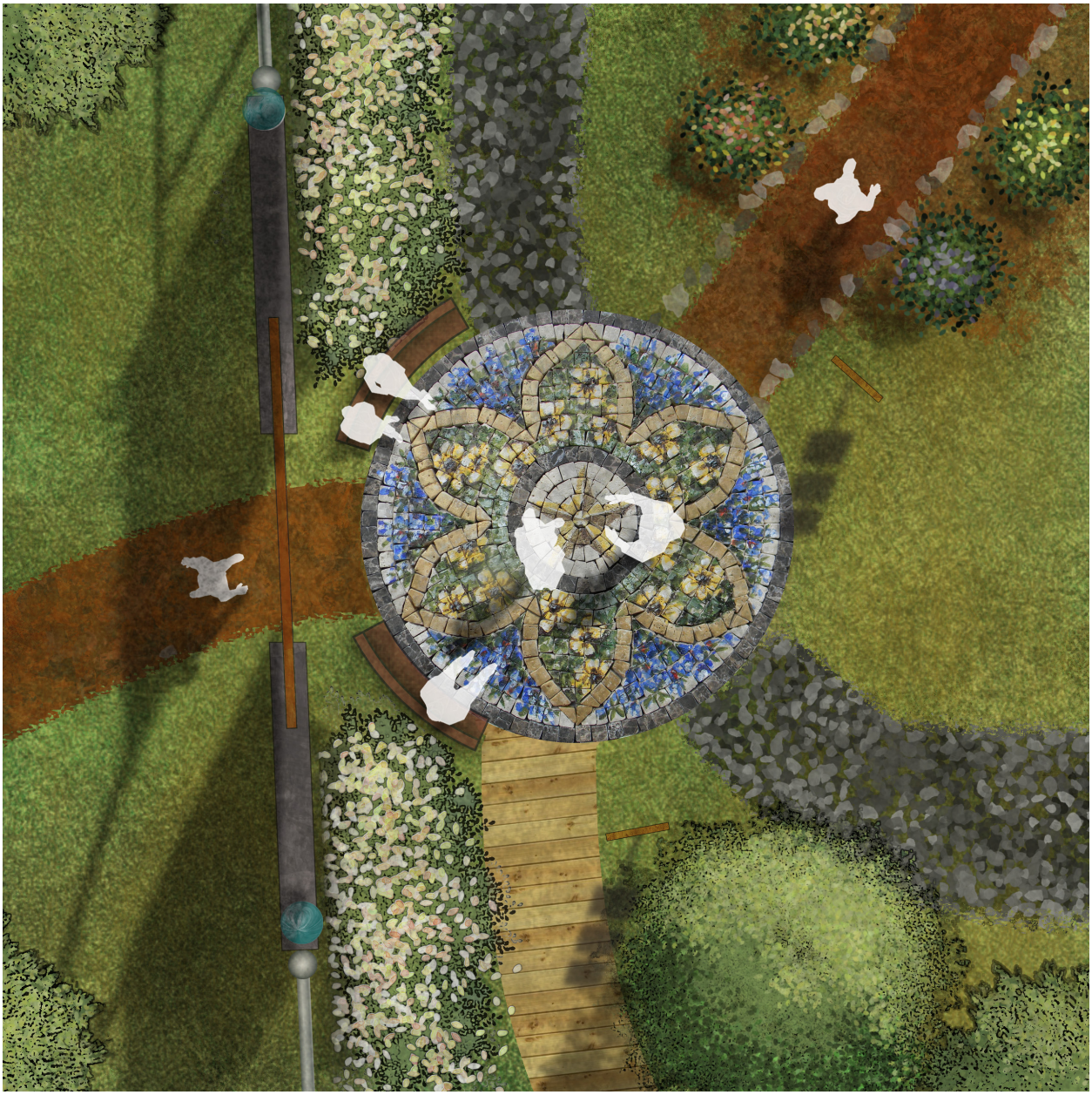
View of the new entrance from Be'er Sheva Park in its first year. Temporary artwork can be used to decorate the blank wall before it is decorated with a new section of mosaic tiles.

around half the perimeter of the site before they reach the entrance.

The Berger Partnership has addressed this in their design by adding a new entrance between Be'er Sheva and RBUFW. I propose an enhancement to that entrance that would signify the site is welcoming to visitors of all ethnic and cultural backgrounds. Pictorial signage within Be'er Sheva could direct visitors to the proposed new gate–a large metal arch inscribed with the name of the site and embellished with a border of nature- and farm-themed artwork. The arch is supported by a mosaic wall created by children from a local school. Children can decorate their own tiles with welcome messages in their native languages or artwork related to the site. Every year the mosaic could expand to another segment of the wall, leaving the messages and artwork of a new group of children. This way, the linguistic and cultural representations on the wall will evolve with the community, while also becoming a record

of neighborhood history and marker of its identity.

Once inside the gateway, visitors are greeted by a small circular plaza paved with a mosaic work complementing the gate. There is good visibility from this plaza to the major activity centers on site to help with orientation and a feeling of safety. Pictorial signage stands beside the pathways, guiding visitors to



Plan blow up of Be'er Sheva entrance. When visitors first arrive from Be'er Sheva Park (to the west), they are greeted by a circular mosaic plaza with pictorial wayfinding signs depicting site features that each path will lead them to.

N

5'



Plan blow up of the boardwalk. Most visitors would arrive via the circular entry plaza in the northwest, travel through the forested area to the bird blind overlooking the wetlands, then continue to the dock at the southernmost tip before heading back north past the terraced mounds to the agricultural fields and activity centers.

different points of interest on site. Benches provide a resting place where people may rest and enjoy the views or wait for their friends or family.

BOARDWALK

Currently, there are no trails or paths through the southern portion of the site. However, the site stewards would like the opportunity to take visiting school groups to this area to learn about the forest, wetlands, and lake. As mentioned previously, there also is no current visual or physical access to Lake Washington from the site.

This design responds to these opportunities by introducing a boardwalk that extends southward from the Be'er Sheva entrance and winds through the southern portion of the site. Starting from the entrance, visitors first travel through the forest area, with the boardwalk, in one section, nudged between two tall rows of birch trees, a reminder of the Atlantic City Nursery history. As they continue south, visitors pass by an inundated area of the forest before arriving at the bird blind. Here, they can enjoy excellent visibility over the southern wetlands as well as wildlife viewing opportunities. After passing the bird blind, the trees give way to shrubs and emergent vegetation, with punctuated views available of the bay. The boardwalk then extends out over the open waters of the lake. Here, a covered dock marks the southern tip of the site with seating areas for visitors to rest and enjoy the views, while being protected from rain or harsh sun. Looping back north, visitors would next pass an open, wetland meadow before the boardwalk scribes around a large old willow tree and arrives at the terraced mound. Here, visitors have an option of continuing on the boardwalk or taking an alternative stepped path that leads up to the top of the terraces, where there are excellent views across the whole site and the bay. This path then connects back to the last segment of the boardwalk bringing visitors to a mulch pathway that heads past the agricultural fields to the classroom, farm stand, learning garden, play area, and other northern parts of the site.



