

INTERSECTIONS OF COMMUNITY, TRADITIONAL KNOWLEDGE, AND PLACE:
A PARK DESIGN FOR THE LA JOLLA BAND OF LUISEÑO INDIANS

BY

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THESIS

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ABSTRACT

The Luiseño people have utilized Southern California's landscape to support their way of life for thousands of years. Their identity is a product of their relationship with this land and is reflected in their culture and traditional practices. Today for the Luiseño people, this relationship between land and culture is dissolving. This is especially true for the La Jolla Band of the Luiseño Indians. Recent shifts in both landscape and lifestyle threaten the persistence of La Jolla community's unique knowledge, traditional practices, and native language. The central challenge for this thesis is to examine ways in which the landscape can be designed to convey La Jolla cultural practices and provide a means for transmitting traditional knowledge. I have engaged with La Jolla tribal members, the La Jolla Environmental Protection Office, the San Diego Zoo Institute for Conservation Research, and University of Illinois faculty and peers to design a park for the La Jolla community that provides considerably more than the typical recreation activities we so often associate with a park. To guide my design process, I synthesized the criteria for success, identified by each of the project partners, and determined that to be successful the landscape must honor the past, acknowledge the present, and accommodate the future. Using a participatory process, I was able to provide design recommendations for an engaging and educational park landscape that integrates cultural gardens, community gardens, and recreational space into a contemporary context.

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CHAPTER 1: INTRODUCTION

For thousands of years, the Luiseño people have utilized the Southern California landscape to support their way of life. Their identity is a product of their relationship with this land and is reflected in their culture and traditional practices. Today for the Luiseño people, this relationship between land and culture is dissolving. This is especially true for the La Jolla Band of the Luiseño Indians. Recent shifts in both landscape and lifestyle threaten the persistence of La Jolla Band's unique knowledge, traditional practices, and native language.

Many tribal members recognize this phenomenon and the importance of preserving their heritage so that it can be shared with future generations. The central challenge for this thesis is to examine ways in which the landscape can be designed to convey La Jolla cultural practices and provide a means for transmitting traditional knowledge.

I became involved with this challenge in May 2010, when I accepted a fellowship with the San Diego Zoo Institute for Conservation Research. The focus of my internship was to assist in the development of a traditional foods garden at the La Jolla Band of Luiseño Indians Reservation. During the past year, I have engaged with La Jolla tribal members, the La Jolla Environmental Protection Office, the San Diego Zoo Institute for Conservation Research, and University of Illinois faculty and peers to design a park for the La Jolla community that provides considerably more than the typical recreation activities we so often associate with a park. This landscape is the beginning of an effort by the La Jolla community to make visible and more concrete some of the traditional aspects of their culture that are intertwined with the land.

1.1 BACKGROUND

The La Jolla Band of Luiseño Indians is part of a diverse Native American community consisting of over 60 tribes whose territories stretch across California (Heizer 1978). Prior to European settlement, the Luiseño territory, stretched across more than



Figure 1: The green area indicates the extent of the Luiseño territory which stretched across 900,000 acres and was home to 10,000 Luiseño people prior to European contact.

Image Source: Adapted from *Handbook of North American Indians. Volume 8 California.* eds. Robert F. Heizer and William C. Sturtevant (Washington, DC: Smithsonian Institution, 1978), ix.

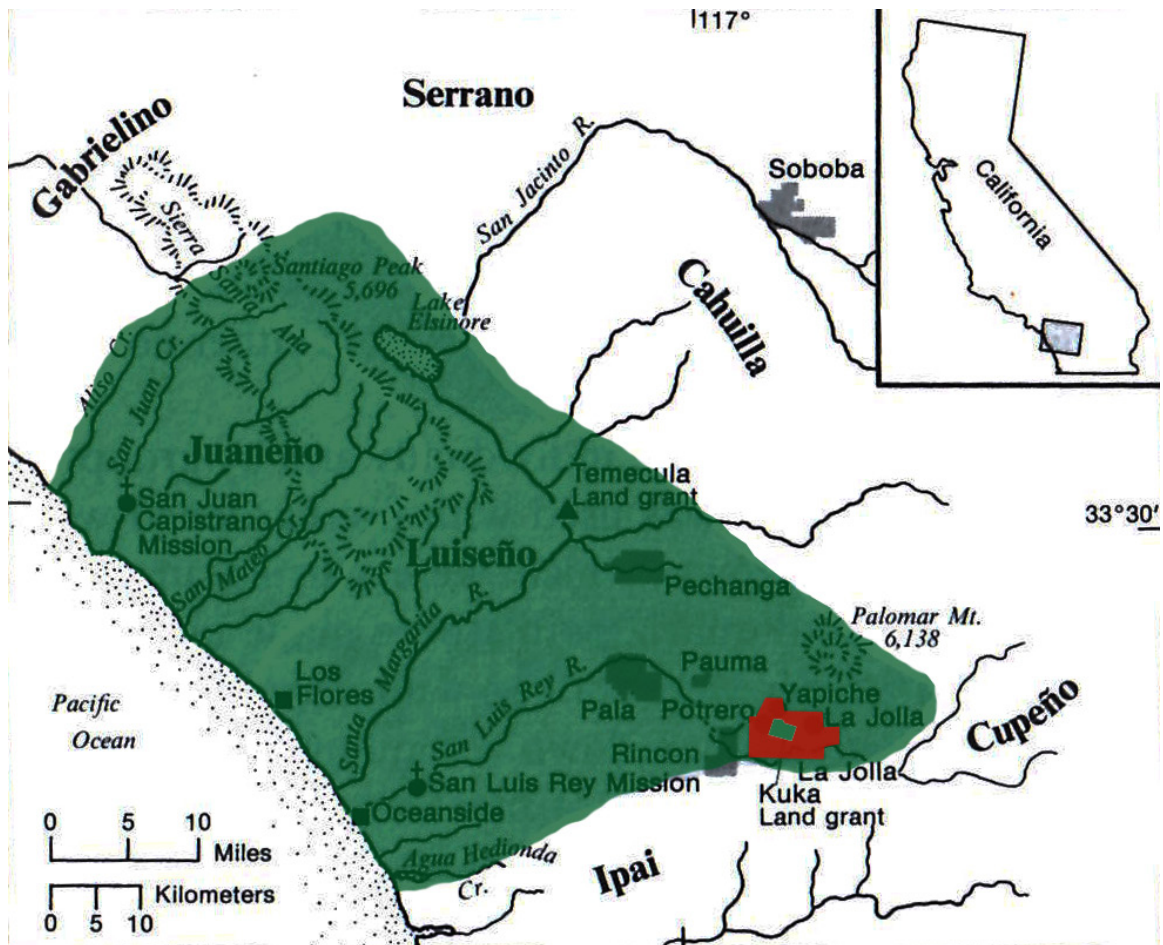


Figure 2: : The red area indicates the 9,000 acre La Jolla Band of Luiseño Indians Reservation where 480 La Jolla tribal members live today.

Image Source: Adapted from *Handbook of North American Indians. Volume 8 California.* eds. Robert F. Heizer and William C. Sturtevant (Washington, DC: Smithsonian Institution, 1978), 551.

900,000 acres of Southern California. White (1963) estimated that, at its peak, this area included 50 villages and a minimum total population of 10,000 individuals. The coastal boundaries of the Luiseño territory extended south from Aliso Creek to Aqua Creek and inland to Santiago Peak in the northeast and Palomar Mountain in the southeast (Heizer 1978). The La Jolla Band of Luiseño Indians' lands consisted of the area surrounding several villages in the southeastern portion of the Luiseño territory extending down the southern slope of Palomar Mountain to the area that is today Pauma Valley.

Following the first European contact in 1776, several missions were established in the region. At the missions Native Americans were taught the Roman Catholic faith, Spanish language, European farming practices, and other European trades (Heizer 1978). During this period, the combination of poor living conditions at the missions and the spread European disease through the Luiseño population caused extensive population declines. In addition, European influence created a shift from a traditional ways life to ones which were imposed on them by the missions causing persistent erosion of their Native culture .

1.2 SITE CONTEXT

In 1876 the La Jolla Band of Luiseño Indians reservation was established by executive order (Heizer 1978). Today, about 480 La Jolla tribal members live at the 9,000 acre reservation in San Diego County. The area was once described to me by a San Diego County resident as, “one of the most rare and pristine places in the county.” Although the extent to which the region is truly “pristine” is debatable, the sparsely populated landscape noticeably deviates from the heavily developed character associated with the majority of San Diego County. Developed and residential areas are dispersed throughout the reservation and are organized into small neighborhoods consisting of a few homes.

The elevation on the reservation ranges from 2,000 feet to 5,000 feet above sea level, a range which supports a variety of ecotypes. The region receives up 30 inches of rain annually, most of which falls in the winter and spring. Temperatures range from just below freezing to 100 degrees depending on the season and elevation. The west and south facing slopes at lower elevations consist predominately of coastal sage scrub. Sweet smelling *Artemisia californica* Less. (California sage), dark green leaved *Eriogonum fasciculatum* Benth. (California buckwheat), and yellow flowering *Lotus scoparius* Nutt. (deerweed) give the mountain sides a grey-green hue in the winter and spring, turning to yellow and then brown as summer progresses. Oak forests consisting of *Quercus agrifolia* Née (coast live oak), *Quercus kelloggii* Newberry (black oak), and



Figure 3: A view south from Palomar Mountain shows the mountainous topography of the region. The elevation on the La Jolla Reservation ranges from 2,000 feet to 5,000 feet above sea level - a range of elevations that supports coastal sage scrub, oak forest, and pine forest ecotypes.

