



# **Watsonville Nature Center 2.0**

## **An Analyzation of Barriers and Strategies to Engage Latinx Residents**

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## **Abstract**

The purpose of this report is to help the Watsonville Public Works department in the expansion of the future nature center by providing reasons why it is important, for grant writing purposes, and what to exhibit in the future center. This is an analysis of the barriers and strategies to engage Latinx residents. Conducting interviews with other nature centers and a literature review has revealed some of the barriers there are to participating in nature centers. These include lack of transportation, costs, people not knowing of the center's existence, and lack of representation. Some of the solutions to this include hiring more bilingual staff, offering fee waiver, and promoting the center as a community space.

The City of Watsonville is on the Central Coast of California. It is a small agricultural town surrounded by amazing natural landmarks and a primarily multicultural Latinx community. Watsonville is 13 miles away from Monterey Bay, it is surrounded by wetlands, and is only 8 miles away from the Elkhorn Slough. Currently, the Public Works and Utility Department of Watsonville has a Nature Center located in Ramsay Park run by the Public Works & Utilities Department. The center offers bilingual guided tours of the wetlands, bird watching tours, exhibits of local animals, and information on how people can reduce water waste, recycle, compost, among other sustainable climate action practices (Watsonville, n.d.). They are looking to expand the center to add more curriculum and activities to engage the community in conservation. .

## Introduction to Watsonville & Background to Project



**Figure 1.** A look inside the exhibits offered at Watsonville’s nature center.

The City of Watsonville is located within Santa Cruz County in California. Its population is 53,961 people with an ethnic breakdown of 84.33% Hispanic, 10.93% White, 3.02% Asian, 0.86% Multirace, 0.49% Black, 0.24% American Indian, 0.03% Pacific Islander, and 0.11% for Other. Education attainment varies, with 26.36% of the population completing 9th grade or less. 25.11% of the population has completed high school, while only 9.88% have completed a Bachelor’s degree (Watsonville, n.d.). Watsonville is a coastal town with agriculture as one of its main economic bases. One of the most notable natural features of Watsonville is the extensive network of freshwater sloughs, referred to as the Watsonville Wetlands, that are around and cross the city. In total, they cover 800 acres (Wetlands, n.d.). The nature center has been around for more than 15 years and some of the main things they do are give wetland tours, teach people about pollution prevention, communicate about sustainability and conservation, offer exhibits during city events, present educational lessons in schools and have exhibits in their center for people to learn about the local environment (**Figure 1**). Given the surroundings in Watsonville, the nature center plays a vital role in the community (Watsonville, n.d.). Recently, they have expressed interest in expanding it and will begin the process of applying for grants for this redesign. In an effort to better serve the community, the purpose of this paper is to: 1) explain best practices with nature centers that serve a diverse population via the use of different literature 2) give examples of what other nature centers have done for equitable community engagement and 3) give recommendations for the future center.

## Literature on Multicultural Participation & Barriers to Participation

Understanding the barriers people face in their engagement with nature centers is an important aspect to look at while creating one. In the case of the Latino community some of the barriers they face include financial barriers, accessibility, and lack of representation within centers. If one's goal is to create a nature center that is inviting to the community it serves, a great way to know about these barriers is by allowing community members to express them. This can then help in the planning and creation of a new nature center.

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Wanting to increase the participation of Latino community members, the Dodge Nature Center in Minnesota conducted interviews with community leaders and parents to understand why participation was low. Key findings in their research suggest barriers to participation include: lack of accessibility, not knowing about the center, price, and fear of discrimination. The placement of the center is located in a predominantly white area of town, in which division between the white neighborhoods and Latino neighborhoods is clear cut. Because of that, Latino families had little knowledge of the existence of the center while community leaders viewed it as an unwelcoming place. The price of entry for the center also worked as a deterrent considering that Latino families tend to be large. Many expressed their concerns about attending the center if there was no Spanish-speaking staff, while others noted that the center would be more welcoming if there were Latino staff members. The final concern was that of discrimination. Because the center had a predominately white staff and attendees, Latino members feared they would face microaggressions when visiting the center. Suggestions given by those who were interviewed were to have better advertising of the center via different media such as announcements in church or television including bilingual exhibits and signs within the center and to have financial assistance for those who need it (Hong, & Anderson, 2006).