Looking southeast from the top of the terraced mound. The terraces offer a place for resting and gathering with great views out over the site and lake. In addition, they create a space for casual performances, such as the one depicted above, and night time story-telling.

TERRACES

The terraced mound is an idea inspired by a conversation with the group of East African elders who come to RBUFW each Friday. The elders were excited about having more opportunities to share their culture, and had the idea of a campfire area at RBUFW where they could share traditional East African stories with younger generations.

The designed terraces provide an intimate performance space backed by beautiful views of the wetlands and bay. The central fire pit is available for storytelling events at night, and a wooden lid allows the circle to double as a small stage for daytime performances. Most

days, however, the terraces would simply provide an excellent spot to relax and enjoy the great views. The elongated, curvilinear form creates flexible space where either several small groups or individuals could find their own area, or a large group could congregate.

SCULPTURE GARDEN

One of the first sights available to visitors arriving from the Be'er Sheva entrance will be the sculpture garden. Just northeast of the entrance, this is a space for temporary installation art. As mentioned earlier, it is important that community participation in the landscape continue over time, to invite community investment in the space and allow for continued relevance of the space to the community as it evolves. The RBUFW sculpture garden is a space for temporary exhibits and ephemeral installation art from visiting student groups as well as professional artists. This space will provide student groups with an opportunity to engage with the landscape, which is very important to the learning process (Medeiros 2011). Also, when children participate in this activity, they will likely want to show their parents what they have done. This will help to make more families aware of



Students creating nature art. Visiting school groups could create similar art projects in the sculpture garden. Photograph from haliburtonschoolofthearts.wordpress.com (accessed May 2014).



Looking north at the dock from Lake Washington. Stepped seating options echo the contours of the terraced mound (seen in the background) and accommodate a variety of uses and social configurations.

RBUFW, including those with limited English who are less likely to already know about the site.

DOCK

Many of the people interviewed for this project were interested in having a place to fish in Rainier Beach. The closest existing public fishing pier is at the tip of Seward Park, three and a half miles away from central Rainier Beach (See page 69). Furthermore, Seattle Tilth staff were excited by the possibility of taking visiting school groups on educational boat journeys around parts of Lake Washington from RBUFW.

The proposed dock at the southern tip of the boardwalk would serve both of these purposes, while also creating a prime gathering space. Benches and steps create flexible seating and gathering opportunities right above the lake. A grassy roof makes the space usable during wet Seattle days, while some seating extends out to either side for casting fishing lines and for times when people desire full sun.

ARBOR

Centered between the learning garden, play area, and the major activity centers in the northern part of the site, the arbor provides a key space for gathering and rest. Edible perennial vines, such as the flowering 'anu' or perennial nasturtium from South America, are supported by an overhead trellis, providing shade and partial rain protection for benches below. Studies have discovered that a playground is the most common place for intergroup interaction to occur in a park. The shared experience of raising and caring for children provides individuals from diverse backgrounds with a common ground to relate to one another (Loukaitou-Sideris 1995, 100). The backless benches under the arbor lend flexibility to the use of the space, accommodating both centrally-focused gathering activities, and outwardly facing observation of the main children's areas. Its central location between the agricultural fields makes the space a perfect spot for taking breaks from gardening work, and its proximity to the classroom and kitchen make it convenient for outdoor lunches as well. There is space between the benches where tables could be placed for eating, drinking coffee, and playing card games–all activities the community



Looking northeast at the arbor and learning garden. Centered between the major activity centers on site, the arbor provides a flexible space for socializing, eating, resting, teaching, and looking after children.

members interviewed expressed interest in. Its flexibility and centrality make the arbor a prime spot for "fortifying," "encountering," and "constructing" cultural transactions, as discussed in Chapter 2.

CROSSING PATHS

The trail systems and gathering spaces throughout the site create opportunities for meeting new people while also offering a variety of activity levels to accommodate different user preferences. The arbor, for example, is carefully placed at the intersection of several heavily used pathways and activity centers so as to create a central social space that offers possibilities for expanding connections among site users. The gardening and work activities that occur at RBUFW deem it a highly productive space for building new social connections. When site visitors observe someone involved in such activities, perhaps using a different cultural method than they are familiar with, it creates an easy conversation topic to allow strangers to engage with one another and, in some cases, learn about each other's cultures. Set in the middle of the agricultural fields and adjacent to the herb gardens and learning garden, the arbor is a prime location for this type of encounter. However, active social spaces may not suit the interests of all site visitors, and thus there is a range of quieter and less active resting and gathering spaces as well. For instance, the forest garden path offers small, fairly secluded resting areas, while the terraced mound offers a much larger gathering space that is removed from the central activity centers. The diagram to the right displays the possible circulation routes of different site users as they travel to the site and move through it. Through these movement patterns, it is possible to see how some areas of the site, such as the arbor, would be activated throughout the day, while others would remain more tranquil with occasional passers by.