Quercus engelmannii Greene (engelmann oak) dominate the north and east slopes and mid-elevations. The century old oaks are striking in appearance, paying homage to the rich history of the region. At the higher elevations oak forests transition to pine forests comprised of *Pinus ponderosa* C. Lawson (ponderosa pine), *Pinus jeffreyi* Balf. (Jeffrey pine), *Pinus coulteri* D. Don (Coulter pine), *Abies concolor* (Gord. & Glend.) Lindl. ex Hildebr. (white fir), *Pseudotsuga macrocarpa* (Vasey) Mayr (big-cone Douglas fir) and *Calocedrus decurrens* (Torr.) Florin (incense cedar). Adding to the biodiversity of the area, the San Luis Rey River and many smaller mountain streams and tributaries provide suitable habitat for wetland and stream-side species like *Salix lasiolepis* Benth. (arroyo willow), *Juncus textilis* Buchenau (basket rush), and *Anemopsis californica* (Nutt.) Hook. & Arn. (yerba mansa).

1.3 SITE DESCRIPTION

This park development project is located within the Poomacha neighborhood which consists of twenty six homes. There are views of the surrounding valley dotted with oak trees and of the mountains in every direction. Palomar Mountain is easily visible to the north. The site is positioned in the center of the neighborhood. It extends across 4 acres and includes an existing baseball diamond. The Poomacha Baseball Field is used to host intertribal baseball games and is frequented by tribal youth. The area immediately surrounding the baseball field currently functions as a popular community



Figure 4: A view east across the existing park site shows evidence of vehicular traffic and sparse, weedy vegetation.



Figure 5: A view west across the site shows Poomacha Baseball Field which provides valuable recreational opportunities for La Jolla tribal youth.

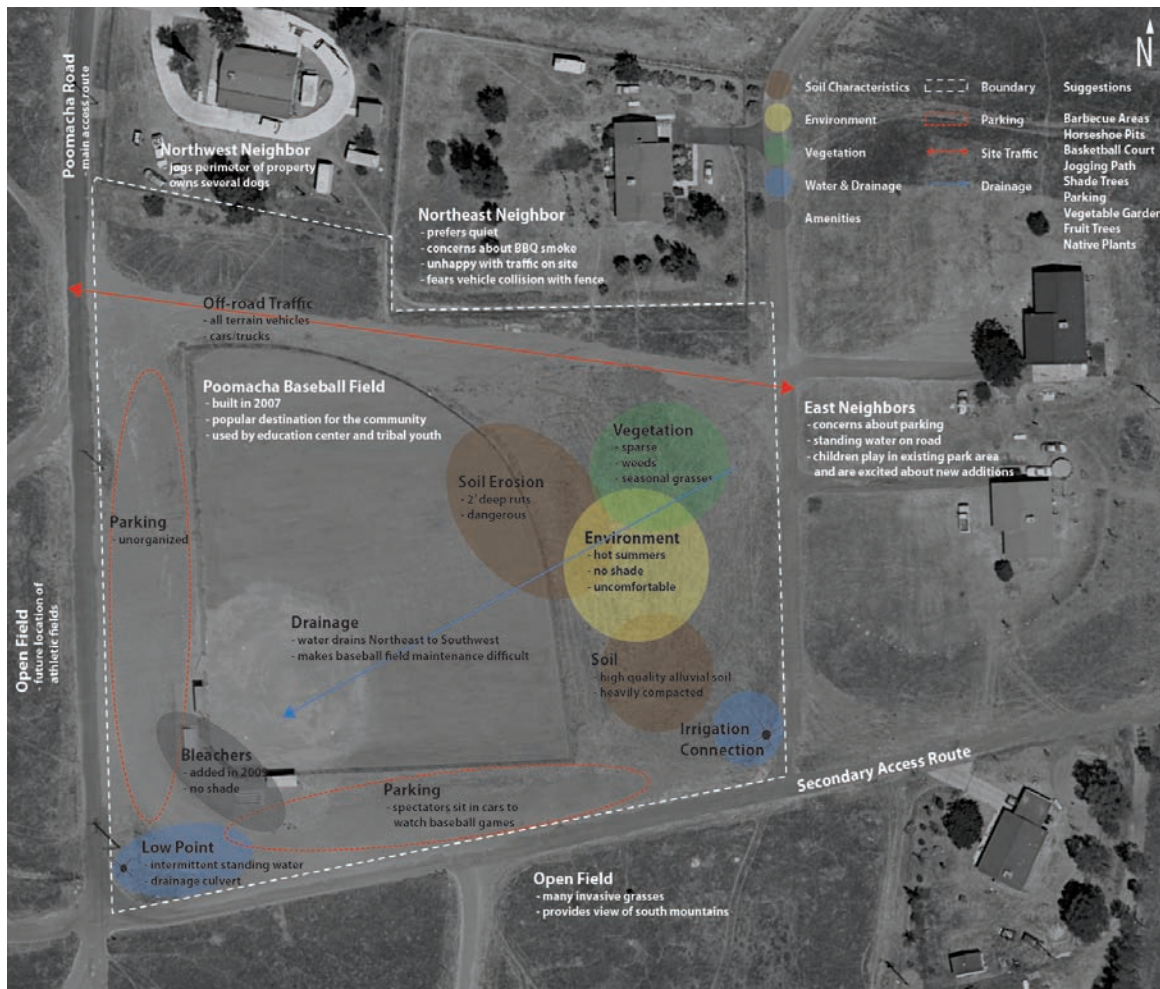


Figure 6: Poomacha Baseball Field, located at the existing park site, is one of the most commonly used recreational areas at the La Jolla Reservation. Many tribal members gather around the bleachers and park their cars along the fence to watch the games. The 2.5 acre area surrounding the baseball field is sparsely covered by weedy vegetation and is frequently used by cars and all-terrain vehicles.

gathering area. The most commonly used areas are the bleachers and the narrow strips just south and west of the diamond's fence. The narrow strips are typically used by individuals who sit in their cars to watch the baseball games. Community members note the lack of shade as a major problem in these areas. The rest of the site is largely unused except as a shortcut for off-road traffic moving east and west and as a playground for all-terrain vehicles and dirt bikes. I often saw children from the Poomacha neighborhood riding their bikes or playing at the site. There are many dogs in the area that run around all over the neighborhood. I also was told of a horse pastured to the south that tends to

escape its fence and graze in personal gardens.

There is very little vegetation on the site in large part because people regularly drive vehicles off the road onto the park site, which creates conditions that are nearly impossible for plants to grow in. The small amount of existing vegetation is mostly weedy in nature and no trees are currently present. The lack of vegetation is partially accountable for the extensive erosion issues. The highest point is located in the northeast corner of the site which slopes downward to the southwest. During intense rain events in the winter and spring the soil is eroded away forming gullies up to three feet deep. The water and eroded soil travel across the site and through the baseball diamond causing extensive damage before leaving the site by flowing over the road or through a 12 inch diameter culvert in the southwest corner. In summer the site is very hot and dusty. The main access to the site is Poomacha Road which runs along the west side of site's boundary and connects to California Highway 76 to the north. There is a secondary access road to the south that connects to Sengme Oaks Road to the east and provides access to the La Jolla Tribal Hall .

1.4 PROJECT PARTNERS

This design project is a collaborative between the La Jolla Band of Luiseño Indians Environmental Protection Office, the San Diego Zoo Institute for Conservation Research, and me. It was first initiated by the La Jolla Environmental Protection Office as a community enhancement project. The original goal of the project was to provide residents with a more accommodating space to watch baseball games and gather for social events.

Upon receiving grant money from the San Diego Foundation for implementing the project, the La Jolla Environmental Protection Office recognized the opportunity to expand the project by incorporating community vegetable gardens, a traditional foods garden, and a walking path. In an effort to realize their goals the Environmental Protection Office partnered with the Institute for Conservation Research, who had been

working with several other Native American communities in the region. The Institute for Conservation Research was also able to contribute funding for the project through grant money provided by the Burpee Foundation.

I became involved with the project in May of 2010 when I was accepted a position as the Sefton Summer Fellow in the Applied Plant Ecology division of the Institute for Conservation Research. At this time the planning of the La Jolla Community Park and Gardens, as it came to be called, was in its initial stages. My task was to serve as the lead designer for the project and to act as a liaison between the Institute for Conservation Research, the La Jolla Environmental Protection Office, and La Jolla community members.

During the following three months, I worked part of the time at the Institute for Conservation Research in Escondido, California, and part of the time at the La Jolla Environmental Protection Office at the La Jolla Band of Luiseño Indians Reservation. In August, 2010 my fellowship ended and I returned to the University of Illinois at Urbana-Champaign. By this time I had become invested in the La Jolla Community Park and Gardens project and had made the decision to pursue this project as my landscape architecture graduate thesis. This decision added University of Illinois faculty members and my fellow graduate students as important partners. The



Figure 7: While completing my thesis I worked with the Institute for Conservation Research and the La Jolla Environmental Protection Office. In the photo, I am helping construct a shade structure at the La Jolla Band of Luiseño Indians Reservation.

combination of expertise and local knowledge coming from multiple sources provided a wealth of knowledge to inform the design process and proved to be a substantial challenge for me to consider, apply, and communicate.

