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Wellness Through Nature

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Abstract

The Ventana Wildlife Society's mission statement is to conserve native wildlife through science, education, and collaboration. VWS addresses the lettuce curtain and lack of access to green spaces with "Salud y Naturaleza ". The *Lettuce Curtain* refers to the disconnect between the Salinas Valley and the coast. This Nature Prescription program removes the barriers of transportation, cost, and language, giving access to nature to families in East Salinas by organizing free family trips to the coast and a weekly nature class. With easy access to nature, people will be encouraged to spend time in the outdoors to better their mental and physical health. Greater access to the outdoors is proven to reduce stress, better mental and physical health, and well-being. The outdoors is a resource that should be available for all and not just a privileged few. Expected findings are for participants to gain comfortability and knowledge with nature.

Keywords: prescription, nature, outdoors, parks

Agency & Communities Served

Ventana Wildlife Society is 501(c)(3) a nonprofit organization founded in 1977. Ventanas Wildlife Society's mission statement is to conserve native wildlife through science, education, and collaboration with our community. Founded in 1977 with 240 acres in Big Sur restricted for wildlife rehabilitation, Ventana Wildlife Society had a crucial part in restoring the Bald Eagle. With current efforts to conserve the California Condor, North America's largest flying land bird (by wingspan, 9.5 feet); VWS needs to share its work through education and outreach. Since 1922, Ventana Wildlife Society has been providing summer camps, school year programs, presentations, and field trips with at least half of the programming free for underserved youth to reach the community. In addition to outreach in the community and schools, VWS Big Sur Discovery Center at Andrew Molera State Park also serves as a center for outreach and education for the public.

The education department in Ventana Wildlife Society has been providing outdoor education programs for youth in an attempt to provide greater access to the outdoors in an attempt to reduce stress, increase mental health and physical health, as well as promote well-being. Transportation, cost, lack of information, and levels of comfort are all barriers that the community in East Salinas faces when trying to access green spaces. In efforts to serve the community, it is important to VWS to provide meaningful outdoor experiences and remove barriers and break inequalities in environmental and outdoor education. The education department does so by providing transportation in a fleet of four 15-passenger vans as well as covering any entrance fees but State Parks, and providing educational information through bilingual staff. VWS will also guide nature activities for families, provide access to coastal

locations and information for them to ideal visit in the future. Ventana can serve as a positive nature experience while educating the community on its surroundings. Destinations have included whale watching boats in the bay, kayaks at Elkhorn Slough, tidepools at Point Pinos, caves in Pinnacles National Park, and forests in the Ventana Wilderness. More than 1,300 youth enroll in outdoor education programs each year, the education program serves home schools, alternative education, family education, and underserved youth. Without a sense of connection with nature, the community lacks care towards the plants and species like the California condor. Ventana wants to provide a positive experience in nature as well as education.

Wellness Through Nature will focus on serving families in East Salinas, many of who are underinsured or uninsured. According to the 2010 Census, East Salinas has a population of 61,000 - 92% of whom are Hispanic and monolingual Spanish. It is common for this community to be illiterate as less than 29% graduate high school; with 38% of children living under the federal poverty level and families spending 30% of their income on rent living in crowded unsanitary conditions.

Region of State	Estimated Number of Participants from Region Served
North Coast	0
Far North	0
Bay Area	0
Sacramento and Valley & Sierras	0
Central Coast	215
San Joaquin Valley	0
South Coast	0
Inland Southern California and Deserts	0

Problem Description

With Wellness Through Nature, VWS hopes to address the nature deficit that the Salinas Valley is in. Nature-Deficit, defined by Richard Louv, co-founder and chairman emeritus of the Children & Nature Network and author of *Last Child in the Woods* - is not a medical diagnosis, but a useful term—a metaphor—to describe what many of us believe are the human costs of alienation from nature: higher rates of physical and emotional illnesses, child and adult obesity, Vitamin D deficiency, and other maladies. While only 12 miles from the coastline, Salinas is a world away. Transportation is a barrier for the public. Cost also prohibits a lot of families from enjoying state parks or participating in programs that provide access.

For the Salinas community, there is a significant lack of open spaces and parkland. A city of 150,000 people, is more densely populated than Los Angeles and has only 360 acres of public open space - far below the state average. Through nature prescription programming, the agency hopes to solve the problem of low levels of physical activity in our community. With the rates of chronic disease increasing in children our community needs to be encouraged to be in nature and to be active. 38% of children live under the federal poverty level, and 63% of families spend over 30% of their income on rent (Census,2017). In Salinas, farmworkers are exposed to pesticides many hours every day that can cause chronic diseases in the long run in farmworkers as they are commonly consumed and inhaled in the fields (Fernandez,2018).