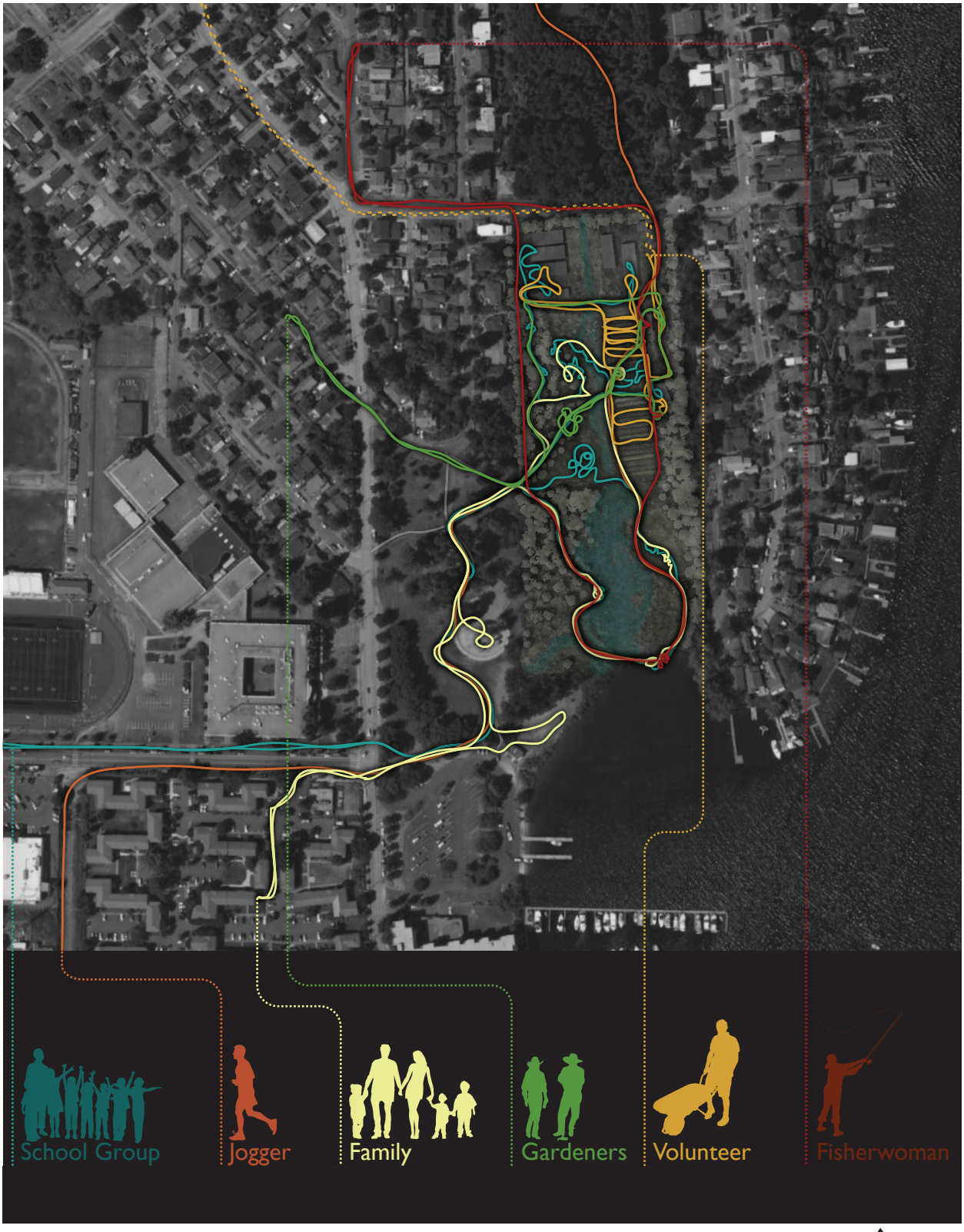


Diagram displaying possible routes different user groups would take to get to the site and move through it.

CONVEY

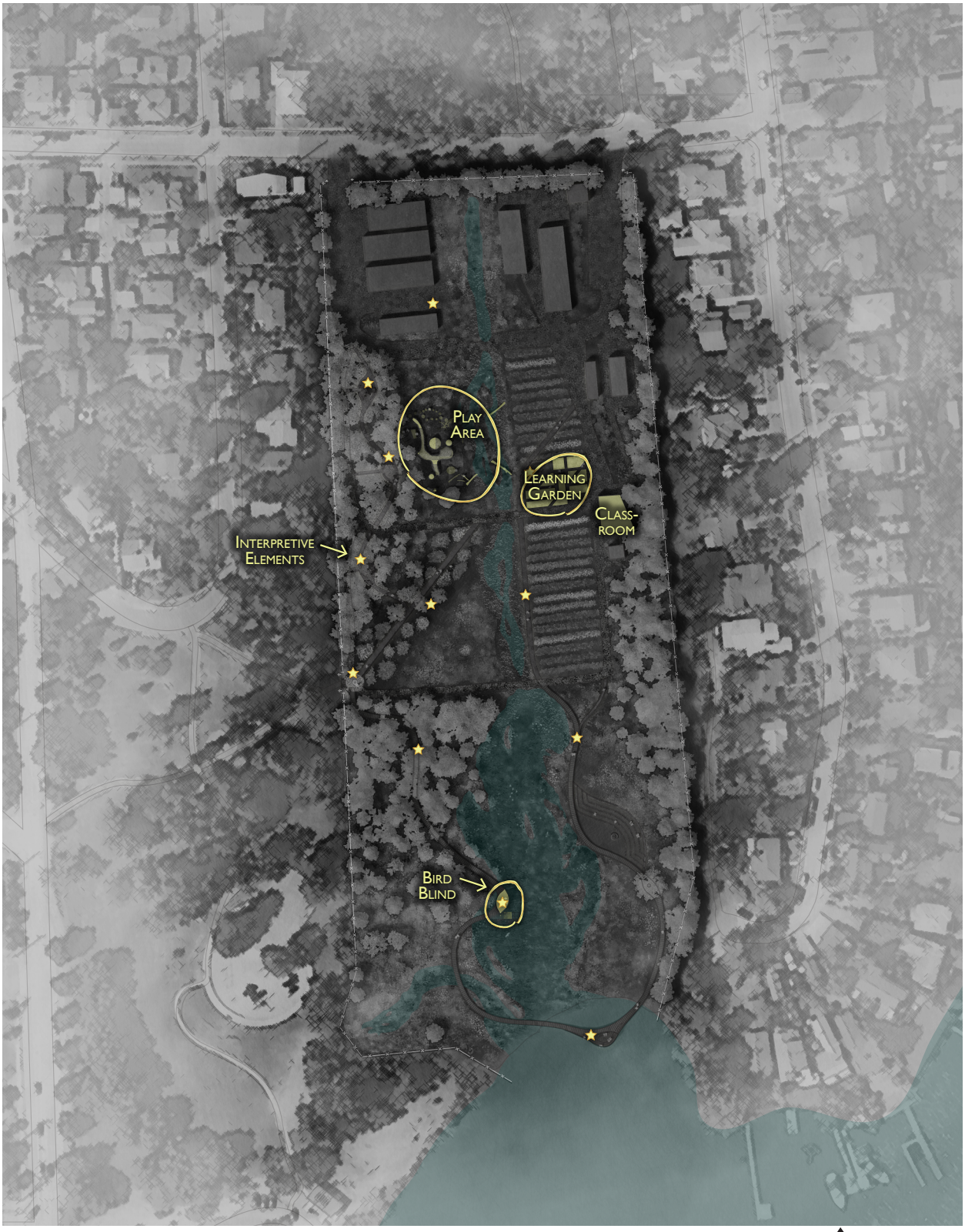
Rainier Beach Urban Farm and Wetlands is perfectly positioned to become a hub for environmental learning activities; there are four different schools located within just a half mile radius of the site, and Seattle Tilth staff are dedicated to providing educational services for the community. This section describes how the site could be improved to better support both structured and passive learning opportunities.