In "The Bitter and The Sweet of Nature" by Veronica Kyle and Laurel Kearns, other set barriers are explored. One of which is historical context and how that shapes people's viewpoints of nature. In this reading some of the mentalities that people have towards nature, more so their lack of interest in engaging, is the past history of their people. In Kyle's recollection of her own family, she explains that: ".....the older generation's desire for the next generation to use their heads, not their hands, to get ahead in the world, reinforced that gardening and getting one's hands dirty were to be avoided". Kyle's family is of African American descent, and given their history within America, it is easy to see why they would avoid interaction in nature. And although this paper is focused on Latinos, there are parallels that can be drawn. As mentioned before, Watsonville has a large agricultural economy. Which means that Kyle's statement might resonate with a lot of people who live in Watsonville who are farm laborers. Their experience out

in the field definitely has an impact on how they view nature and how they want to engage with it outside of work. As mentioned in the reading, one way to know more about these sorts of barriers is by allowing the people to tell their stories (Kyle, & Kearns, 2018)

Understanding the motivation that inspires Latino families to engage in a nature center is important to better build a facility around those motivations. The article “Barriers to participation for Latino people at Dodge Nature Center” was focused on what motivates Latino families to attend museums in Wake County, North Carolina. Major findings in this study related to the motivation found that prospects of learning, escapism and social/family interaction were what motivated Latino families the most. However, constraints that prevented them from attending were time and accessibility (Palacios, 2013). These two papers bring up similar points as to why Latinos are of low attendance in nature centers. The biggest point is that of accessibility, which in this case refers to whether or not there are Spanish options available at a center. Also, lack of knowledge about the center’s existence prevented families from attending. Those who were aware of nature centers viewed it as a “white space”, a place only intended for white people (Hong, & Anderson, 2006).

Transportation is another barrier faced by many. If someone lives in a rural area or just in a place that has limited transportation, then their chances of being able to attend a nature center is interrupted. To add to this, the perception that you need to buy expensive items to engage with nature, such as camping gear, also works to disintice people because it gives them the idea that nature can only be enjoyed by those who can afford it. At an educational level, educators often put a lot of emphasis on macro-level education. What is meant by this is that in nature education, field trips are often taken to places far from the city to teach about nature. This can give the idea that nature is far away from us and not something that we can engage with in our homes. Although these examples focus more on engagement with nature as a whole, they certainly still are barriers for people in engaging with nature center and the education taught within them (Selby, 2017).

### **Importance of Nature Centers in Conservation or Nature Awareness**

Creating a Resource Conservation Center in Watsonville would provide a transformative change in the sustainability seen in the community. This is given that the goal of Watsonville Public Works outreach is to increase climate friendly community actions such as driving less, biking more, upgrading appliances to electric or gas, improving water conservation practices, home waste reduction and composting as well as preventing stormwater pollution. In recent years, museums have shifted their goals to be more focused on social change rather than just teaching. Take for example the Monterey Bay Aquarium and their SeaFood Watch Program. It is a

program used to inform the public about sustainable seafood choices. They have an app and multiple brochures about it in the aquarium, which reinforces the message they are trying to spread. Attending the aquarium can engage people with the wonder of the ocean, but through the SeaFood Watch Program, people can apply what they've learned in the aquarium outside of it and in their everyday lives. Opinion leaders are those who spread the information about a service to others, which is one of the reasons why the SeaFood Watch Program has been successful in reaching large crowds. The aquarium's end goal with this program is to create a societal impact on sustainable food choices. Watsonville's Resource Conservation Center can also create a societal impact like the aquarium, both by having a more interactive space as well as resources to reach people outside of the center (Munley, 2013).

As people become more urbanized they begin to lose a connection to nature. This can be seen with children, who often interact more with technology than nature given the location they are in. Connectedness to nature, however, provides great benefits to both children and adults. Since people are becoming more urbanized, it is still important to immerse themselves in nature. Benefits that connectedness brings to children are better cognitive skills, improved health, sensitivity, curiosity, empathy, and responsibility. In a study conducted in South Carolina at a school serving children from disadvantaged communities, the association between connectedness and better hope for the future was made. Something else to consider is how children preserve climate change. Children can feel hopeless when learning about our current state, which can in turn affect their positive outlook. A suggested method to approach this topic is by demonstrating that people do care. Which circles back to Watsonville's Resource Conservation Center. By catering programs and exhibits to children that aim to connect children to nature, they can greatly impact their health. A center like this would also show them that people care and are trying their best to mitigate the problem, which would help children in attaining a positive outlook for the future (Chawla, 2020).

Nature centers also provide a place for intergenerational education to take place. This is when both adults and children are actively engaged in an activity together, which can bring about benefits to one another and in the community. For adults, they have the opportunity to share their life experiences about nature, be contributing members of the community, and help leave a legacy. For children, they gain role models and are also able to understand environmental impacts as the adults can share their own stories. This also helps teachers as the student to teacher ratio may be too overwhelming for them to teach about environmental education. For a city, intergenerational education helps bring out collaborations within multiple groups. A nature center can encourage this with the programs they offer, such as teaching and then having adults guide nature tours for children. For example, Liu and Kaplan (2017) describe how elders in Taiwan took school children on a trip around their town and told them stories about the trees. Which helps in seeing the changes nature experiences over time, and helps them understand that

changes happen within lifespans. This could be applied to Watsonville in both a way to connect to nature and have kids learn more about their roots. A lot of elders in Watsonville may have immigrated, so they'll have stories to tell as well about their childhood in their home country. This can prove helpful to kids who would like to learn more about their heritage (Liu, & Kaplan, 2017).