CHAPTER 2: PROJECT CHALLENGES

The La Jolla community, like many Native American communities, is a product of their rich history which is powerfully linked to the experience of landscape. The diverse assemblage of habitats and plant species in the region may offer some explanation for how the La Jolla tribe has been able to persist on these lands for thousands of years. Traditions and cultural practices still performed today offer evidence of this relationship. Offering tobacco and a prayer before harvesting plant material, weaving baskets from juncus or pine needles, and harvesting acorns to prepare wiiwish, a traditional dish, are just a few examples of the many practices that demonstrate the utility of the land.

Traditional practices unique to the La Jolla tribe have been passed from generation to generation through oral tradition. Young tribal members learn these traditions from Elders who share their knowledge in the form of stories, songs, and



Figure 8: Oral tradition is the main method for sharing traditional knowledge. In the photograph James Trujillo, a member of the La Jolla Tribal Council, dances and sings a traditional song. James also hosts a Luiseño language class at the La Jolla Tribal Hall once a week. The challenge for this thesis is to design a landscape which can aid community members like James in their efforts to preserve La Jolla tradition.

engaged experience. In the recent decades, however, shifts in both lifestyle and landscape have led to the erosion La Jolla specific knowledge and traditions. The assimilation of the La Jolla community into mainstream American ways of life is strongly evident. In most ways the community members go about their daily lives just like any other American citizens. As a result, the necessary pathways for sharing traditional knowledge have become more obscure and less connected to the current lifestyles of La Jolla tribal members.

2.1 CONVEYING LA JOLLA CULTURE

The central challenge of this thesis is to design a landscape that conveys La Jolla cultural practices and serves as a vehicle for the transmission of traditional knowledge. In a time where cars, video games, and grocery stores constitute the main sources of sustenance and entertainment, practicing traditional skill sets is no longer a requirement for survival and the relationship between tribal members and their ancestral land is less apparent. By designing a landscape that considers traditional knowledge, the connections between the landscape, history, and tradition might become more obvious. In this way, the landscape could potentially contribute to the preservation of La Jolla heritage.

The La Jolla community has identified harvest and preparation of traditional foods, basket weaving, and traditional medicine as important cultural practices. The current landscape, however, does not provide an easily accessible source of the materials required to perform these traditions or educate tribal youth about their value. Focusing on culturally significant plant species in the park's planting scheme could enhance opportunities for community members to engage in traditional practices and help educate tribal youth about the history and value of the surrounding landscape.

2.2 CREATE SOCIAL AND RECREATIONAL SPACE

In addition to this challenge, access to facilities and outdoor space for social or recreational activities is limited. Most social gatherings currently take place at the La Jolla Tribal Hall, a centrally located building with several open rooms, a kitchen,



Figure 9: The children who live in the Poomacha community are excited about new opportunities for recreation and are always interested in knowing what I am working on when I visit the park site.

and limited outdoor space. In terms of social space, the opportunities provided to the community by the La Jolla Tribal Hall are minimal and there is strong community support for a more accommodating outdoor space for barbeques, picnics, and other social engagements.

Community members have also expressed a need for additional space for outdoor recreation. Currently, opportunities for outdoor recreation are limited to a baseball field and an old, worn-out basketball hoop. Many community members, especially the older generations, prefer to get their daily exercise by walking or jogging. However, because of the limited number of sidewalks and trails across the reservation most of these activities are performed in the individuals' backyards.

2.3 ESTABLISH COMMUNITY GARDENS

Some individuals in the La Jolla community maintain personal vegetable gardens at their homes as a source of inexpensive healthy produce. These gardens are



Figure 10: La Jolla community members currently have to travel twenty miles or more to buy vegetables and other produce. They have expressed a need for a community garden as a source of inexpensive produce and as a way to encourage healthy eating and exercise.

an important resource because buying produce at the nearest supermarket requires a 20 minute drive. Store-bought produce is also expensive and the majority of tribal families persist on low household income.

While a vegetable garden seems like a good idea, many tribal members lack the expertise, physical ability, or space necessary for establishing a personal garden. As a result, there is strong support for establishing a community garden, where maintenance responsibilities and produce are shared amongst the tribal members. Tribal members have indicated that the community garden should provide an easily accessible space to grow vegetables, fruit trees, and traditional foods.

2.4 PROJECT SIGNIFICANCE

Taking action to preserve La Jolla cultural practices and traditional knowledge is more important today than ever before. Because it is shared mostly through oral

tradition, much of the knowledge is held by tribal Elders and its persistence is dependent on intergenerational communication. It is the landscape that provides the conditions conducive to passing along stories, songs, and skills to younger generations. As relationships between the landscape and everyday life continue to dissolve fewer Elders are presented with opportunities to share their knowledge. The unfortunate consequence is that much of the La Jolla legacy is lost when an Elder is laid to rest. This challenge is currently being addressed by incorporating cultural education into local after school programs and providing weekly Luiseño language classes to tribal members. This thesis intends to extend those efforts into the landscape by creating an empowering environment for education and experience.

Providing opportunities for physical exercise and access to sources of fresh produce are particularly important in Native American communities because many suffer from increasingly high rates of diabetes (Broussard et al. 1991). Scientific evidence shows increasing cases of type II diabetes is strongly correlated with increasing rates of obesity (Wilson et al. 2007). Physical activity is the most important strategy for preventing or decreasing obesity and, therefore, diabetes (Hassin et al. 2010). Obese individuals also have an increased risk of cardiovascular disease, hypertension, arthritis, sleep and breathing disorders, gallbladder disease, and certain forms of cancer (Wilson et al. 2007).

A community garden offers increased opportunities to educate La Jolla tribal members about the benefits of healthy eating practices and provides a space for them to engage in a low impact form of exercise. Also, additional space for recreational activities might encourage some individuals to exercise more regularly.

Addressing these challenges extends beyond the La Jolla community. Similar opportunities to reestablish relationships to the landscape and improve community health are present in many urban neighborhoods. Landscape architects and city planners often have to tackle these issues. Consideration of traditional knowledge is a widely accepted

practice in many scientific fields, but should not be overlooked as an equally useful tool for landscape architects and designers. Design decisions informed by traditional knowledge can uncover new possibilities and stimulate a greater sense of ownership and pride among community members. Characteristics which could translate to increased project success and greater overall impact.

CHAPTER 3: METHODS

Utilizing traditional knowledge in landscape design involves two fundamental challenges. The first challenge is to identify various ways of acquiring knowledge specific to the particular culture at hand. The second challenge is establishing a means for applying traditional knowledge to the landscape. To overcome these challenges, I have worked to merge traditional knowledge with scientific and design expertise. Synthesizing these knowledge pools required an approach that combined community participation with field research. The feedback and information I gathered during this process informed the design decisions and the criteria for evaluating the project's success.

I was introduced to this project on June 7, 2010 at a meeting attended by the project collaborators. Following this meeting I began to work a portion of each week at the Institute for Conservation Research and part of the week at the La Jolla Environmental Protection Office. I also occasionally visited various sites across San Diego County while fulfilling my field research responsibilities. By spending time every week with each of the project partners I was able learn a great deal, act as a liaison, and keep everyone informed of the project's status. This process sustained the project's momentum and allowed me to quickly address any emerging issues. It also created an environment in which I was continually influenced by different perspectives, allowing me to consider each as the project progressed.

3.1 EVALUATION CRITERIA

As a way to guide my design process, I developed a framework for evaluating the various design concepts. The framework synthesizes the markers of success that were identified by me, the La Jolla Environmental Protection Office, the Institute for Conservation Research, and community garden and ethnobotanic garden design literature.

The cultural and traditional knowledge component of this thesis led me to investigate ethnobotanic garden design as a design precedent. Ethnobotany is the study of the relationships between people and plants. Jones and Hoversten (2004) provide a

framework for a creating a successful ethnobotany garden based on five basic attributes.

1. The project must have a clearly defined mission.
2. The design should focus on visitor experience and utilization of site resources.
3. The landscape must tell a compelling story.
4. The design should provide an environment which is conducive to learning.
5. The site must be capable of adapting through time.

I found this framework to be useful beyond the ethnobotanical component of this project. Because these five attributes provided a solid foundation for achieving the projects overall goals I referred to them throughout the design process as a way to maintain progress toward successful design solutions.

In addition, I considered the evaluation criteria for establishing a successful community garden. Milburn and Vail (2010) identify four “seeds of success” as a framework for sustained community garden success.

1. The gardens must be located at a site that is not vulnerable to being converted for an alternative use.
2. Public interest in community gardening must be sustained.
3. The community should be involved in the garden’s development.
4. The site should be designed to meet the needs of its users.

A secure location and community interest were present prior to my involvement in this project. The design process I utilized intended to maintain these criteria and address the issues of community involvement and user friendly design.

Finally, I considered the markers of success that were identified by me and each of the project partners. My criteria for success including a sustained vision or mission, community engagement, and providing a compelling and educational experience were analogous to those identified by Jones and Hoversten (2007) and Milburn and Vail (2010). I also felt that a successful design needed to be specific to the La Jolla community and the site conditions. The La Jolla Environmental Protection Office added that the

project would be successful if there was interest in expansion or replication in other communities across the reservation. The Institute for Conservation Research included a habitat conservation component to their criteria for success, stating that the project should function as a “hub for local action.” They also said continued collaboration was important for sustained success.