LEARNING GARDEN

Especially with groups of younger children who visit RBUFW, there is a need for a garden space where they can learn about growing fruit and vegetables in an environment where they do not need to worry about stepping on or damaging the crops. Directly adjacent to the classroom, the learning garden fulfills this need. Raised beds at varying heights allow children to run and play without worry of stepping on the plants, while simultaneously making the garden



Learning garden elements. Fairy houses (left) sheltered within the planting beds add an element of fun, mystery and excitement to the garden. Created by different members of the community, each one could represent a different cultural aesthetic as well. A colorful fence (middle) around the perimeter of the garden can protect the agricultural spaces adjacent to the garden and give children a sense of ownership over the space. It is also a great opportunity for community participation. The water play feature (right) is a larger scale example of the one proposed in this design. Photographs, left to right, from themagiconions.com, peaberrydesigns.com, and livinglandscapesandgardens.co.nz (accessed May 2014).



Plan view of the site highlighting the features that compose the "convey" design theme.



Rendering of the play area looking southeast. To the right, a child plays with a wooden musical instrument sheltered by a willow fence. In the center children run about the bean huts, while a boy hops from stump to stump on the left. In the background, children play by the shallow wetland while their parents look on from the arbor.

accessible for people in wheelchairs or with limited mobility. A central, pump-based water feature serves several purposes. While fun and interactive, it also works as a teaching tool to convey the importance of water and hydrological systems in sustaining all life.

PLAY AREA

Contrasting to the conventional playground next door at Be'er Sheva, this area allows for unscripted play opportunities. The area is composed of natural elements, such as logs, stumps and rocks, and living elements such as bean tunnels and huts. Natural materials are also used to create musical instruments in a music garden, semi-hidden by a willow fence, as pictured above. In addition, the shallow wetland and native grassland are perfect spaces for catching frogs, building dams or huts, or engaging in other unstructured natural play opportunities that help children both learn about and build connections to the natural environment.

The area is directly accessible from the learning garden via logs and rocks that bridge across the shallow wetland. Furthermore, the central location allows for great visibility from the agricultural fields, the greenhouses, and other activity centers, and a line of thick shrubs create a barrier to the adjacent forest garden, where visibility is lower. With this addition, parents would be able bring their children with them when they come to volunteer or garden and keep on eye on them while they work.

BIRD BLIND

A sheltered protrusion along the boardwalk, the bird blind is a place for both casual observation and more in-depth learning. Its location over the wetland pond provides excellent opportunities for spotting birds as well



Rendering of the bird blind looking south from the boardwalk. Visitors observe the wetland wildlife while a child looks through a 'historiscope' to the site's past.



The 'historiscope' would have a similar appearance to coin binoculars, but when visitors look through the lens they see how the scenery around them would have appeared in the past.

as ducks, frogs, and other wetland creatures. The overhead shelter gives visitors protection from rainy Seattle weather as they observe wildlife.

INTERPRETIVE ELEMENTS

Throughout the site, interactive interpretive elements help visitors learn more about the site and provide activity stations for touring school groups. Rather than conventional English language signage, these interpretive elements provide visual information and invite interaction.

For example, rendered on the previous page next to the bird blind and pictured above is a 'historiscope.' The 'historiscope' would have a similar appearance to the coin binoculars often found at scenic overlooks, but function more closely to a View-Master®, or stereoscope. When visitors look through the lens, they look into the past. The images inside the device show what someone would see if standing in the same spot, 50, 100, or 1,000 years in the past. Just as with a View-Master®, the user can rotate the images to travel through different time periods.

The bird blind offers another form of visual interpretation through a labeled image collection of bird species and other wildlife with key maps that illustrate each species' migration route or place of origin. This would allow visitors to learn the names of the wildlife they are seeing and learn where migrating birds might be coming from and heading to. Visiting groups could also engage in games or activities where they try to spot particular creatures or see if they can match those they see to a picture.

Similar activities would also be available for plant species. A flip sign could ask a question in basic English such as "What plants do you see that you can eat?" When the top is flipped up, a pictorial list displays the edible plants within sight and highlights their edible parts.

In addition to ecological learning activities, other elements would provide cultural interpretation as well. For example, the benches along the paths would be inscribed with poems or proverbs in the native languages of Rainier Beach residents that relate to their experiences of being at the site or part of the community.



An example of poetry inscribed into a bench. At RBUFW, one side could display the poem in its native language, and the other could translate it to English. Photograph from retirementanadventure.files.wordpress.com (accessed May 2014).

CULTIVATE

This design aims to maximize both the ecological function and food production capabilities of the site. The existing row agriculture area has been expanded and is complemented by new, low-maintenance food production areas dominated by perennial plant species. The other areas of the site are also improved to increase their habitat value. This section describes the different natural areas of the site.

HERB GARDENS

Entering the site from Be'er Sheva, the herb gardens are one of the first sights to greet visitors, spanning out to the northeast and lining the path leading towards the farm stand with strong and pleasant fragrances. These gardens function similar to a P-Patch, however, rather than being cared for by individuals, these gardens are each stewarded by a local community group such as the Oromo Cultural Center, Ethiopian Community Mutual Association, or Buddha Jewel Monastery. Rather than occupying a uniform series of predesigned garden beds, both the garden design and planting choices are up to each group. Thus, each garden is highly unique, and together they reflect the cultural diversity of the neighborhood.

FOREST GARDEN

Currently, the agriculturally productive areas of the site are very distinct from the wetland and forested areas. The introduction of a forest garden, however, would help visitors to understand these as interconnected systems. Furthermore, a forest garden, designed to mimic natural, self-supporting ecosystems, could enhance the food production capabilities of the site while requiring much



Plan view of the site highlighting the features that compose the "cultivate" design theme.

less maintenance and volunteer labor than conventional agriculture.

Similarly to the herb gardens, the plants forming the various layers of the forest garden originate from all across the world. Here, however, the plants intermix and support one another to form a single interconnected system.

The plants in both the herb gardens and forest garden will create opportunities for immigrants with farming or gardening experience in their home country to share their knowledge with younger generations. The fragrance and tastes of these plants can also provide a nostalgic connection to their homeland and help to bridge that environment with their new surroundings.

Interpretation in the forest garden is achieved in multiple ways. Plants are identified with plaques that display their names and maps of their origins. However, more personal interpretation is also achieved through community participation. Little boxes within the forest garden contain blank pieces of waterproof paper that visitors can use to write down a memory that was evoked through the garden, or a story of how a plant is used in their home country. These memories and stories can then be hung from branches in the forest, as shown in the image below.