## **Methods for Nature Center Interview Study**

To create a nature center that will engage the community successfully, I wanted to include the perspective of other centers to gain insight and inspiration of what others have done. The interview process included the search of different nature centers across the United States. If a nature center served a large Latino population, focused on public utilities, or had a focus on conservation, then I contacted them to set up an interview. I approached this in two ways. The first was by conducting several Google searches and inputting all relevant places found in a database. Those centers were then contacted to set up an interview. Those who agreed to an interview were then asked if they knew of any other places that should be contacted, thus using a snowball effect.

In total, 21 centers were contacted for interviews, and there were 7 interviews conducted throughout the months of March and April of the year 2021. Five of those interviews were hosted over Zoom and lasted about 30 minutes. The other two were done via sending them the questions and then emailing their responses back as it was difficult to find a time that worked for all parties. The questions asked during the interviews were:

1. What kinds of programming do you offer for the community?
  - a. Do you bring people to a center and/or do you go out in the community?
  - b. Do you do any work with water or water resources? With (solid) waste? With disaster preparedness or climate action?
  - c. How do you fund your Center's staff and programs?
  - d. Are any of your staff and programs funded by your City's utilities, such as water, sewer, solid waste?
2. How are you specifically working with the Latinx community?
3. What has worked well? What have been some challenges?
4. How have you seen this benefit the community? What new conservation behaviors have you witnessed in your local Latinx community thanks to your programs?

- a. Do you have any specific documentation of these benefits that you could share? For example, are residents littering less, conserving more resources (water, making less waste), or any other changes you have noticed over time due to your Center and the programs you offer?
5. What advice would you give to a water utility that wants to engage the Latinx population with natural resources?
6. Are there examples of specific exhibits or programs *from your own work* that you can share?
7. Are there examples of specific exhibits or programs *from other organizations* that you can share?
8. Are there other nature centers or other programs that are also working with Latinx populations that you recommend I contact?
9. Are you interested in a copy of the final report?

The places that had agreed to be interviewed were:

- Thorne Nature Center, Boulder, CO
- Cal-Wood Education Center, Jamestown, CO
- The WET Science Center, Olympia, WA
- Urban Ecology Center, Milwaukee, WI
- Monterey Bay Aquarium, Monterey, CA
- The Cedar River Watershed Education Center, North Bend, WA, and
- Bluff Lake Nature Center, Denver, CO.

I conducted all the interviews over Zoom and they were recorded, with the interviewee's permission. To conduct the analysis of the interviews, the audio files saved were uploaded to the programs Otter.ai and Word Online for faster transcription. Once that was complete, each I reviewed each transcription for the analysis portion of this paper. This was done by taking notes during the revision of the transcript to take note of any important recurring subjects that would arise from each. I would play the audio and read the text as it played, to highlight any important quotes. I did a first revision taking important notes of each individual interview. Then, once I had written that down, I did a second revision to start finding similarities between all in terms of common themes.



## Results from Interviews

Everyone interviewed demonstrated passion in their work, and enthusiasm in wanting to share more information about their center. All centers provided field trips to school children as a form of engagement, while also having varying activities that made them stand out. They all acknowledged that providing items in Spanish is a way to bring in more Latinos to their centers, but recognized the fact that language is not the only barrier faced to them. They emphasized the importance of networking, community involvement, and representation in environmental education.

Nature Center, Location	Barriers to Reaching Latino Audience	Supportive Approaches to Reaching Latino Audience
Thorne Nature Center Boulder, CO	The <b>cultural divide</b> between those who give and receive	Being willing to change; “continually learning and growing and listening for feedback”  <b>Growth mindset and diversity trainings</b>
Cal-Wood Jamestown, CO	“a lot of the families just don't know, they're not familiar with something like this”  “it takes time to build that trust”  <b>Trust &amp; Familiarity</b>	Helping them know what’s really out there by taking them on trips  Encourage family gathering in the natural spaces through incentives, ie if you bring a new family next time your stay at the campsite is free  <b>Engaging families</b>
WET Science Center Olympia, WA	Low staff levels and low staff diversity  Representation  <b>Staffing &amp; Diversity</b>	Increasing diversity in their volunteer staff  Examining their biases in their educational programs  <b>Growth mindset and</b>

		<b>diversity trainings</b>
Urban Ecology Milwaukee, WI	Doesn't feel like they have enough bilingual staff  Cultural differences in how nature is seen and how they look at kids engaging in nature  <b>Staffing &amp; Cultural Divide &amp; Language</b>	Are able to have some materials in Spanish, but would require more <u>funding</u> to get more bilingual materials out  <b>Multi-lingual materials and staff</b>
Monterey Bay Aquarium Monterey, CA	The price of entrance to aquarium is too high for some  <b>Accessibility</b>	Community open house, where TriCounty residents can go for free  Events in which kids can enter for free  Occasionally offering free tickets at local libraries  <b>Free or reduced access</b>
Cedar River Watershed North Bend, WA	Location of their center  <b>Location</b>	Lots of advertising  Collaborating with community liaisons who spread the word in different communities  <b>Outreach through other community venues</b>
Bluff Lake Boulder, CO	Language  <b>Staffing Diversity</b>	Have a lot of bilingual volunteers  Offer Spanish lessons to their education team  <b>Multi-lingual materials and staff</b>

**Table 1.** Summary of the overall challenges the interviewed nature centers face and what they have done to overcome them.