Myself (Designer/Student)	Institute for Conservation Research	La Jolla Partners	Milburn & Vail (2010)	Jones & Hoversten (2004)	
x	x		x	x	Maintains Vision
	x		x		Participatory Process
		x			Volunteer Participation
x		x	x		Accessible
x	x	x		x	Engaging
	x	x	x		Sustains Interest
x		x			Intergenerational Interest
			x		Sustains Land Tenure
	x	x			Local Stewardship
x			x	x	Site Specific Design
x		x	x		Tells a Story
x	x	x		x	Educational
x					Empowers Community
	x				Continued Collaboration
x		x			Replication or Expansion
x	x				Expanded Program
x			x		Adaptive

Figure 11: I synthesized the criteria for success that were identified by the project partners, ethnobotanic garden design literature, and community garden design literature to create a framework based on three guiding principles - honor the past, acknowledge the present, and accommodate the future.

My synthesis of the evaluation criteria resulted in a framework consisting of three guiding principles. I concluded that the design must

1. Honor the past by creating a means of connecting with heritage, language, and tradition;
2. Acknowledge the present by increasing awareness of local and regional issues regarding culture and the environment; and
3. Accommodate the future by creating an experience that is educational and stimulates community engagement as a way to empower local action.

3.2 COMMUNITY PARTICIPATION

Chambers (1997) suggests that community participation approaches fall within an extractive-empowerment continuum. The extractive method uses community participation to access local knowledge which then informs design decisions made by outside collaborators. Juarez and Brown (2008) state that community participation in landscape architecture tends to rely on the extractive approach. For this project, I have attempted to deviate from this tendency and create an empowering experience by engaging the La Jolla community throughout the design process.

Community participation is supported by the institutions of the La Jolla Tribal Government. Decisions concerning tribal issues are made by the La Jolla Tribal Council, consisting of five elected tribal members. The Tribal Council supervises the activities of various divisions of the tribal government including the Environmental Protection Office. The Tribal Council is overseen by the General Council which meets monthly and consists of the Tribal Council members and all attending tribal members. Decisions concerning the entire community or those that deal with tribal lands are made by the General Council. I worked with each tier of the La Jolla Tribal government during the design process. In doing so, the community was engaged through a system to which they were familiar. This allowed me to present alternatives and gain feedback in a way that was empowering without imposing.

- 06--07-2010 Orientation meeting (Bryan Endress, Maren Peterson, Rob Roy, John Flores)
Introduced to the project site. Discussed goals and community interest
- 06-30-2010 Tribal Council meeting (4/5 attending council members)
Presentation of first design alternatives
- 7-11-2010 General Council meeting (54 attending residents, 5 Tribal Council Members)
Five minute presentation, followed by a vote to approve the project
- 7-13-2010 Community workshop at Tribal Hall (9 participants)
Discussed project details, ideas, and concerns. Gained feedback
- 08-14-2010 Fellowship presentation (Audience: San Diego Zoo donors, employees, & guests)
Positive feedback about our efforts to connect people, plants, and conservation
- 09-30-2010 Announcement of basketball court grant from Nike
Poomacha selected as location. Suggested two options for its placement
- 10-01-2010 Project update conference call (Bryan Endress, Maren Peterson, Rob Roy, John Flores, Jimmy Trujillo)
Progress report, budget update, new developments and scheduling
- 10-18-2010 Began construction of basketball courts
Location in the Northeast corner of the site was selected
- 10-29-2010 Submission of design plans to tribal government
Finalized site layout
- 10-01-2010 Began site grading
- 10-4-2010 Midterm thesis review
Feedback from faculty
- 12-29-2010 Trip to project site
Stake out design layout
- 01-02-2011 Meeting with Tribal Council (James Trujillo, EPO employees)
Finalized design, materials, and budget
- 02-26-2011 First volunteer weekend
- 03-19-2011 Site Visit
- 03-20-2011 Alternative Spring Break student volunteer week
Install plants and construct shade structures

Figure 12: I engaged with the project partners continuously throughout my design process. The timeline shows the most important dates. Dates in blue represent time when I was working in San Diego County and dates in red represent time when I was working at the University of Illinois at Urbana-Champaign.

CHAPTER 4: DESIGN PROCESS

The participatory process was initiated by a survey developed by the Institute for Conservation Research and distributed to each household at the reservation by the La Jolla Environmental Protection Office. The survey assessed the level of interest in the project and provided a basic understanding of what individual community members would like included in the park design.

4.1 PRELIMINARY DESIGN ALTERNATIVES

In response to information gathered in the survey and input from the project partners, I developed two preliminary design alternatives. Each alternative shared several similar attributes including space for community garden plots, picnic areas, horseshoe pits, a walking path, and a plant palette consisting of species native to San Diego County. However, each alternative varied in spatial organization and planting scheme. I intended for these alternatives to suggest a variety of design options and to provide a visual perception of the project's potential outcome.

The first alternative highlighted the natural ecologies of the region and proposed a planting scheme that included uninterrupted expanses of coastal sage scrub, grassland, woodland, and chaparral. I distributed the community garden plots across the site and separated them into individual raised planting beds intended for individual or family use. I also included one large picnic area to accommodate views of the baseball diamond and provide space for large groups.

The second alternative highlighted the cultural significance of native plant species and proposed a planting scheme that included space for native food plants and plants used for making baskets. I also included several "learning gardens" to educate visitors about the plants in each area. I clustered the community garden into one area so it could be divided into a range of sizes or maintained as a single shared plot. I also distributed four individual picnic areas across the site to accommodate multiple small groups.

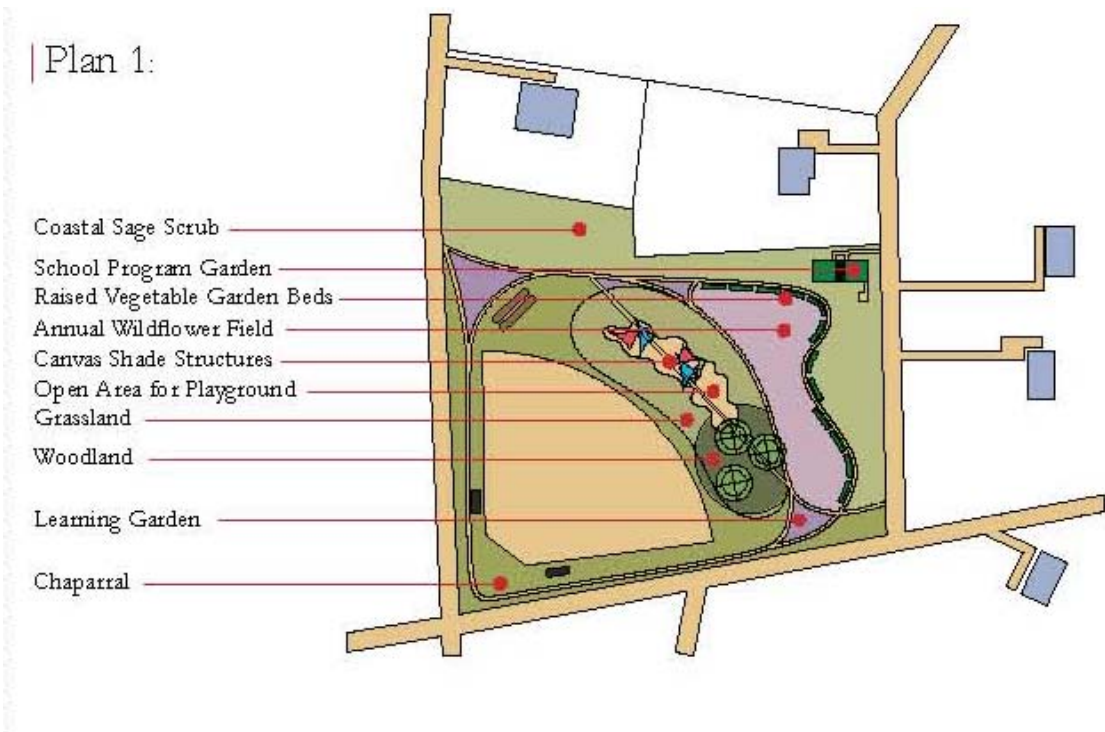


Figure 13: A plan drawing of the first alternative shows possible spatial organization with a planting scheme to highlight natural ecotypes and community garden planters distributed across the site.



Figure 14: A photo montage for the first alternative provides a visual representation of what the constructed park could look like.

Plan 2:

Garden Plots (in-the-ground)

Native Tree Arboretum

Picnic Areas

Native Foods Field

Basket & Dyes Field

Horseshoe Pits

Learning Gardens

Wetland Planting

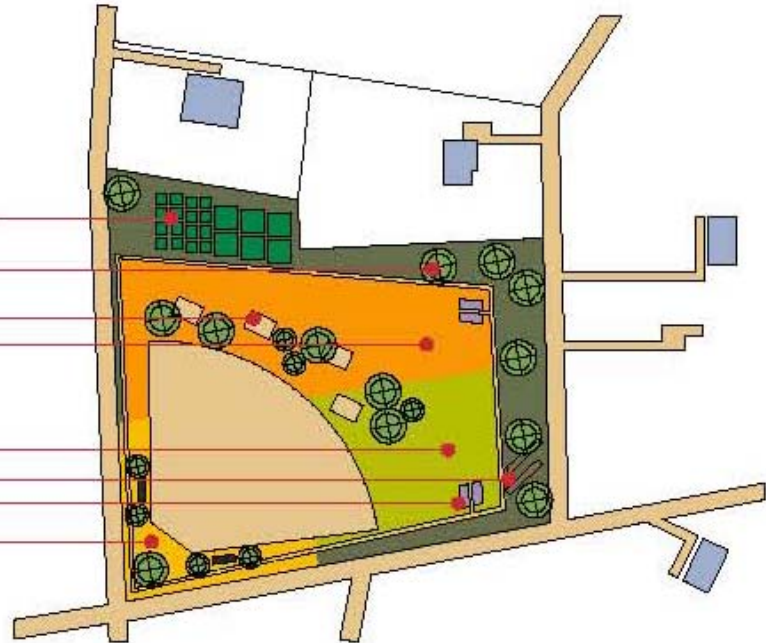


Figure 15: A plan drawing of the second alternative shows possible spatial organization with a planting scheme to highlight culturally significant species and clustered community gardens to accommodate shared use.