In the forest garden, visitors can write down memories and stories that a tree or plant evokes and suspend them from its branches. Photograph from insidebainbridge.com (accessed June 2014).

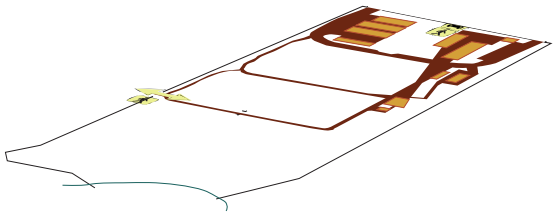
POND AND HABITAT ISLANDS

When Lake Washington was lowered by nine feet in 1917, much of the surrounding marshland was destroyed, as was discussed earlier. When the ditch was dug through the center of the site, remaining wetland areas were filled in to create arable land. The proposed pond and habitat islands reintroduce some of the critical habitat and ecosystem functions that these historic wetlands provided by expanding the area of the existing open water wetland.

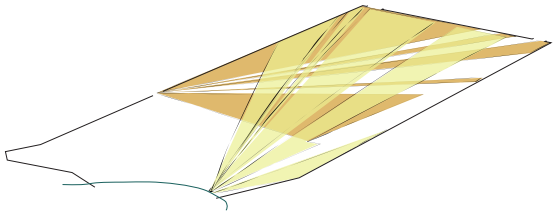
The large increase in sunlight reaching the ground that will result from clearing the eastern section of the dense shrub thicket will make the expanded pond prime habitat for waterfowl (France 2002). Furthermore, the contours of the pond are formed such that the edges between land and open water are maximized, which are the most productive area of the wetland, and a breeding ground for many species (France 2002). Also increasing this edge is a series of habitat islands within the pond that create spaces for wildlife, sheltered from the human activities on site.

PLANTING ZONES

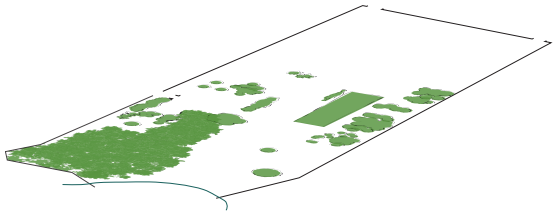
The planting zones were developed according to the climatic and environmental conditions of the site such as moisture and shade levels, as well as to human factors. For instance, planting heights were selected to preserve view corridors from the Be'er Sheva entrance to the central areas of the site, and from the site to Lake Washington. Edible plants, which require more care, were placed in close proximity to supporting site facilities such as the tool shed and compost. As mentioned in the forest garden section, the edible plants were also selected for their ability to represent a large variety of the world's regions.