## **Networks and Partnerships**

Important points from this section:

- Partnerships between different organizations help address gaps in environmental education
  - Partnership with teachers help enhance student learning
  - Partnerships are important when it comes to creating new opportunities in the community
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The concept of networking was brought up frequently both as a recommendation for Watsonville and as a tool centers have been using. Thorne Nature Center's "Nature Kids" program is a collaborative program with 30 organizations working together to specifically engage Latino kids and families in environmental education and outdoor recreation. The Urban Ecology center has a partnership with the sewage district in Milwaukee to teach people about sewage. All of these are examples of how these centers have become part of networks to benefit from one another.

This idea of partnerships can bring about two main benefits, the benefit of collaboration and the benefit of expansion of the centers. This theme was heavily touched upon in the interview with a staff member from the WET Science Center. In this interview they went into detail about ECONet which is a Thurston County environmental education network, and how having the network has led to great support. As they stated, a network can "Give resources one may not have such as space, time, or resources" since environmental education as a whole is rather underfunded, it is important to take advantage of partnerships to share resources. The second benefit in networking is the opportunity to answer the question "What's not being done?". If there is no communication between centers nearby, visitors may feel like their experiences are being repetitive. And while repetition is not an entirely bad thing, if all centers are focusing on the same materials, then the community loses the opportunity to further expand their knowledge.

An example provided from the WET Science interview is how they will collaborate with school teachers for their field trip program to ensure the materials students are learning align with their school standard. They have also hosted events in which people can come to learn about wolves, which might seem odd at first since they are a wastewater treatment plant, but as they put it "gives a bigger holistic system thinking to understanding why we treat wastewater". Cal-Wood

also collaborates with teachers for their school residential programs. These are programs in which schools come to stay 3 days and 2 nights at Cal-Wood, and to make the best out of this stay, they will teach children different things depending on what they are learning in class. The Monterey Bay Aquarium also pointed out how they have partnerships with local libraries to give aquarium tickets, making it more accessible for people to know about the aquarium's existence and also have access to it.

### Community Input to Reduce Barriers to Participation

Important points from this section:

- Engage with the community to plan ahead the exhibits with the center
- Some ways this can be done is through: picnics with the community, outreach through community partners such as churches or liaison in specific communities

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Many of the centers said that if you want to create a nature center, then the community should certainly have a say on what should be included. A representative from the Urban Ecology Center recalled how he has seen nature center buildings not reaching their full potential because they did not plan ahead. Having an idea of the exhibits that will be put into place will make it easier to create a building that will complement said exhibits. If the creation of the center is a communal effort, people would feel more welcomed by it rather than others.

All centers provided valuable information in the process of getting the word out to the community. Advertising at a farmer's market and on social media is a good start, but if you are targeting a specific audience, in this case Latino people, branching out via different means can provide more involvement. Some of the ways to branch out to the Latino community, which was brought up during the Cal-Wood interview, include going to Church and advertising there or inviting the community to have "cafecitos" or coffee to help answer the question "What else can you do to make them feel more welcomed?" into a nature center. Having picnics on site where community members are invited to have lunch with staff and share opinions is a tactic Cedar River Watershed uses. Or if there is any local activist group that has strong connections in the Latino community, partnering with them can reap the benefits of having a trusting source welcoming them to the center.

This is what Thorne Nature Center did when they were developing their Nature Kids program. They took an entire year gaining input from the community to develop a program that would align with their interests and needs. Overall, the most common way nature centers receive feedback is via surveys. After hosting an event or field trip, or even after someone visited their center, handing out surveys is a good way to see what opinions people may have on what is being done well, what can improve, and any other feedback they have. The best quote taken from the Cedar River Watershed interview to sum this all up is “I think the government often thinks they know what is best, or they just like to take the reins.. But we can be blinded by what we are not even aware of”. Non-English speakers might feel alienated to engage in English - based surveys, so the survey strategy might be edited to a coffee table talk with the home language or other strategy.