Figure 16: A photo montage for the second alternative provides a visual representation of what the constructed park could look like.

On June 30, I presented the preliminary design alternatives to the La Jolla Tribal Council. During the meeting, I encouraged Tribal Council members to make suggestions and voice their concerns. At the meeting we discussed each of the alternatives as well as other options. The main questions that surfaced were how to provide irrigation to the site, whether to organize the community gardens into small family sized plots or a single communal garden, and which features should be included in the design.

Because the irrigation lines near the Poomacha site were in need of repair, the Tribal Council suggested that domestic waterlines could be used for the initial establishment and then switched to the irrigation line at a later time. Individuals showed support for both methods of organizing the community gardens. Those who favored family sized plots proposed it was the fair alternative. Those in favor of the communal style plot suggested it would distribute the work load and allow produce to be shared with community members, like some Elders, who are unable to maintain a garden but deserve a share of the harvest. The issue remained undecided and the Tribal Council members suggested I obtain feedback from community members. Based on our discussion, I was able to compile a list of features to be considered for the design. My list included barbecue areas, horseshoe pits, a looped walking path, and shade structures.

On July, 11 I presented the preliminary design alternatives at the La Jolla General Council meeting. Because it involved alterations to tribal land, local institutions required this project to obtain a majority vote at the General Council meeting before the design process could proceed. This was the first time many community members were able to visualize the potential outcomes of the project and the images I provided generated an unanticipated amount of support. This support translated into a passing vote, with 52 tribal members in favor and 2 opposed.

In response to suggestions made at the General Council meeting, on July, 14 I hosted a design workshop for community members to directly communicate their ideas and concerns. I made several site plans and supplementary drawings available and

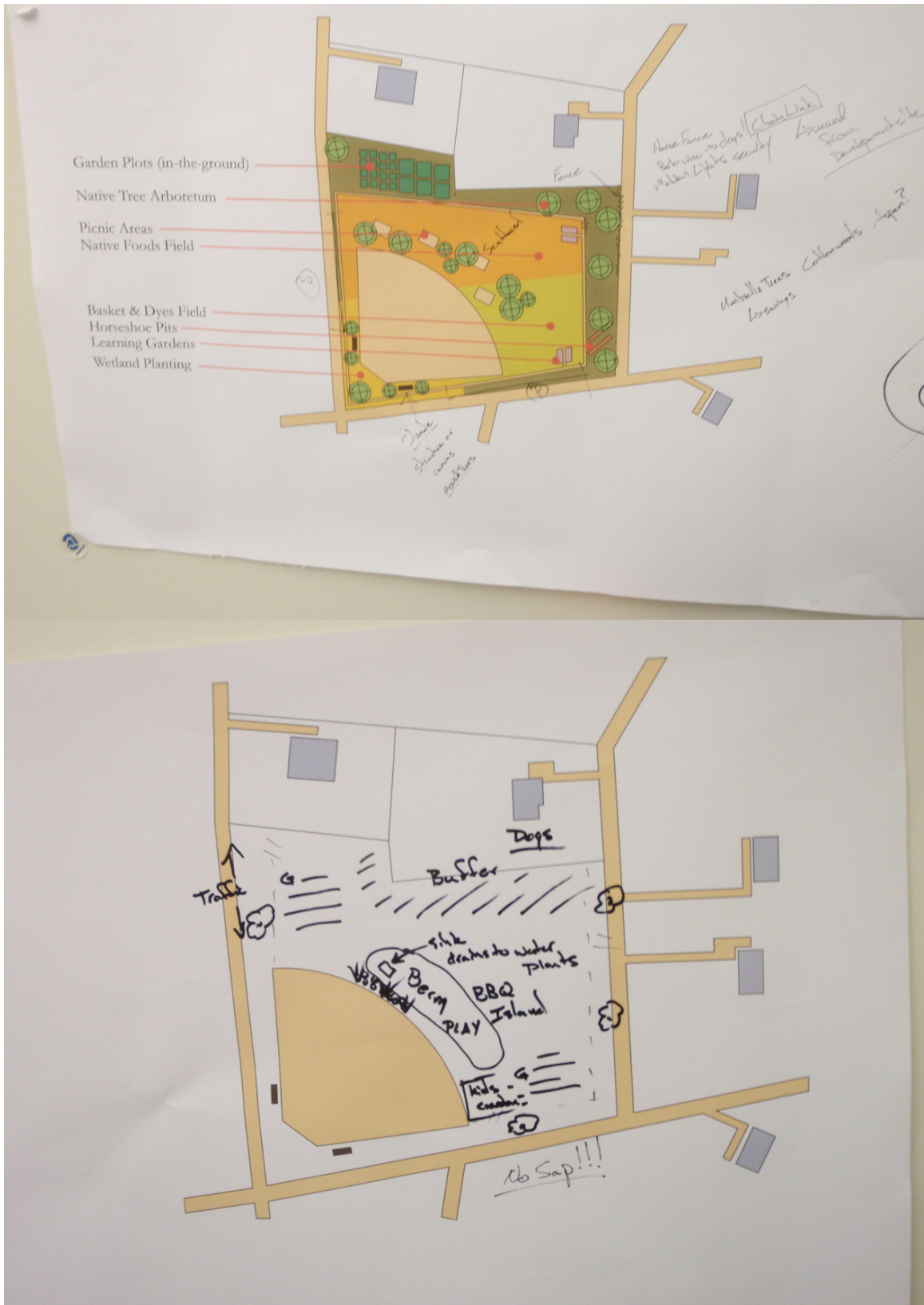


Figure 17: Plan drawings marked-up during a community workshop show suggestions made by participants.

encouraged participants to illustrate their ideas with the pens and markers provided. This attempt was partially successful but I discovered a more useful approach was to mark-up the drawings myself while listening to the participants suggestions. During the workshop the participants determined a perimeter fence would be necessary to keep out dogs and all-terrain vehicles. They confirmed the need for barbecue areas, a looped path, and shade structures and added a fruit orchard to the list of features to be included in the design.

The participants also concluded that the community gardens should be a large communal plot because it distributed the management responsibility throughout the community and could easily be sub-divided if the strategy was unsuccessful. They suggested two gardens be established. One would be managed jointly by community members, and a second would be reserved for use by La Jolla Generations, an after-school program for tribal youth. I was also able use tribal member's suggestions to generate a working list of vegetables and native plant species to include in the design.

4.2 DESIGN REFINEMENT

Following the community workshop I began to develop a design that responded to feedback from the Tribal Council, General Council, and workshop participants. As I worked, the design process transformed into an iterative process of refinement and review by the Tribal Council. I also continued to gain input through informal reviews by local experts, discussions with the project partners, and conversations with individual members of the community.

The refined design included space for seven picnic areas, a cutting garden, community vegetable garden, children's vegetable garden, fruit orchard, rain garden, horseshoe pits, and an open area for playground equipment. I utilized a plant palette consisting of thirty-three native plant species, each of which had been identified by experts or community members as having utilitarian value and cultural significance. I determined the south and east areas of the site were most suitable for the gardens and orchard because it allowed for easy access to water for irrigation. I distributed the picnic



Figure 18: A plan drawing shows refinements made after receiving feedback from the community.

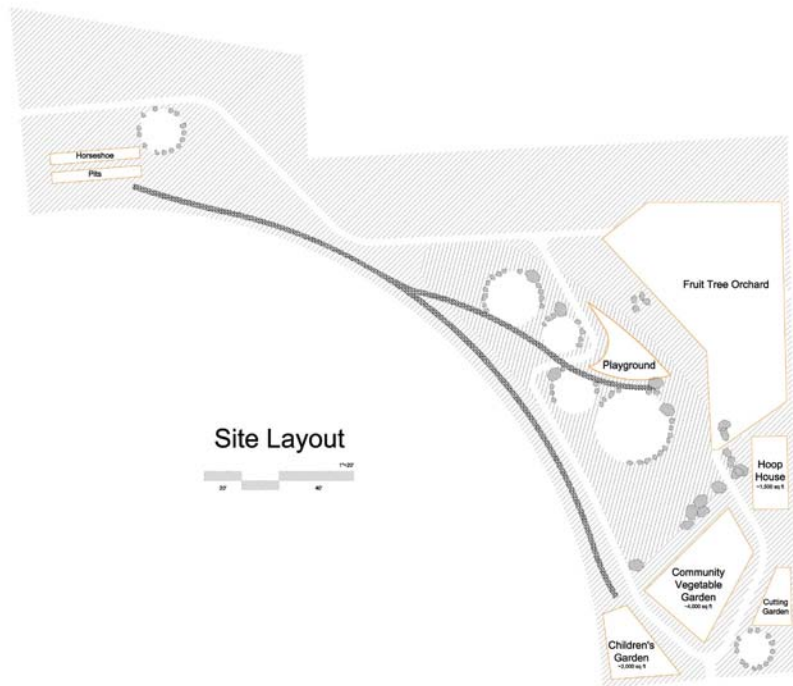


Figure 19: A refined design layout shows the spatial organization of important park features.