Ventana sees a need in parting the lettuce curtain to avoid a sense of disconnect between Salinas and the rest of the bay area. We are surrounded by state parks yet many families have not visited or camped due to many reasons such as work, fear of the unknown, etc.

Many factors contribute to the problem of access to nature in our community. The Ventana Wildlife Society finds the need to advocate for a prescription nature due to the lack of access to nature, language barriers, and health decline in our community. Lack of green spaces or parting the [lettuce curtain](#) is the phenomenon in which many residents from Monterey Peninsula and other coastal cities avoid going to the Salinas Valley and vice versa. Much of the Salinas youth has not been exposed to the Coast and state parks in their area, it is important to address this as the benefits n nature benefits all. Another barrier our community faces is the lack of translated information leading to a language barrier. Many of our demographics' main language is Spanish and not many resources are available to them. Fear of the unknown is very real when information is not given in all languages, leading people to feel unwelcome and discouraged. Fear of deportation is a huge issue for migrant families and authority figures like park rangers can shy people away from state parks. Although park rangers can not deport people, families have every right to be worried, and it all comes down to the lack of information and language barrier.

Wellness through Nature also hopes to encourage people to use nature for the benefit of their health. With obesity rising among the youth of East Salinas. Nature prescription is focused on the health and happiness of patients. Obesity is becoming an epidemic among children in Monterey, with 48% of 7th graders being obese in comparison with 38.7 percent in California overall ([Kids Data, 2015](#)). Prescribing for a patient on resources and physical activity can help them implement exercise and improve their health.

The consequences of the contributing factors can be life-changing to patients. From the decline in physical activity, increase of depression, and nature deficit within youth. The decline

in physical activity can cause a large effect on their health, not getting enough physical activity can lead to heart disease—even for people who have no other risk factors. Lack of exercise time in nature can also increase the likelihood of developing other heart disease risk factors, including obesity, high blood pressure, high blood cholesterol, and type 2 diabetes. that could result in high blood pressure, diabetes, coronary heart disease, and high cholesterol [\(CDC 2019\)](#). In addition to the risk factors health-wise, the decline in time spent in nature can lead to mental health issues such as depression. Green spaces may also have direct effects on mental health -- providing us with relaxing distractions and natural highs [\(Gwen 2019\)](#), staying in the city environment can affect us mentally and physically. Spending time in nature safely and positively is especially important for adolescents in Salinas due to the increase in gang violence.

Wellness Through Nature will conduct 4 one day family programs, recurring weekly youth classes, and 2 family campouts. In all events, participants will enjoy the experience of the coast or state parks without the concern for transportation, cost, or language barrier. The program will be considered a success if pre and post-surveys show that 80% of participants indicate feelings of lower stress after having participated, increased awareness of the outdoors as an available option to develop and maintain healthy lifestyles, and increased a better comfort level in visiting a state park.

Contributing Factors	Problem	Consequences
Transportation	Easier access to Nature for migrant families	The decline in physical activity
Language Barriers		Obesity
Health Benefits		Nature Deficit

Capstone Project Description and Justification

Ventana Wildlife Society will follow previous education classes and camps to model Wellness through Nature. While the structure of the project is based on programs successfully operated since 1922, the content and activities will be continuously molded by the participants. In November 2019, Ventana held a family program trial which included a group nature walk followed by a 'choose your own adventure' - organized sport, art and reflection, or a hike. During and after program participants took pre and post-surveys where they expressed no prior experiences in nature such as the one provided and high interest in continuing to participate in nature programs. In addition to single-day adventures for families, there were also requests for overnight camping; and as VWS saw an opportunity for the community, programming will include all three - after-school weekly classes, single-day family programs, and family overnight camping.

Weekly nature Classes for Youth will be recurring opportunities for youth ages 8 - 12 to connect with nature. For six weeks VWS instructors will pick up participants and travel to different coastal locations for hiking, exploring, games, wildlife watching, tide pooling, and journaling. Two classes each semester will incorporate a fitness program to encourage physical activity.

Single Day Coastal Adventures for Families is a one-day experience where families can experience nature together with no cost or worry for transportation. Participants are transported to coastal locations for activities such as kayaking, whale watching, followed by beach trash pick up, beach art, picnicking, games, and exploration. Each program will incorporate physical

activity as well as information for families to return by themselves. There are currently two kayaking trips planned for families in East Salinas.

Two Coastal Overnight Adventures for Families will provide families with the opportunity to spend the night camping along the coast. Pre meetings will be held for families to ask questions and know what to expect. Families are picked up and transported to Andrew Molera State Park in Big Sur. After an introduction to our Discovery center, participants will set camp with the help of VWS staff and have options for activities. Dinner and breakfast will be provided.