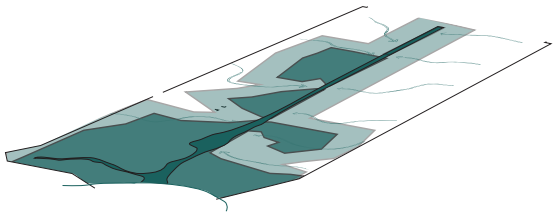
ACTIVITY CENTERS



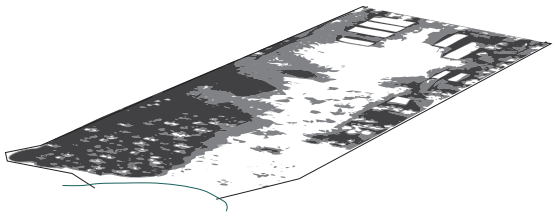
VIEWSHEDS



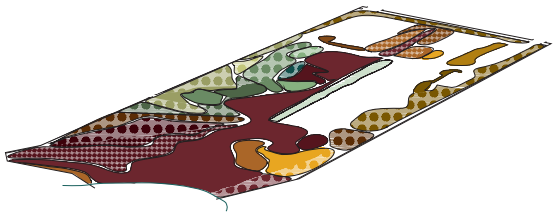
EXISTING VEGETATION



HYDROLOGY

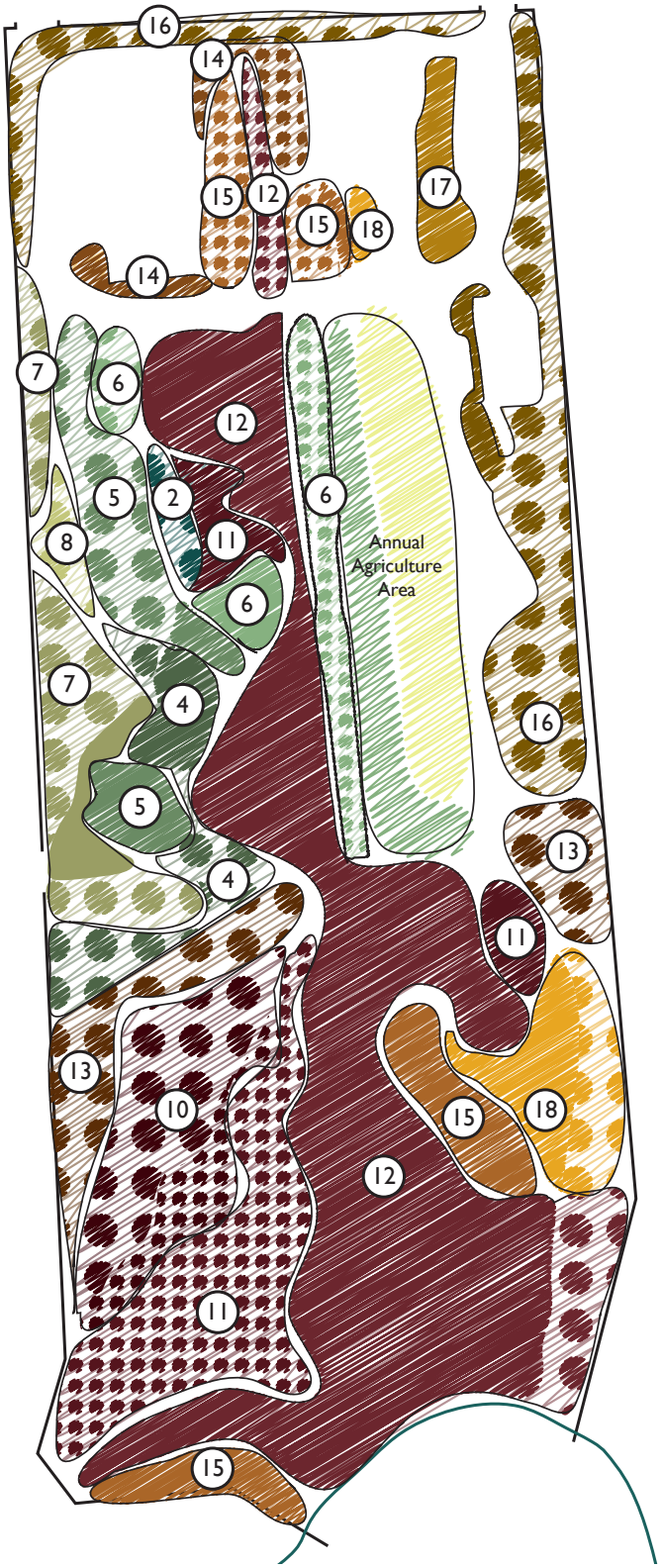


SUN + SHADE



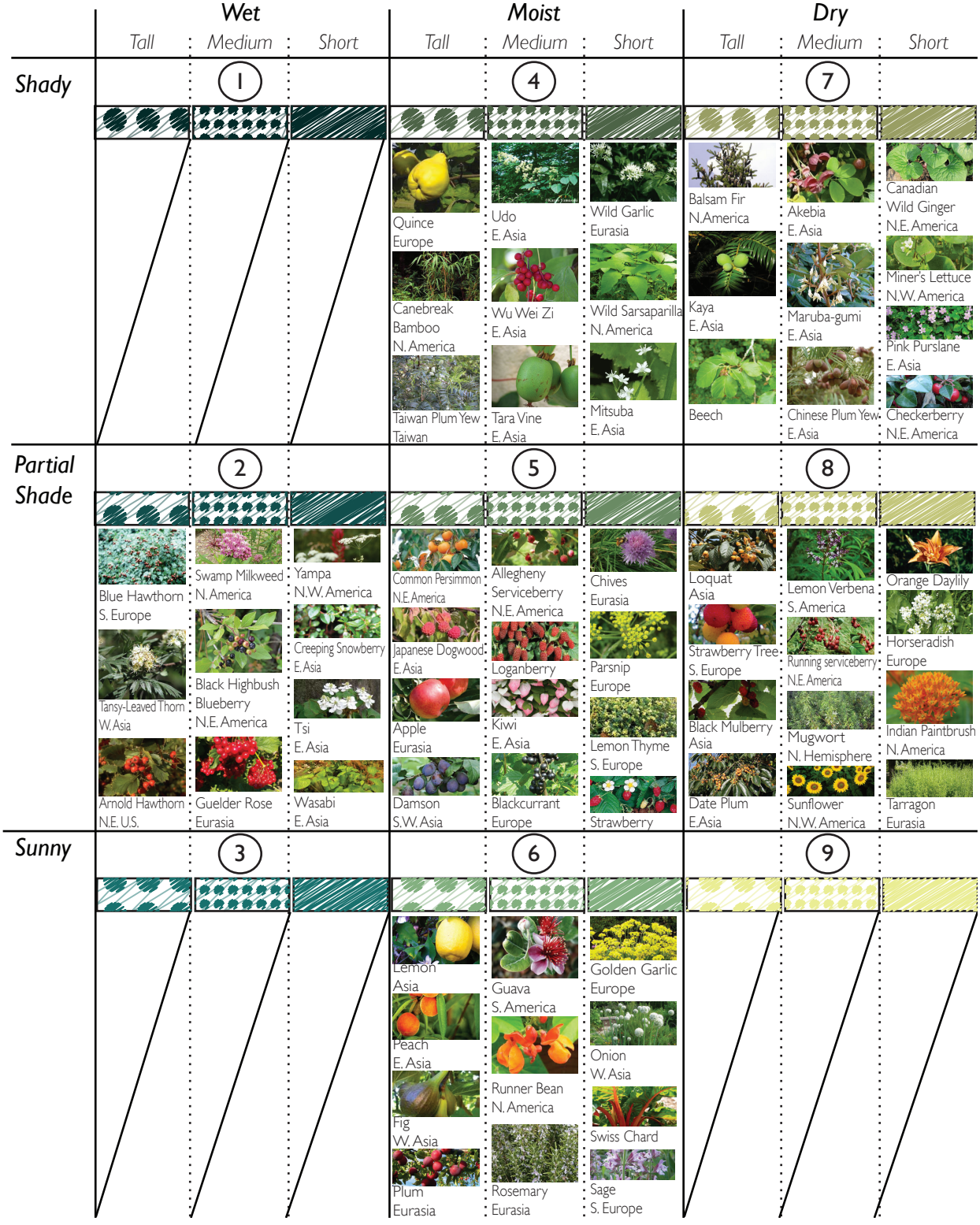
PLANTING ZONES

The planting zones were determined from a range of factors including climatic factors like sunniness and hydrology and human factors including proximity to facilities and viewsheds.