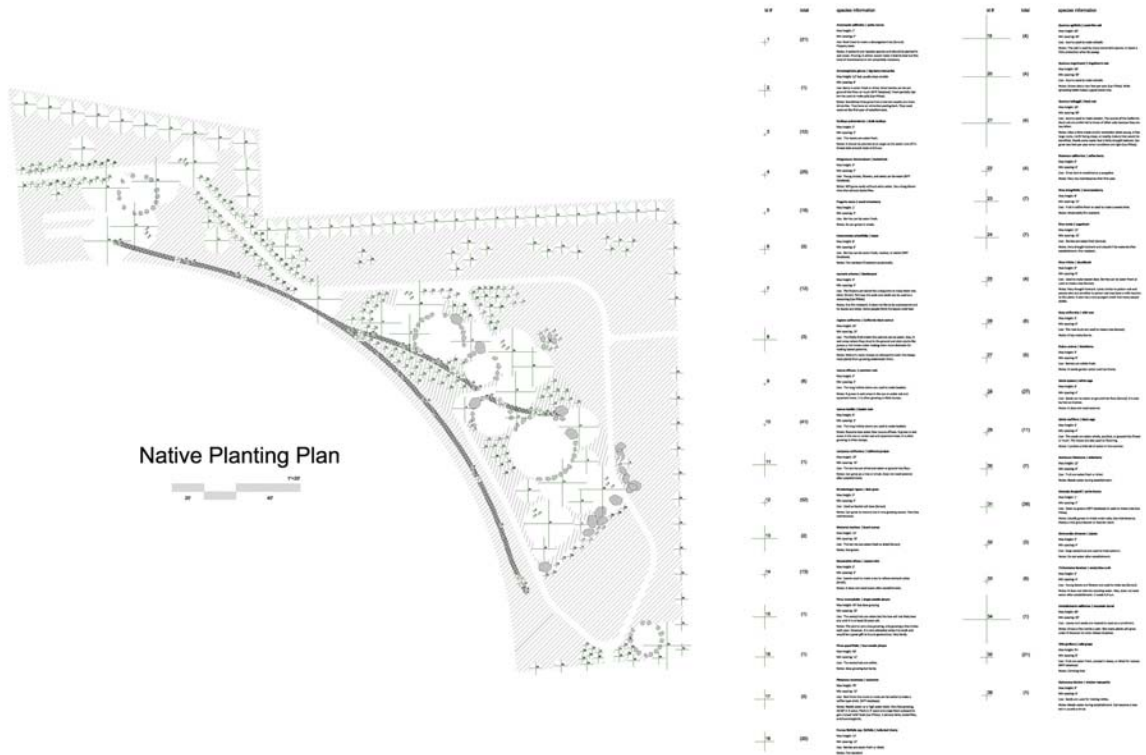


Figure 20: A refined planting plan included thirty-three native plant species identified as having utilitarian value or cultural significance.



Figure 21: A photo montage for the refined design provides a visual representation of what the constructed park could look like.

areas across the site near areas programmed for prolonged engagement and where the baseball diamond was easily visible.

In August, 2010 my fellowship with the Institute for Conservation Research ended and I returned to the University of Illinois at Urbana-Champaign to continue my design work as my graduate thesis project. While working in Illinois the design was reviewed and influenced by University of Illinois faculty members and peers in addition to the previously invested project partners. Although communication became less frequent, I had established a strong relationship with each of the project partners. I was therefore capable of maintaining contact with everyone involved through regular exchange of e-mail, conference calls, and periodic visits.

On November, 30 the La Jolla community received a grant from Nike and the LA84 Foundation to construct a new outdoor basketball court. Following reception of the grant, the Tribal Council determined that the Poomacha community was the best location for the new court and should be included in the La Jolla Park and Garden design. This presented me with a new challenge which required me to reconsider the spatial organization and scale of the design elements.

My initial reaction to the addition of the basketball court was that it would distract from the project's mission and would take up an unacceptable amount of space. However, after hearing the excitement it generated in the community, I began to realize the opportunity it represented. The basketball court offered the potential to draw a large number of previously uninterested community members to the site. This potential could translate into an increased amount of support and use by the community, thus, providing a larger audience to engage in the educational and cultural components of the park. Eventually, I reasoned that integrating a basketball court into the design could enhance the value of the entire park.

CHAPTER 5: DESIGN RECOMMENDATIONS

The collaborative, participatory process used for this thesis proved to be a reliable method for generating information and gathering feedback. This information allowed me to generate design recommendations that address the project's central challenge of creating a landscape that conveys La Jolla cultural practices and serves as a vehicle for transmitting traditional knowledge. Each design element is intended to represent the La Jolla community in a unique way in order to produce an experience that embodies the past, present, and future.



Figure 22: The proposed design embodies the past, present, and future by uniting cultural gardens, produce gardens, and recreation into a comprehensive and legible landscape.

5.1 CULTURAL GARDENS

I recommend the development of three themed cultural gardens that will highlight the La Jolla community's relationship to plants and the landscape. I consider these new spaces as ethnobotanic gardens. Historically ethnobotany has focused primarily on

primitive societies' use of plants (Balick and Cox 1996). However, today's ethnobotanic gardens embody a broader perception of the relationship between people and plants (Jones and Hoversten 2004). This broader definition encompasses the cultural, social, and conservation challenges of this project by linking the landscape to La Jolla tradition and by highlighting the material and non-material value of plants. Such an orientation is in line with the ideas of Skye (1997) who states that newer ethnobotanic gardens bring together the past, present, and future by interpreting traditional knowledge within the context of contemporary concerns.

My recommendations include establishment of a medicine garden, basketry garden, and traditional foods gardens. These gardens intend to draw visitors' attention to their relationship with the landscape and to their own heritage. In this way, the cultural gardens may help sustain the knowledge associated with plants in the greater context of cultural tradition. They also provide a method for conservation of biological diversity by sustaining plant collections in a contemporary landscape setting (Balick and Cox 1996).

The medicine garden contains plants with healing attributes. Traditional medicine is a common practice in the La Jolla community. A tea made from *Trichostema lanatum* Benth. (wooly blue curls), for example, is used as a flu remedy and to strengthen one's memory. By calling attention to the healing properties of plants like wooly blue curls, the medicine garden may create an opportunity for sharing knowledge about how medicinal plants should be used and techniques for their harvest and preparation. It also provides an easily accessible place for community members to collect small quantities of medicinal plants for personal use, education, or reference. This is particularly important for Elders who are no longer capable of harvesting medicinal plants in the wild.

Basketry was an important life-skill for past generations of La Jolla tribal members to possess. Today, basket weaving continues to be a common practice helping to sustain the tradition and its cultural significance. The basketry garden contains plants used for producing baskets and dyes. The most important basketry material is stems

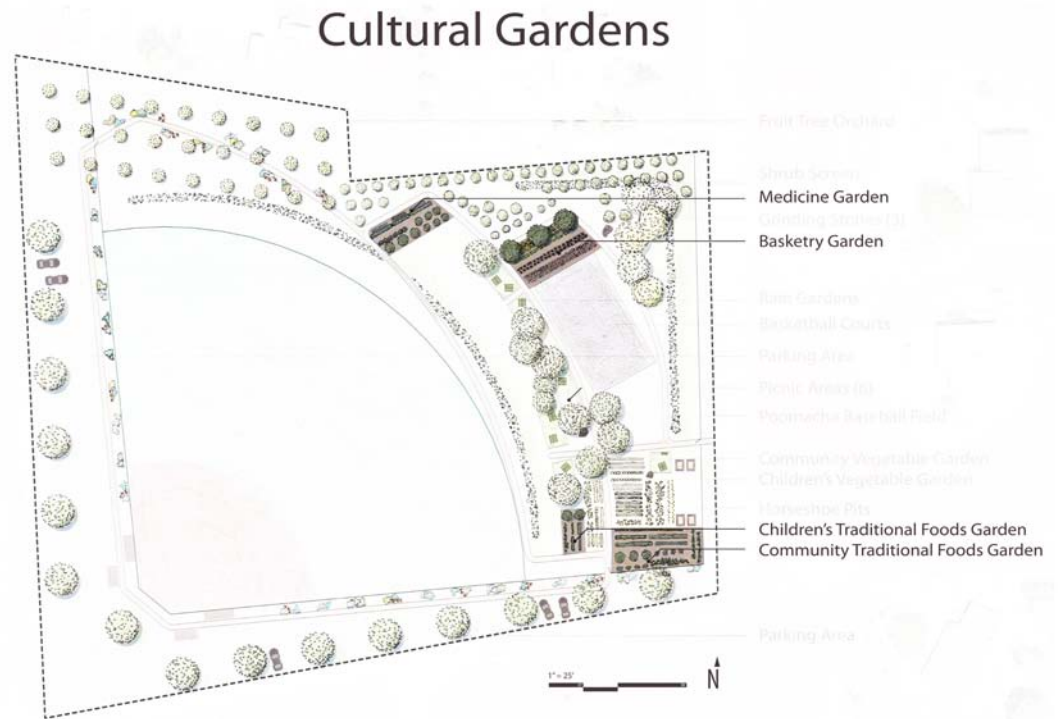


Figure 23: A medicine garden, basketry garden, and traditional foods gardens highlight the La Jolla tribal members’ relationship with the greater landscape and emphasizes their heritage.

from *Juncus textilis* Buchenau (basket rush or juncus). As populations of plants used to produce baskets become harder to access the basketry garden can provide the community with an easily accessible collection of plants for educational use or harvest. It may also serve as inspiration for younger tribal members to inquire about basket making techniques or explore basketry as a personal hobby.