Funding for Wellness Through Nature is grant-based from Parks California and Coastal Conservancy. This program is supported through various Ventana Wildlife Society Education staff and previous programming models.

The purpose of this project is to make a positive impact on youth and families to visit nature in their community to raise awareness and improve their well-being. Many of our programs have positively influenced people into a career they would like to pursue or give them a change in routine. A positive impact can change the well-being of participants; outside spaces and activities are for everyone. Time in nature has proven to be beneficial for physical health all around. There are extensive study trials and evidence that show positive health outcomes that could help people in our community. Spending time outdoors is also associated with increased [physical activity](#) at more vigorous levels of exertion among children. Spending time outdoors has many [health benefits for children](#) such as decreased symptoms of attention-deficit/hyperactivity disorder, asthma, myopia, and life stress, 1-7 the average child spends only 4 to 7 minutes

outdoors each day. Time in nature can help [children with ADHD](#) as it can have a positive effect on concentration and brain development

The expected outcome for this program is for the underserved communities to have free and easy access to green spaces. At the end of tier experience, families will feel comfortable enough to visit nature on their own and use it for their health benefits. Providing families with positive nature experiences will encourage healthy habits. The program will increase coastal access and provide opportunities to enjoy Monterey County. The expectation is to have participants increase their knowledge of and experiences with the coastal ecosystem and view the coastline as accessible to them. Indicators to represent success in our program will be program enrollment of 85% or ger, 805 of participants will indicate increased feelings of health and wellness, and 80% of participants will return to state parks or the coast on their own.

Enrollment and demographics will be recorded through registration forms. Participants will also take pre and post-surveys as indicators for evaluation.s Programs will also include opening and closing circles as a way to focus on participant's suggestions and thoughts.

Activities	Deliverables	Timelines/ Deadlines
Project Preparation	Conduct focus groups for families and for future programming. Schedule for upcoming programs in order for reservations to be made	September 2021
Implementation of programming	Provide weekly class in Salinas, family day adventure, and camping. Develop bilingual materials	October 2021 December 2021
Evaluation and follow up	Debrief meeting with participating families. Complete and collected surveys for final reports.	February 2022

Project Results

The Ventana Wildlife Society mission statement is to conserve native wildlife through science, education, and collaboration. VWS addresses the lettuce curtain and lack of access to green spaces with "Salud y Naturaleza ". The lettuce curtain refers to the disconnect between the Salinas valley and the coast. This Nature Prescription program removes the barriers of transportation, cost, and language, giving access to nature to families in East Salinas by organizing free family trips to the coast and a weekly nature class. With easy access to nature people will be encouraged to spend time in the outdoors to better their mental and physical health. Greater access to the outdoors is proven to reduce stress, better mental and physical health, and well being. The outdoors is a resource that should be available for all and not just a privileged few. Expected findings are for participants to gain comfortability and knowledge with nature.

Activities conducted during the weekly Youth class, are centered around students Stewardship and Coastal experience. Activities from the current Salinas class include a trip to Moss Landing beach, where students watched for sea lions and learned about adaptations through games. The class was also introduced to the migrating population of monarch butterflies in Pacific Grove. The students were so impressed by the monarchs and encouraged their families to visit as well! Activities during trips to the coast also include implementation from "No Trace Left Behind' ethics; where students learn the basic rules for enjoying and respecting nature. These sets of rules set the tone for the youth classes to enjoy and appreciate nature. The first family camp out also took place, activities included hiking, stargazing , healthy eating, and equipment for families. The family overnight camp out set an amazing tone for our following

events. Three families, a total of 15 participants, shared their very first camping experience with Ventana Wildlife Society. Engaging with nature in Big Sur, families worked together for an amazing time and family bonding. As first time campers families set up tents, gathered at the campfire for marshmallows and observed wildlife.

By the end of this project, expected outcomes would be to increase attendance in programming for future "Salud y Naturaleza " events/trips but also for families to seek nature in benefit of their health. It is important for Ventana Wildlife Society to provide fun and easy access to the great outdoors and with the capacity available and benefits. There will be pre and post surveys that will indicate a positive effect of nature after our programing. The survey, as well as any suggestions from participants will help establish the success of the program.

As a result of our program there was a clear interest in the nature education and family bonding setting provided by "Salud y Naturaleza". Salinas Nature Class showed great growth by increasing attendance and having participants wanting to return for next semester. The students showed amazing results, parent Mauricio shared how less hyperactive his son is at home and nature class has helped him distress.