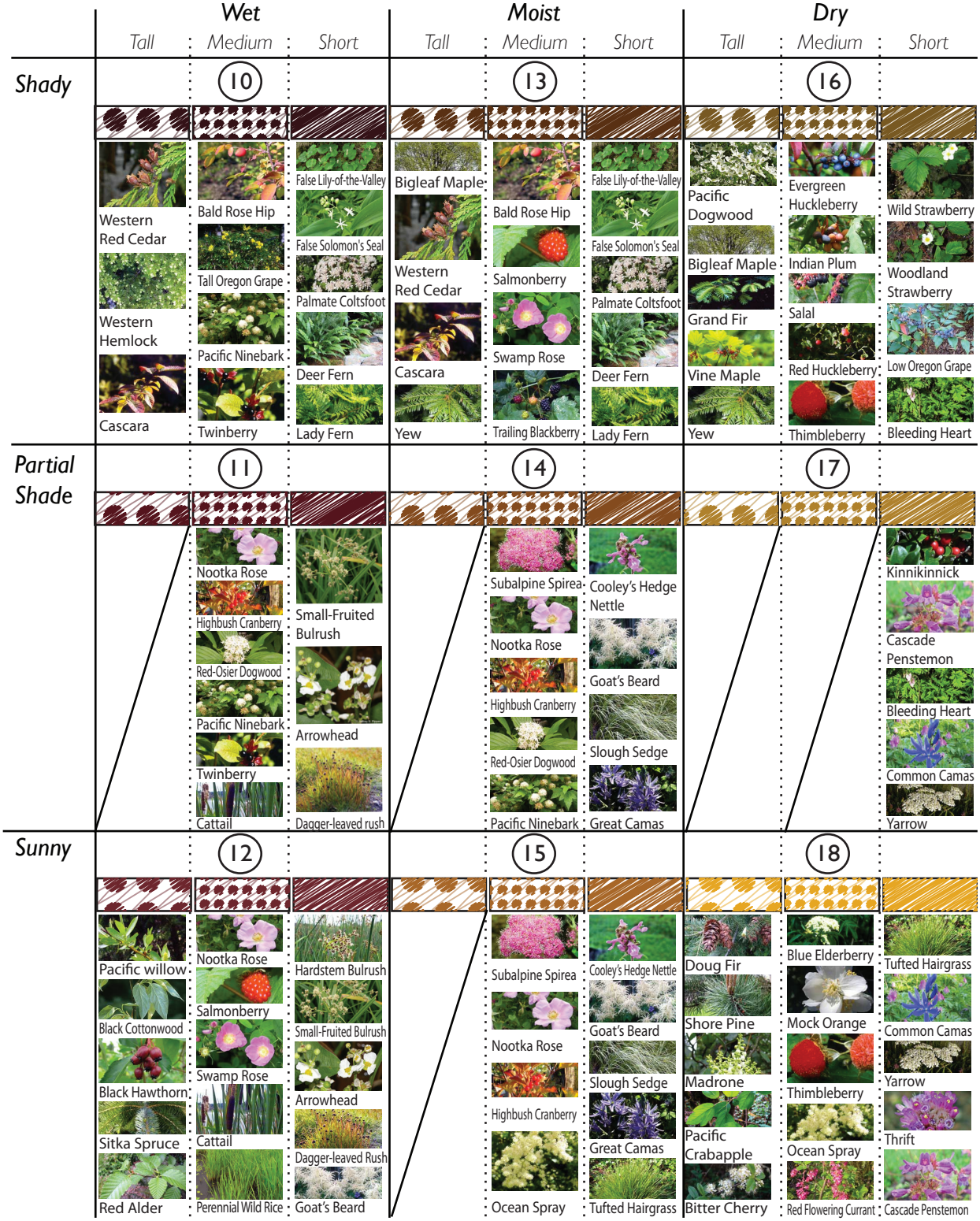


The resulting planting zones derived from the process described to the right. Numbers coordinate with the charts on the following two pages.

EDIBLE FOCUS



HABITAT FOCUS



COALESCE

Rainier Beach Urban Farm and Wetlands intersects with the surrounding neighborhood on three sides. Today each of these intersections are marked by steep terrain topped with a tall chain link fence, imparting a sense of seclusion onto the site. This design aims to re-integrate the site physically, socially and ecologically with the surrounding community fabric. The fence is punctured and the new openings are adorned with expressions of invitation. Inside the site, the provision of diverse activities and environments creates a space that entices participation among residents of all ethnicities, cultures, ages and abilities. Removing shrubs and opening up sightlines to and from Lake Washington adds another element of connection and imbues the site with a sense of rootedness in place.

By revealing local histories and ecological systems, the educational opportunities on site can also connect the diverse residents of Rainier Beach to the place where they live, thus strengthening a neighborhood identity and forming a shared sense of belonging.

Through these improvements, Rainier Beach Urban Farm and Wetlands will contribute vitality, cohesion, and resilience to the social and ecological fabric of Rainier Beach.

The chart on the following spread reviews how the design elements presented in this chapter reflect the guidelines set forth in the Design Framework for Cultural Diversity. Next, the final chapter reflects on the lessons learned through this thesis project and suggests directions for future explorations of this topic.



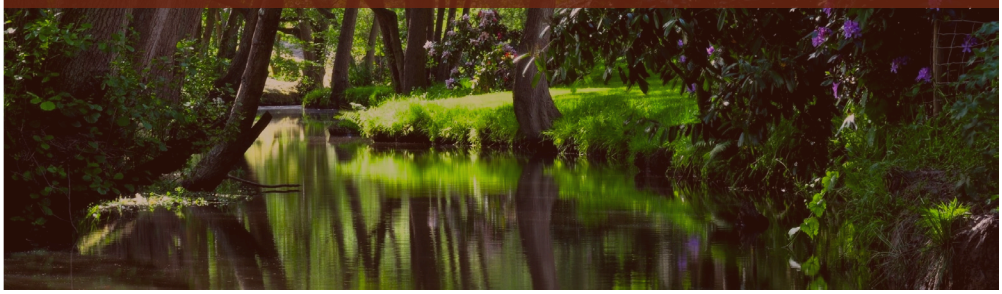
Plan view of all proposed site improvements.

	CONNECT
1. Create flexible environments	Entrance: Gate wall designed to expand over time. Sculpture Garden: Spacious, open area allows for a wide variety of installation art possibilities. Arbor: Backless benches allow for many different social configurations and also leave space for tables to be brought in for eating and activities.
2. Allow for community participation in shaping the landscape	Entrance: Each year school groups design and decorate tiles to create the gate wall. Sculpture Garden: Artists, community groups, and school groups create revolving temporary exhibits.
3. Facilitate opportunities for positive interpersonal interactions	Terraces: Semi-clustered seating supports larger group interactions as well as casual encounters. Sculpture Garden: Opportunities to create artwork together can strengthen community ties. Arbor: Centered between many activity centers, the arbor provides excellent opportunities for social gathering and meeting new people
4. Develop a diverse and evocative plant and material palette	Plant palette helps to connect people to place by providing nourishment and attracting wildlife.
5. Use visual rather than linguistic communication	Entrance: Pictorial signage directs visitors to major site features without need for written labels. Sculpture garden: Provides opportunities for artistic communication
6. Incorporate a diversity of environments, activities and gathering spaces	The seating, gathering, and activity spaces available throughout the site accomodate a variety of group sizes and activity types.
7. Facilitate connection between people and place	Sculpture Garden: Manipulating natural materials to create art engages students with their natural environment Dock and Boardwalk: Added connection to Lake Washington provides orientation and sense of place.

Chart displaying ways in which the final design coordinates with the Design Framework developed in Chapter 2.