The traditional foods gardens contain plants which provided sustenance for La Jolla tribal members throughout their history. In today’s developed landscape, connections between food and culture can easily be overlooked. The traditional food gardens will strengthen the relationship between landscape, food, and heritage through cultivation, harvest, preparation, and consumption of culturally important plants.

The traditional foods gardens also address the challenge of obesity and diabetes plaguing many Native American communities by providing healthy eating alternatives. Many traditional foods are extremely nutritious, and harvesting and processing

encourages physical activity. *Salvia columbariae* Benth. (chia), for example, is a small annual wildflower which was a staple food of many tribes of southern California and Northwestern Mexico. Chia seeds can be used in a wide variety of ways and added to many dishes. They are high in essential fats, and a good source of protein. The traditional foods gardens could help educate La Jolla tribal members about the how to grow and harvest nutritious plants such as chia and provide space for their cultivation.

Based on community feedback, I have recommended that the traditional foods gardens be divided between two separate spaces. The children's traditional foods garden will be reserved for use by the La Jolla Generations after-school program. The community traditional foods garden will be maintained by community volunteers. These two gardens are closely associated to the community vegetable gardens in both location and function, with the main difference being the varieties of produce cultivated.

5.2 PRODUCE GARDENS

The La Jolla community's relationship to plants and landscape extends beyond traditional knowledge and natural environments. This project has shown me it is a relationship which should be considered in the present context as well. Community gardens can provide a mechanism for demonstrating and utilizing the landscape in a contemporary fashion. Research shows that community gardens provide social, health, educational, and environmental benefits to engaged participants and the surrounding community (Hynes and Howe 2004; Kingsley and Townsend 2006; Milburn and Vail 2010).

La Jolla tribal members have expressed a strong desire for the establishment of a community garden as a way to encourage healthy eating practices, provide opportunities for low impact exercise, and stimulate a greater capacity for social engagement. In response to their interest, I have recommended that three community produce gardens be included in the park's design. Two of them are for cultivating vegetables and the third is a fruit tree orchard.

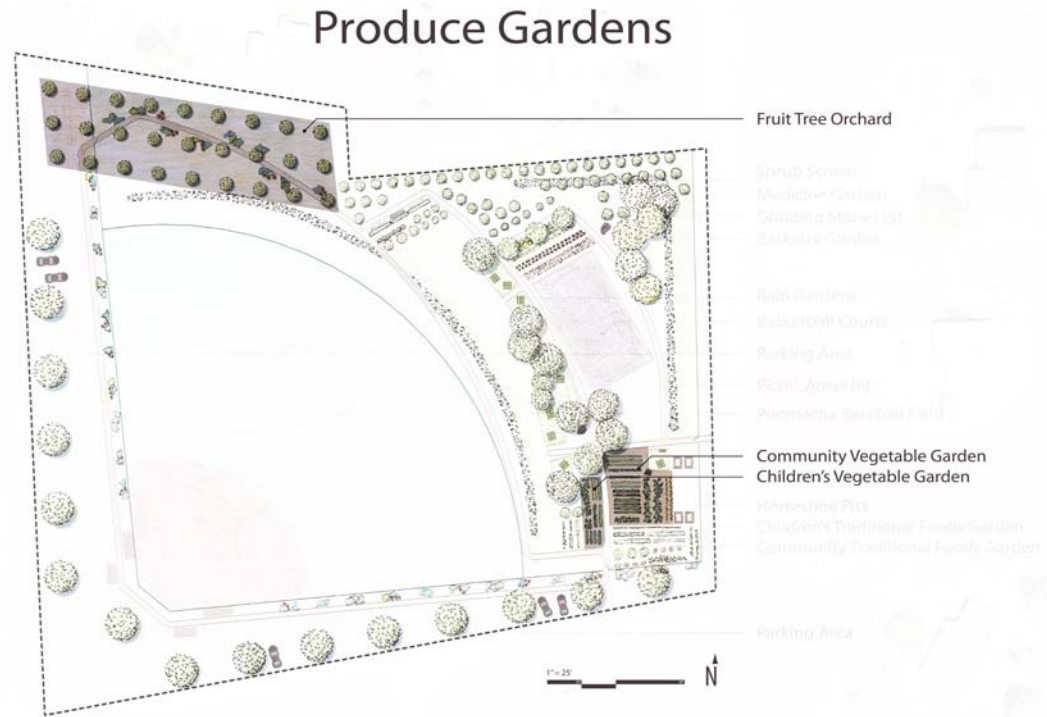


Figure 24: Community gardens can encourage healthy eating practices, provide opportunities for low impact exercise, and stimulate a greater capacity for social engagement.

The community vegetable garden and the fruit tree orchard are proposed to be a shared garden space. Maintenance responsibilities will be distributed amongst volunteers and the produce will be available to anyone from the community. This method of management is intended to encourage sharing of gardening techniques and stimulate an increased sense of ownership amongst community members.

A smaller children’s vegetable garden will be located near the community vegetable garden. This garden will be reserved for use by the La Jolla Generations after-school program. It is intended to provide an opportunity for young tribal members to directly engage with the landscape as a way to promote healthy eating alternatives and exercise. The children’s vegetable garden could also serve as a catalyst for establishing vegetable gardens at home or in other communities.

5.3 RECREATION

Competitive sports are an important recreational activity for the La Jolla

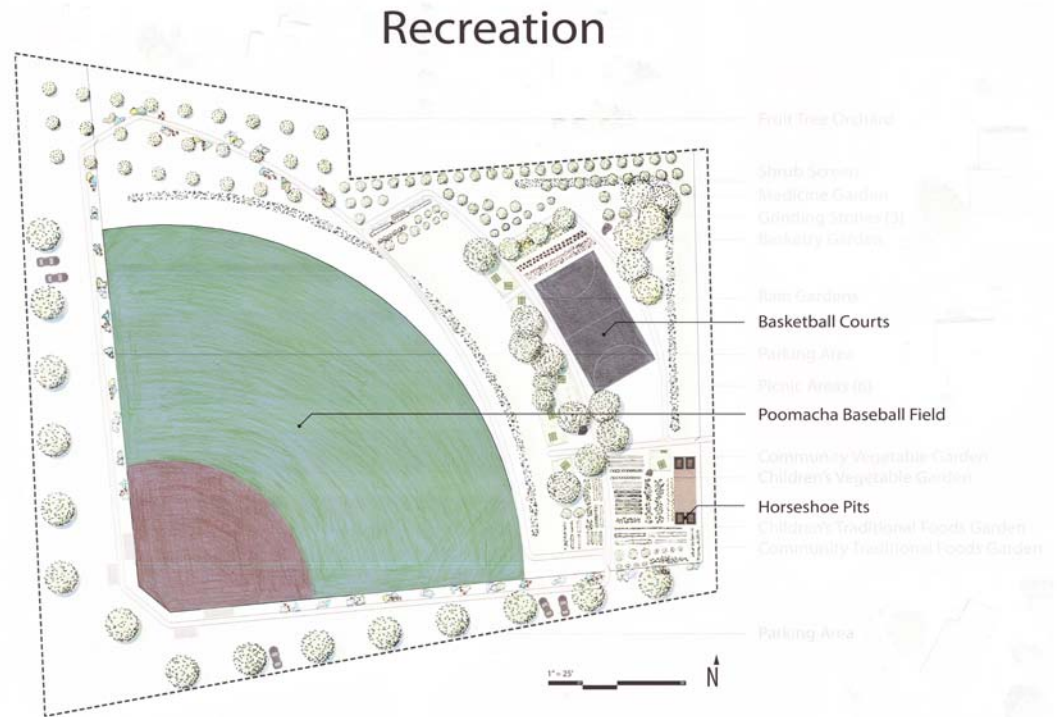


Figure 25: Additional recreational opportunities can provide entertainment and a chance for community members of all ages and interest to engage in healthy forms of physical exercise.

community and each year intertribal sports leagues visit the La Jolla Reservation to compete in baseball and basketball tournaments. Other popular forms of recreation include walking, jogging, and horseshoes. I have proposed that the La Jolla Community Park and Gardens includes space for tribal members to engage in these types of physical activity.

The basketball court, funded by Nike and the LA84 Foundation, is a valuable addition to the community and provides a place the community can proudly host outdoor basketball tournaments. Two sets of horseshoe pits should also provide a source of entertainment to tribal members. The horseshoe pits can be used for organized tournaments or as a leisure activity during barbecues and picnics. In addition, the looped system of paths traversing the park is intended to serve as a safe and visually pleasing alternative to walking or jogging through neighborhoods on roads or in backyards. In combination with the existing Poomacha Baseball Field, these recreational features are

intended to provide community members of all ages and interests with entertainment and opportunities to engage in healthy forms of exercise.