Last Name	Age	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	25-Nov	2-Dec
Godinez	8	1	1	1	1	1	1	No Class	1
Escamilla	10		1	1	1	1	1		1
Juarez	10			1	1	1	1		1

The measures for outcomes in the family overnight camping were post surveys and closing circles where each participant shared their experience. The closing circle happened at the end of the day joined with the post-surveys. Post surveys demonstrated that the outcome of the

program was successful. Post surveys showed that 100% of the families were satisfied with staff, equipment, and transportation as well as a reduction in their stress. All families are also interested in future VWS events and going back to a state park on their own. Closing circles gave families a chance to share their favorite part of the camping trip; some of these included location, family bonding time, no cell service, teamwork, and s'more! Participants, as well as staff, were very satisfied with the outcome of the Nature Prescriptions camping trip.

Conclusion & Recommendations

Based on my results, Ventana Wildlife Society bringing Nature Prescription with “Salud y Naturaleza” is the beginning of something great. Participants were interested and showed the positive effects that nature has not only with individuals but with families as well. Participants in the Nature class retained and remembered lesson information as well as shared educational information with families. Families who participated in the camping trip stated great satisfaction with nature. This concludes that providing an experience and easy access to nature will encourage people to enjoy nature on their own and turn to nature for the positive.

Research to continue the program is limited as there have only been a handful of events but post surveys and evaluations show great promise to continue the program. Securing funding is the first step in Ventana to continue providing experiences for families. This program should continue to expand in the Salinas communities as well as Monterey County. Attendance during Fall classes went from 1 to 3 and remained constant throughout demonstrating that participants enjoyed the class.

My recommendation for my agency to improve the project would be more single-day adventures with Ventana Wildlife Society, for the community to continue getting familiarized with staff and actively spreading the word. Current single-day adventures for VWS consist of kayaking or whale watching, which can be intimidating for some. Offering single-day adventures with arts and crafts, storytime, or Zumba in the park can be a small start for some people and their comfort in nature.

Personal Reflection

I learned the big problem of the lettuce curtain is for the Salinas Valley and the nature deficit in the community. Nature deficit is a cause of city life and families do not always have time for a nature break but one of the hardest parts of implementation was outreach in the community. Coming back from Covid with efforts for a new program had a slow start but with happy participants and word of mouth we can see some increase in participation. Some communities are harder than others, our Nature Class in Castroville has no participants but my agency is making an effort to address the problem by adjusting the class to be targeted for younger ages (4-7), which might be the need of that community. Everything about program planning was a professional growth for me, from taking care of the lessons to camping with families in 40F degree weather.

The success of the program stemmed from early focus groups. Focus groups that took place in September, where participants were introduced to Ventana and opened a discussion for participants set the tone for the following programs. These focus groups gave the community the chance to ask questions and give suggestions on what nature programming they wanted to see. This was vital for the success of the program as it allowed VWS to introduce itself and nature programming to the community. Most importantly it was vital in shaping programming to meet the needs of the community.

Limitations and challenges were mainly centered around Covid-19 and what programming looked like post-quarantine. Due to the pandemic, much participation was lost and lockdown raised the benefits that nature prescriptions could give to some people but we had to find a way to serve communities safely. Covid concerns were addressed through the guide of the

County and CDC. Programming requires a mask or Covid vaccination card. All the families on our camping trip did not hesitate to provide proof of vaccination for a mask-free camping trip but we believe that some parents might be hesitant to send children on programming due to the uncertainty of the pandemic. All programming is different with participation and demographics.

The broader health problem Salud y Naturaleza is trying to address is the increase of mental health and obesity rates in Monterey County, doing this by providing bilingual information and easy access to the Coast and State Parks. In addition to what has already been done, there could be a weekly group for Salud y Naturaleza that provides weekly hikes; this would help participants create a habit out of their time in nature and appreciate it through the long run. I think it is beneficial for future capstone students to create a capstone project that is rewarding to them. For me, it was extremely rewarding to work towards serving the community around us and introduce them to new nature education. It is important to take and save any notes taken during the creation of the project because it will help brainstorm and help for future project planning.

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Appendix A

Activities	Deliverables	Timeline/Deadlines	Supporting Staff
Create Curriculum for upcoming programming for nature prescription “Salud y Naturaleza”	Scheduling made and shared through Google Docs	March - April 2021	Alena Porte Staff
Create bilingual material for nature prescription	Flyers and surveys for community	May 2021	Alena Porte
Outreach for East Salinas Community	Every Tuesday Alisal WIC Farmers Market	June - September 2021	Alena Porte Staff
Focus groups for East Salinas	3 different sessions of focus groups to survey and get input from community	October 2021	Staff
Site Visits	Visit potential locations for Nature Classes	October 2021	Staff
Weekly Youth Nature Classes	9 classes for East Salinas Youth	October 2021	Alena Porte Staff
Look for supporting partners for nature prescription	Salinas Valley partnership for safe prescription	November 2021	Alena Porte

First Family Camping	Overnight camping for East Salinas communities with transportation	December 2021	Staff
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