CONVEY	CULTIVATE
Play area: Unstructured environment supports child-directed play experiences.	Herb Gardens: While suitable space has been dedicated to the gardens, the design decisions are left up to the community groups that steward them.
Interpretive Elements: Community members contribute poems and proverbs from their native language expressing their experiences at RBUFW that are inscribed into benches alongside English translations when necessary.	Herb Gardens: Different community groups steward the different gardens infusing each with its own unique cultural aesthetic and planting scheme.
Learning Garden: Both children and adults can share their knowledge and gardening skills with others and build social ties through cooperative learning activities.	The gardening and restoration activities that occur on site create opportunities for collaboration and learning through observation, while also creating conversation topics that ease pathways to new social ties
Diversity of plant palette provides opportunities to convey cultural meanings and practices related to food and agriculture.	Forest Garden: Edible plant varieties originate from all over the world. Herb Gardens: Culturally appropriate herbs chosen by diverse groups of neighborhood residents
Bird Blind: Visitors learn through direct observation and labeled wildlife illustrations can teach species names to English and non-English speakers Interpretive Elements: 'Historiscopes' visually reveal site history	Forest Garden: Interdependence of the plant species forming different layers of the food forest demonstrates ecological concepts and reveals connections between agricultural and forest systems.
Varied gathering spaces throughout the site double as outdoor classrooms that can accomodate a large range of learning opportunities.	From designed to unstructured, forested to open, dry to inundated, agriculutral to native and in between, the site offers a wide range of natural environments. Meanwhile, proposed new facilities offer a complementary range of indoor spaces.
Play Area: Unstructured nature of play area allows children to interact with the natural environment Bird Blind: Connects visitors with local wildlife Interpretive Elements: 'Historiscopes' connect residents with the neighborhood's history	Herb and Forest Gardens: By raising herbs and plants from their homeland, immigrant communities can create comforting strands of familiarity that smooth the transition to their new environment

5 REFLECTIONS



REFLECTIONS ON THEORIES AND DESIGN DEVELOPED

In Chapter 2, this thesis introduced seven guidelines that form a Design Framework for Cultural Diversity (DFCD) based on existing research that has been done on this topic. These guidelines are:

1. Create flexible environments;
2. Allow for community participation in shaping the landscape;
3. Facilitate opportunities for positive interpersonal interactions;
4. Develop a diverse and evocative plant and material palette;
5. Use visual rather than linguistic communication;
6. Incorporate a diversity of environments, activities and gathering spaces;
7. Facilitate connection between people and place.

This framework co-evolved with the design of the site, with each informing the development of the other.

This section examines the ways in which this framework was applied to the design of RBUFW. Furthermore, it evaluates the strengths and weaknesses of this framework for future applications.

The DFCD was most useful in adding a layer of depth to the design, that might not have been present if it were only based on existing conditions, form, and program. The framework helped to overcome quotidian design reflexes by encouraging more unique responses that considered social consequences. For instance, rather than distribute standard benches across the trails however-many-feet on center, the framework encouraged more in-depth questioning and experimentation with site seating arrangements that led to a varied and distinct set of gathering spaces on site.

The openness of the guidelines made them widely applicable across the site, and inspired more creative thinking than would be possible with a more concrete or detailed guide. Furthermore, this flexibility allowed important program needs and site conditions to not be overshadowed by the design framework.

However, it was precisely the abstract nature of the DFCD that presented the greatest challenges in its application. There is a dearth of supporting research to elaborate on how these guidelines might be implemented. For example, little is yet known as to what seating arrangements in a public space might best facilitate positive "fortifying," "constructing," or "encountering" transactions, (as defined in Chapter 2). Further research on this topic will help to close these knowledge gaps (ideas for which are discussed in the next section). However, advances can also be made through further design exploration, implementation, and evaluation. Through further design exploration, landscape architects and designers can experiment with arrangements of space that create flexibility without insipidness. They can experiment with visual communication tools that do not compromise the depth of communication possible through linguistic means. If these design hypotheses are then subjected to post-occupancy evaluations, the field will be able to make significant advances in its understanding of these matters.

FUTURE EXPLORATIONS

This thesis presents a nascent set of theories and strategies pertaining to the relationship between public space design and cultural diversity. This section investigates what research initiatives are needed to support the process of testing, expanding, and challenging the ideas presented herein, and making advancements in this field.

CULTURAL PREFERENCES

While flexibility and diverse spaces and activities within a design can help to accommodate a wider variety of cultural preferences than might typically be accounted for, more knowledge is needed as to how designers can better serve the needs and preferences of diverse communities.

The cultural preferences studies undertaken thus far have frequently been muddled by confounding skin color with culture. The dual categories of African American and white, often applied to test preferences in the past, are of very limited utility in understanding modern American urban areas such as Rainier Beach. Studies that distinguished between, for instance, East and West Africans, Somalis and Ethiopians, Northern and Southern African Americans, could develop a much stronger understanding of which categorization methods have the greatest predictive power in determining public space preferences.

However, this information should always be used carefully. There will never be a complete conformance of preferences under any such categorization. A refined understanding of differences in cultural preference should primarily be used to challenge existing "common good" assumptions that marginalize the needs of some communities; it should not be used to simply rely on new assumptions.

Cultural preference studies can provide a launching ground to guide a more informed public engagement process, but cannot be used to substitute this process.

INTERACTIONS

While there is a lot of existing theory that explores prejudice and intergroup relations in the urban public realm, there is a notable lack of information when it comes to the influence of design on these issues. Very little is known about what types of spatial relationships within and between various social and activity spaces might breed conflict or intolerances and what might build stronger community ties.

Chapter 2 revealed four types of cultural transactions that can occur between individuals or groups. These are: fortifying, constructing, encountering, and assimilating. This categorization could be applied to future investigations of public space design. Observations should be made on the influence of existing spaces on the cultural transactions that occur. New design techniques informed by this process could once again be tested, as part of an iterative development in this field.

PROCESS + MANAGEMENT

The process involved in creating a public space and the management of the space thereafter are as important as the physical structure of the site. It is common sense that outreach efforts to engage the full diversity of citizens within a community, including those typically underrepresented in these processes, will result in spaces that better reflect the full diversity of community preferences and needs. However, further research could benefit these efforts by providing insight as to which outreach methods are most effective. For instance, further research could investigate which channels of communication are most effective in reaching non-English speaking households or which methods of engagement result in the greatest sense of ownership or stewardship over a space.

CONCLUDING THOUGHTS

The relationship of cultural diversity and design is a topic that can be uncomfortable or difficult for some people to discuss. The close relationship to the historic and current problems of racial prejudice faced in this country makes it a very sensitive issue. Furthermore discomfort can stem from the difficulty of discussing differences in cultural preference in a way that does not rely upon or contribute to stereotypes. Therefore, these topics have often been avoided in public space design and management discourses and, instead, assumptions of universal preferences and needs are typically, though often implicitly, applied. However, relying upon these assumptions is likely to only contribute to the marginalization of historically underserved and underrepresented populations.

This thesis has provided a review of the existing literature with insights into this topic, offered new theories, and explored those theories through their application to the design of Rainier Beach Urban Farm and Wetlands.

It is my hope that these efforts can serve as a launching ground for future explorations into this important topic, and, through these efforts, the public space 'monocultures' of today will soon give way to a more inclusive, inspiring, and culturally-rich landscapes.

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