5.4 EXPERIENCE

By bringing together cultural gardens, produce gardens, and recreation into one landscape the La Jolla Park and Gardens will offer a wide variety of activities and educational opportunities for La Jolla tribal members. The design I have proposed will bring together each of these components into a comprehensive and legible place. As residents and visitors move through the areas I have designed, they will be repeatedly engaged with elements of the past, present and future. The medicine garden, for example, is positioned near the basketball court and the traditional foods gardens are adjacent to the vegetable gardens. This organization is intended to expose the connections between landscape, culture, and everyday life.

I have also utilized the transitional spaces within the design to enhance visitors' experience and communicate the parks underlying mission of preserving tradition. The planting scheme proposed for these areas is comprised entirely of culturally important species. *Quercus kelloggii* Newberry (California black oak) trees, for example, cast



Figure 26: A photo montage of design recommendations shows how landscape, culture, and everyday life can come together to form an educational and engaging experience.

shade across picnic areas. While providing this important function they also produce acorns, a staple food for past generations of La Jolla tribal members. In addition, I have recommended three grinding stones be distributed across the park to convey tradition and highlight the value of the surrounding landscape.

5.5 DOCUMENTATION

The design recommendations I have made for the La Jolla Community Park and Gardens integrate culture, tradition, and recreation to provide a comprehensive and valuable experience in a modern context. The park landscape is intended provide an experience that extends beyond the park’s boundaries into the coastal sage scrub, riparian, oak and pine forest environments that have shaped La Jolla traditions and define the region. To emphasize the park’s relationship to the contextual landscape I have developed an ethnobotany guide book that is specific to La Jolla land and culture.

The ethnobotany guide book gives a description of the park’s mission and

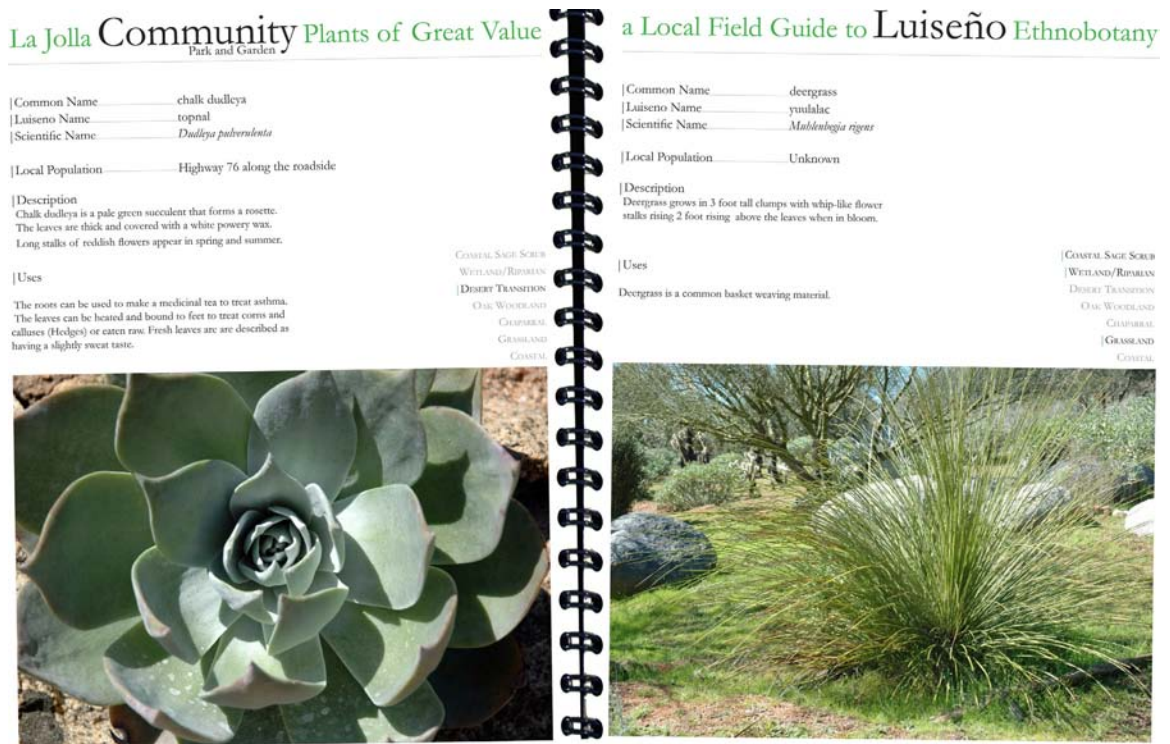


Figure 27: To help connect the park site to the surrounding landscape, I have developed an ethnobotany guide book that is specific to the La Jolla tribe and to the park design.

explains its potential contributions to the preservation of traditional knowledge. The main content identifies the location of each of the plant species included in the park's design. I have included information to help identify each plant species as well as a description of traditional methods of harvest, preparation, and use. To illustrate the park's connection to the surrounding landscape I have identified the natural ecotypes and specific locations outside of the park where each plant species might be encountered during typical daily activities.

The ethnobotany guide book is supplemental to the park's design and provides an important means of documenting La Jolla traditional knowledge. It could easily be distributed to La Jolla tribal members, separated into pamphlets for park visitors, or portions could be included in the La Jolla Environmental Protection Office's monthly newsletter. Regardless of the method of distribution, the ethnobotany guide book underlines the connection between the park and the surrounding landscape and helps bridge the gap between past, present, and future.

CHAPTER 6: DISCUSSION

The central challenge of this thesis has been to design a landscape that conveys La Jolla cultural practices and serves as a vehicle for the transmission of traditional knowledge. I have been able to meet this challenge by synthesizing information provided by the project partners and by incorporating feedback and ideas I received throughout the participatory design process with the La Jolla community. The designs I have generated could help to preserve La Jolla heritage as it relates to the landscape. My design recommendations honor the past through cultural gardens that highlight the utility of landscape and provide opportunities to engage with and share traditional knowledge. It acknowledges the present by providing a stage for educating tribal members about ecosystem and cultural conservation and by making space available for recreation and social activities. It also accommodates the future by enhancing the landscape's capacity to bring young and old together so that they might share traditional knowledge. I believe my work will create an environment that is conducive to education and stimulates community engagement.

6.1 EMPOWERING WITHOUT IMPOSING

One of the greatest challenges for me to overcome while completing this thesis was to empower the La Jolla community without imposing my values, processes, or ideas upon them. For many landscape architects, the designer-client relationship is too often one-sided. The client may provide a description of how they would like the end product to look or function but they rely heavily on the expertise of the designer to bring their vision to reality. After my initial introduction to this project, however, I recognized that it was important for the La Jolla tribal members and the project partners to remain involved throughout the design process as a way to cultivate a sense of community ownership. The approach was also important because, with respect to their culture, I was a novice and they were the experts.

Community participation does not directly translate to ownership or empowerment. Empowerment requires direct involvement in the decision making process. Addressing this challenge required me to develop multiple design options and communicate the advantages and disadvantages of each one; a responsibility that pushed the limits of my design capabilities. I knew the final design decisions would be made by the community. Thus, I had to be persuasive in my presentation of design options while remaining flexible and open to the community's feedback and their expressions of what might be possible.

My role as an empowering, persuasive, and flexible designer proved to be an extremely rewarding experience. It created an environment where I was forced to justify my personal biases while considering multiple, sometimes opposing, perspectives. Working with the La Jolla community has enhanced my communication skills and improved my abilities as a landscape architect. Other students, and even some practicing landscape architects, could benefit from an experience similar to my own because of its potential to generate new design possibilities and reveal previously unconsidered perspectives.

6.2 SUSTAINING COMMUNITY

The most influential insight I gained during this thesis was an enhanced understanding of what makes and sustains a community. Throughout the design process I have realized "community" embodies much more than a collection of individuals or a shared set of beliefs. The La Jolla's collective body of knowledge and experience, which is deeply intertwined with both culture and the landscape, is the foundation upon which their sense of community rests. Landscape, whether as a remnant of the past or newly constructed, is an essential vehicle for transmitting their knowledge from generation to generation and is therefore vital to sustaining their community and preserving their heritage.

My newly found understanding of the La Jolla community is specific to this

thesis. Still, accepting a generalized idea of community as a complex and dynamic relationship between people, culture, and landscape has the potential to enhance the value of future design projects regardless of location or scale. Landscape architects could benefit greatly from investigating the specific relationships of the community they intend to serve and responding with design solutions that capitalize on the connections between landscape and culture.

This design strategy is possibly more important today than ever before. As the world continues to become more connected, through innovations in transportation and communication, the distinct character of many cultures are increasingly threatened. Landscape architects are in a unique position to aid in the preservation of cultural diversity by designing innovative landscapes that situate tradition within a modern context.

6.3 CONCLUSION

I hope this thesis and the La Jolla Park and Gardens landscape will someday serve as an example of how past and present, traditional and innovative, can come together to create a legacy for future generations to enjoy and build upon. It is humbling to think that in some way this project could assist in the preservation of the La Jolla way of life. I have made many friends while completing this thesis and developed a deep respect for the many fading cultures that are so often overlooked in today's fast paced world. It has been an honor and a privilege to work with the La Jolla community, everyone at the La Jolla Environmental Protection Office, all of the La Jolla Tribal Council Members, everyone at the San Diego Zoo Institute for Conservation Research, and my thesis advisors and peers. My journey has been immensely rewarding. It has enhanced my abilities as a landscape architect and my capacity to contribute as a productive member of the professional world.

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