### Barriers to Latinx Participation

Important points of this section:

- Lack of representation can turn away people from centers
- A way to solve this is by hiring staff who reflect the community
- Using monarch butterflies and their story of migration can help draw the interest of the Latinx community due to their own stories, which also plays into representation within nature

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In the Hong and Anderson article on Latinx participation, lack of representation and no services in Spanish was one of the main reasons why Latino families were hesitant to attend any nature center (Hong, & Anderson, 2006). When asked of ways they’ve been engaging the Latino community and how to bring representation in their centers, most centers interviewed mentioned that they offer, or try to offer, bilingual services. This is either through hiring bilingual staff or through volunteers that help translate. Hiring staff who are Latino was also brought up, as this can help families feel more comfortable in the area because they are able to understand the material. In the interview with Cal-Wood, more helpful insight was brought up regarding this manner. During their interview it was mentioned that while having Latino staff is important, you have to pay attention to who your community is and cater to them. What is meant by this is that if your community is predominantly Mexican, then hiring Mexican staff would be ideal. This is because Latin America is composed of very diverse countries. Even looking at Mexico there is a clear distinction between the language and culture in northern and southern states. Considering the cultural diversity, hiring staff who have the same cultural background as the community would allow for better communication and connection within the center. Also mentioned in the same interview was the topic of connection, with monarch butterflies as an example: “You know,

the monarch butterfly talks to people, or I guess, represents something that is really personal to our Latino community, which is the word migration”. Fostering these relationships between people and something that resembles their culture can really ingrain in them the need to care for nature, which is the main goal of all nature centers.

## Funding

Important points from this section:

- Funding varies by nature centers, so it is ultimately up to the center whether or not they charge
  - If there is a fee, there should also be fee waivers
  - Justification for charging is that people are more likely to attend as they already paid, but it also creates a barrier for some
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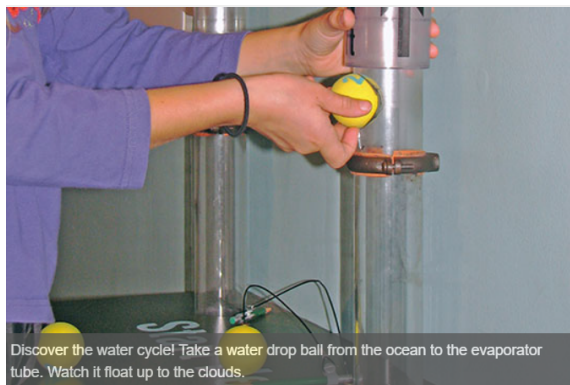
As seen in the Methods section, all centers were asked about how they are funded and whether or not they charge a fee. All seven mentioned how they would receive funding through donations, state funding, federal funding, ratepayers and grants. All centers charge for their services, except for the WET Center who provides everything for free, but they offer some sort of financial assistance. Urban Ecology has a “what you can pay” charge policy. Cal-Wood refers individuals to organizations that can help them with the costs of their programs. The Monterey Bay Aquarium will offer free tickets to people in the local TriCounty area sometimes through local libraries, sometimes by hosting a day in which people from the area can come in for free. Bluff Lake charge as well. And Both Cedar River Watershed and Thorne Nature Experience offer scholarships/fee waivers for those who need it. From Cal-Wood they explain that they charge people because they want them to think of it as an investment. Given that their programs focus on taking Latino families out camping, they have them pay for camping equipment rather than borrow it because they see it as a way to continue motivating people to engage in nature since they have the materials. But it is a challenging philosophy to tackle on whether or not to charge. From the Cedar River Watershed interview they brought the argument that “.....you charge and then they’re more apt to come and other ideas is that by charging for a ticket, we’re excluding some people who would otherwise want to come”. If you charge people, the idea is that they are more likely to come because it is a monetary investment, they committed to already but charging also creates a barrier. It is important as centers to identify how to navigate this challenge.

## Examples of Exhibits from Each Center Interviewed

All centers were asked about exhibits or programs they thought were worth sharing about. This section is dedicated to highlighting that, which can then hopefully work as a source of inspiration for the Watsonville Public Works Department. Some of these exhibits, such as the ones seen in Cedar River Watershed, Cal-Wood, WET Science Center, Thorne Nature Experience, and Urban Ecology, are great examples of intergenerational exhibits. They are accessible to people of all ages, especially in terms of being able to grasp the activity/information they are given. It would be great if the new center in Watsonville also has programs and exhibits like these, so that people of all ages can look forward to visiting.

### The Cedar River Watershed Education Center ([site](#))

From their interview, they suggested their website, but made an emphasis on the fact that they have a lot of hands-on exhibits which are listed below:



**Figure 2.** Learning about the water cycle



**Figure 3.** People carry a 5 gallon water jug

This first one is focused on teaching people about the water cycle, by having them insert a ball into a tube and pretending it was a water drop. Having exhibits like these can help people in visualizing an important cycle that is crucial to our environment (Figure 2). The second exhibit (Figure 3) I decided to highlight is one in which people are tasked with picking up a 5-gallon water jug. The idea behind this exhibit is to have people think about their water usage. The question asked in the exhibit was “Would you use 170 gallons a day if you had to carry that jug a mile?”. It is relevant to the effort the Watsonville Nature Center is centered on and is an example of a simple-cost exhibit that can still pose a significant meaning. The last exhibit (Figure 4) is a mural dedicated to telling the story of the Cedar River Watershed, both of the native people and the natural system itself (Seattle Public Utilities, n.d.).



**Figure 4.** Learning about nature through historical storytelling

**WET Science Center ([Site](#))**



**Figure 5.** How to conserve water in different areas of the house **Figure 6.** Calculate your water usage

For the WET science center, the two exhibits worth highlighting are their Interactive Kitchen (Figure 5) and Giant Calculator (Figure 6). For the kitchen, people are able to learn different ways to reduce their water usage by going through different water-based appliances and reading the tips for water reduction. This exhibit provides a fun space for curious children and families to learn about water conservation as they probably go to it in wonder, asking themselves “Why is there a toilet in the middle of a nature center?”. The second exhibit’s highlight is the giant calculator people can use to calculate the amount of water they use daily throughout their daily



activities. If anything, both of these are examples of quirky exhibits that are eye-catching and therefore effective in capturing an audience (WET Science Center, n.d.).

### **Monterey Bay Aquarium ([Site](#))**

For this interview, they did not give specific examples of exhibits they wanted to highlight, but browsing through their website there are some notable takeaways. First is their “Ocean Plastic Pollution Online Course”, which is not an exhibit but rather an example of what the Watsonville Nature Center can do in the future. This online course is created for teachers to learn how to teach about plastic pollution to their students, as well as how to encourage their students in taking action (Monterey Bay Aquarium, n.d.). Watsonville’s nature center can also do something similar to this as a means of community engagement. People from the center already go to classrooms to teach about resource conservation, which is great, but finding ways of expanding the scope of the message is also important. Which is why creating an online source like this one for teachers can prove to be helpful.

### **Cal Wood Education Center**



**Figure 7.** Cabin used for camping excursions

In their goal of connecting Latino families to nature, one of the programs Cal-Wood hosts are camping excursions. In the land area they own, they have multiple cabins like in Figure 7, where families can come and camp over a 3 day 2 night period. Cal-Wood provides food, internet, health insurance for the stay, and educational program during the day for those who stay. Each educational program is catered to the curriculum needs of the children who come along with their families. Aside from cabins, families also have the option of bringing their own camp gear and setting up on the land. While the program does cost \$200 per person, they do offer fee

waivers for those who require financial assistance (Cal-Wood, n.d.). In October 2020, Cal-Wood unfortunately had half of their acres (600 acres to be exact) damaged by a fire. While that has impacted their services, alongside COVID, they have also taken this incident as a learning opportunity. Through the use of social media they are documenting the restoration project of their land, and within that are also teaching people about fire in their environment (Cal-Wood, n.d.).

### **Urban Ecology ([site](#))**

In the times of COVID and online learning, Urban Ecology has shifted its current offerings to online formats as well. Their “In My Backyard” program offers different categories of informative online content for kids, adults and everyone. The main purpose of this is to connect people to their backyards through interactive activities. For kids, they offer videos showing them how to make terrariums as well as teaching about bees, to name a few examples. They also offer most of their content with Spanish translation (Urban Ecology, n.d.) For the adults they have a lot of emphasis on gardening. In the everyone section, it has a heavier focus on family interaction by posting self-paced hike ideas, cooking recipes, and outdoor activities a family can engage in. Even outside of COVID times, providing these sorts of activities through an online page can be helpful in engaging the community in nature without them necessarily needing to visit the nature center itself (Urban Ecology, n.d.).

### **Bluff Lake ([site](#))**

With the information given about Bluff Lake, the experience they wanted to highlight were their virtual field trips. The way their trips work is by offering a catalog of topics teachers can choose from. The package includes presentation videos, slides, and questionnaires teachers can give to their students after each lesson. In addition to that, an educator from Bluff Lake will also be there to answer questions students may have and all lessons are offered in English or Spanish. Unlike the other virtual offerings from the other centers, Bluff Lake does charge a fee for this service (Bluff Lake, n.d.). From browsing their website, some exhibits I wanted to highlight, or rather activities, are their after school programs and birthday parties. Their after school programs last an hour and 15 minutes, and is a 5 week program. During this time, kids are taken to the Bluff Lake area and they get to interact with nature in whichever way they’d like, for example bird watching (Bluff Lake, n.d.). One unique offering they have is allowing their site to be used for birthday parties. People can choose from two gathering locations and host a party for 2 and a half hours. They also have additional add ons people can choose from such as having one of the environmental educators host fun activities for everyone or even make them smores! The unique thing about this is by allowing people to host parties here, this makes Bluff Lake feel more like a

community space, and events like this can introduce new people to the area who may have not visited before. One of these key points from the previous section is that nature centers should also function as a community center, and the ability to host parties in ones is one way to do it (Bluff Lake, n.d.).

### **Thorne Nature Experience ([site](#))**

Thorne Nature Experience has their Latino Family Engagement programs, which as the name implies, aims at engaging the Latino community with nature. They actively engage in partnerships with other programs who work in Latino communities to better understand the needs and expand their ways of engagement. They also have events in which the parents of children participating in Thorne's school programs can come out and experience what their children experience, to help instill the same sense of wonder in them. The third way of engagement is that they provide Latino families with kits that will guide them in family centered nature time so that both parents and children can have time to learn about their environment (Thorne Nature, n.d.). Nature Kids is a collaborative project between Thorne and 30 other organizations. Its main goal is to create intergenerational programs and opportunities for people in the community related to nature. The first part of the program was back in 2016, when over 200 community members between the ages of 5 to 400, most of whom come from a Latino or low-income background, would be given the opportunity to voice the barriers they face in bonding with nature. Taking this feedback, all organizations plan on executing a pilot program that is aiming to take away the barriers mentioned before. Some of the strategies they have mentioned in their website include the creation of new trails, new parks, and having more employment opportunities for high school students in nature. All this in an effort to dismantle the barriers in place (Thorne Nature, n.d.). Since this program is fairly new, it would be helpful to get in touch with the people at Thorne once again in order to learn more about their process of getting community members to come and talk about barriers they face. The Watsonville Nature Center could also do something similar, which in turn can be helpful when planning out their new center as they can then take into consideration the needs of the community.

### **Recommendations**

Since the Watsonville nature center is currently in its beginning stages of redevelopment , this is the perfect time to get the community involved in the process. As mentioned in the analysis section, having community input in the starting stages can lead to a welcoming environment in the long run. One way to gauge the opinions of the public is through focus groups. Focus groups are when a group of people all participate in a discussion. I was thinking that the Watsonville works department could host a series of workshops. These workshops could be in collaboration with local groups such as Watsonville Wetlands Watch and Regeneration, who could spread the

word and help facilitate the event. Although I would also recommend working with non-environmental groups to help reach different audiences. The first hour would focus on the department introducing themselves and all the work they do. They can also talk about the old nature center. Part of this hour would also include a lesson on Watsonville's local environment and would end in a walk through the slough. The second hour is where the focus groups will happen. Participants will be divided into groups, each having a facilitator, and will start off by having a cafecito time. I would recommend that each group has no more than four people (not including the facilitator) and that everyone should be grouped with people in similar age ranges. This will ensure that everyone is able to share and will lower the chances of there being a dominant member in the group. During this cafecito time, people will be asked a series of questions (bulleted below) in order to act as an ice breaker and kickstart their creativity. The last part of this workshop would be the focus groups. Collaborating amongst each other, each group would be asked to create the "perfect" exhibit for the new nature center. The hope is that they will reflect on the cafecito time and local nature lesson to create exhibits that reflects what the community is curious about and what they need.

**Questions for "cafecito" time period:**

- How did you interact with nature when you were young/back home?
- How do you interact with nature now that you live in Watsonville?
- Have you interacted with the current nature center before? If not, why is that? If yes, what were things you liked and disliked?
- How do you interact with water in Watsonville?
- How prepared do you feel if there was a wildfire or major earthquake in town? What would be beneficial to you to learn in terms of natural hazards?
- Would you like to be involved in an exhibit in which your story is shared?
- What would make you feel more welcomed in a nature center? What would encourage you to continue coming back?
- What are some of the barriers you have faced in engaging with nature?
- Showing them examples of potential exhibit types and experience types, have them rank them in terms of which exhibit is more appealing to them. These exhibits can be ones that

already exist in other nature centers OR could be ones that the Public Works Department has already designed

## **Conclusion**

Overall, there are many barriers faced by the Latino community in participating in nature centers. Whether it be financial or language barriers, these are enough to prevent someone from wanting to enter the space. Also taking into consideration the history of environmentalism and how unwelcoming it has been towards people of color, it now becomes a challenge to dismantle all the barriers that stand. However, through the use of community engagement and networking with other centers, it is possible to address these barriers. It is going to take a lot of dedication, patience and research to achieve such a goal, but that should not be a deterrent as the outcome will help the well-being of the community and its environment. The biggest piece of advice that can be given is to create partnerships with different organizations within the community that can help spread the message of the ambitions of the new nature center in order to gain input. The nature center's purpose is to serve the community, so their needs need to be reflected in it. The best way to summarize this is by what was said during the Cedar River interview: "...we can be blinded by what we are not even aware of". To create a welcoming space for everyone, there needs to be a willingness to learn and change opinions, all in the ultimate goal of creating a center that serves the community well.

## **My Own Thoughts**

I have lived in Watsonville my entire life, however I was not aware that the nature center existed up until I was in university. My lack of knowledge of its existence is a reflection of some of the barriers presented earlier. My parents didn't know it was there, therefore they never took me and my sister in the first place. Even if they did know about it, I'm not sure if they would have taken us. For us, family trips were always heading over to Salinas and going to the mall. Our interactions with nature were few and far between. My connection with nature came through the WATCH (Watsonville Area Teens Conserving Habitats) Program hosted by the Monterey Bay Aquarium when I was in high school. I am grateful for it and how transformative that program was for me; I hope that sometime in the future another Watsonville kid can say the same thing about the new nature center. I do believe that the new nature center can become a cornerstone in the community. The work that the Public Works Department does is amazing, I mean they have managed to make my parents take composting seriously now! That is a testament of what they

can do and that needs to be applied to the new center. I decided to do this project because I love my community and found it to be an important task to have. I know how this town is, and one of my biggest concerns is gang activity. It is so prominent in our community, that we are banned from wearing red and blue as it would be a violation of our dress code. One approach that has been mainly used to tackle this is by heavily policing schools. It's an approach that I don't agree with, especially because it feeds into the school to prison pipeline, but also understand that it's the most feasible one at the moment. This is where I believe the new nature center can play a vital role. I'm not saying that it'll resolve the issue entirely. But I do think that it can be a space where people, especially youth, can foster a sense of belonging, and community; where they can develop new passions and make a family out of like minded individuals who also share those passions. I know that isn't easy work, which is why I think hosting the focus group workshops would be really beneficial to the final outcome of the center. While this report of mine does provide insight, it is very generalized and so it is essential to gain insight from the people of Watsonville directly. I'm sure everyone has concerns, and ideas they would like to share, we just have to give them a way to do so.

I am grateful for being able to take on this report. I hope it proves to be useful in some way, and I can't wait to see the new center in the future.

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## References

Bluff Lake (n.d.). *Virtual Field Trips*. Retrieved from:

<http://www.blufflake.org/distance/virtual-field-trips/>

Bluff Lake (n.d.). *After School*. Retrieved from: <http://www.blufflake.org/after-school/>

Bluff Lake (n.d.). *Birthday Parties*. Retrieved from:

<http://www.blufflake.org/events/birthday-parties/>

Cal-Wood (n.d.) *School-age after school family programs*. Retrieved from:

<https://www.calwood.org/familyprograms>

Cal-Wood (n.d.) *The Cal-Wood fire*. Retrieved from: <https://www.calwood.org/calwoodfire>

Chawla, L. (2020). Childhood nature connection and constructive hope: A review of research on connecting with nature and coping with environmental loss. *People and Nature*, 2(3), 619-642.

Hong, A., & Anderson, D., H. (2006). Barriers to participation for Latino people at Dodge Nature Center. *The Journal of Environmental Education*. 37(4). 33-44.

Kyle, V., & Kearns, L. (2018). 2. The Bitter and The Sweet of Nature: Weaving a Tapestry of Migration Stories. In *Grassroots to Global* (pp. 41-64). Cornell University Press.

Liu, S. T. N., & Kaplan, M. S. (2017). 19. Intergenerational Education. In *Urban Environmental Education Review* (pp. 185-193). Cornell University Press.

Monterey Bay Aquarium (n.d.) *Ocean Plastic Pollution Online Course*. Retrieved from:

<https://www.montereybayaquarium.org/for-educators/teacher-professional-development/teacher-programs/ocean-plastic-pollution-online-course>

Munley, M. E. (2013). Evaluating public value: Strategy and practice. *Museums and Public Value: Creating Sustainable Futures*, 45-61.

Palacios, I. M. (2013). Examination of Negotiation Strategies of Mexican Latinos to Visit Museums in Wake County, North Carolina

Seattle Public Utilities (n.d.). *Education center features and exhibits*. Retrieved from:

<https://www.seattle.gov/utilities/protecting-our-environment/our-water-sources/cedar-river-watershed/education-center/features-and-exhibits>

Selby, K. T. (2017). *Shifting Perceptions: A Systematic Approach to Urban Environmental Stewardship* (Doctoral dissertation).

Thorne Nature (n.d.). *Latino family engagement*. Retrieved from:

<https://thornenature.org/nature-for-all/latino-family-engagement-2/>

Thorne Nature (n.d.). *Nature Kids*. Retrieved from:

<https://thornenature.org/nature-for-all/nature-kids/>

Urban Ecology (n.d.). *In my backyard for kids*. Retrieved from:

<https://urbanecologycenter.org/programs-events-main/uec-in-my-backyard/backyard-for-kids.html>

Urban Ecology (n.d.). *In my backyard for adults*. Retrieved from:

<https://urbanecologycenter.org/programs-events-main/uec-in-my-backyard/backyard-for-adults.html>

Watsonville (n.d.) *Demographics*. Retrieved from

<https://www.cityofwatsonville.org/1441/Demographics>

Watsonville. (n.d.). *Nature Center*. <https://www.cityofwatsonville.org/684/Nature-Center>

Watsonville (n.d.). *Nature Center*. Retrieved from



<https://www.cityofwatsonville.org/684/Nature-Center>

Watsonville (n.d.). *Wetlands of Watsonville*. Retrieved from:

<https://www.cityofwatsonville.org/699/Wetlands-of-Watsonville>

WET Science Center (n.d.). *Exhibits to explore*. Retrieved from:

<https://wetsciencecenter.org/visit-us/exhibits/>