

Understanding Urban Audiences

Community Workshop Results for Don Edwards San Francisco Bay NWR

Background

In the summer of 2010, the U.S. Fish and Wildlife Service (Service) began creating an updated vision for the future of the National Wildlife Refuge System. More than 100 people from across the Service worked together to craft *Conserving the Future: Wildlife Refuges and the Next Generation*.¹ This document lays out an ambitious plan for the next decade that addresses opportunities and challenges in the face of a changing America and conservation landscape.

To implement the new vision, nine teams consisting of Service employees were created, one of which was the Urban Wildlife Refuge Initiative team. The Initiative team aims to increase the Service's relevancy to urban citizens and contribute to the vision's goal of diversifying and expanding the Service's conservation constituency over the next decade. It grew out of the recognition that America's increasing population is more diverse and increasingly living in urban areas. Objectives set by the Initiative team include establishing measures that help to define and achieve excellence, creating a framework for developing new urban partnerships, and establishing a refuge presence in ten demographically and geographically varied cities in the U.S.

An underlying need for the Initiative is a better understanding of factors that facilitate or inhibit connecting urban audiences with wildlife and nature. To address this need, the Service's Human Dimensions Branch collaborated with U.S. Geological Survey and North Carolina State University on a research project aimed at understanding urban audiences, identifying barriers to engagement in wildlife-dependent recreation, and identifying strategies that the Service can implement to overcome these barriers.

This multiple-method research project includes: (1) a review and synthesis of the current literature to better understand what is known about barriers, motivations, and proven successful strategies of urban engagement in outdoor recreation; (2) interviews with refuge staff and partner organization representatives in urban areas to understand current refuge visitation in these settings, identify programs and strategies that have been successful, and identify institutional factors that promote or impede the ability to connect with urban audiences; and (3) community workshops to hear from community representatives about the needs and motivations for outdoor recreation participation, perceptions of barriers that exist, and suggested strategies to better connect and engage diverse urban residents with wildlife.

¹<http://americaswildlife.org/vision/>

Site Selection

Community workshops were conducted at seven refuges (see Table 1) selected through a multi-stage process. First, Service GIS specialists compiled a list of urban areas within a 25-mile radius of a National Wildlife Refuge, using the Census Bureau's definition of an urban area. The 25-mile radius was selected as the distance because it was the average distance traveled by local refuge visitors who participated in the 2010/2011 National Wildlife Refuge Visitor Survey.² A list of 301 refuges was generated and further refined by omitting refuges that met the following criteria:

- Refuges in U.S. territories (e.g., Puerto Rico)
- Refuges with populations less than 250,000 within 25 miles (based on 2010 U.S. Census data)
- Refuges with no public access
- Refuges whose 2012 annual visitation was less than 22,000

Seventy-one refuges were identified and further refined by Service employees with extensive knowledge about refuges. Through this process, some refuges were removed based on various access or physical attribute restraints. The research team then selected twelve refuges in geographically and culturally diverse urban areas; this list was modified and narrowed down to six locations based on input from key contacts from regions, the Urban Initiative team, and others in the Service. Potomac River NWR was later added to the project based on the utility of the research for their needs and available refuge funds.

Table 1. National Wildlife Refuge locations for community workshops

Refuge	Urban Area(s) within 25 miles *	Population within 25 miles *	Visitors 2013 **
Tualatin River NWR	Portland, OR-WA	1,727,100	131,709
Don Edwards San Francisco Bay NWR	San Francisco-Oakland, CA San Jose, CA Concord, CA	5,019,028	685,400
Rocky Mountain Arsenal NWR	Denver-Aurora, CO	2,277,371	180,000
Minnesota Valley NWR	Minneapolis-St. Paul, MN-WI	2,610,793	230,000
John Heinz NWR at Tinicum	Philadelphia, PA-NJ-DE-MD	3,949,328	140,000
Potomac River NWR Complex			
Featherstone NWR	Washington, DC-VA-MD	2,479,129	20***
Mason Neck NWR	Washington, DC-VA-MD	2,832,706	38,210
Occoquan Bay NWR	Washington, DC-VA-MD	2,774,276	38,210
Arthur R Marshall Loxahatchee NWR	Miami, FL	2,586,378	276,680

* Based on 2010 U.S. Census.

** Based on 2013 RAPP.

*** Featherstone NWR is currently only accessible by water, and has very low visitation as a result.

² <http://pubs.usgs.gov/ds/685/DS685.pdf>

Methods

For each refuge, a protocol for contacting and inviting potential participants was followed. With assistance from refuge managers and staff, people with extensive ties to the local residents and communities of interest were identified. Individuals or organizations were contacted by the researchers to participate in a workshop at the refuge. See Community Workshop Findings, below, for more refuge-specific methods.

The research team for each workshop typically consisted of a discussion facilitator and two note takers. Notes were recorded on flipcharts that participants could view throughout the discussion to ensure that key points were captured accurately. Participants had multiple opportunities to review, clarify, and fill-in any information they felt might be missing. A second note taker recorded near verbatim notes on a laptop, identifying individual speakers with an anonymous coding system. Notes were edited for clarity immediately following the workshop. No audio or visual recording was used.

Both workshops lasted approximately two hours. All participation was voluntary; no money or other incentives were provided to the participants. To begin each session, participants were welcomed by the facilitator and refuge staff (if available), and then asked to introduce themselves and indicate the organization or community they represent. If present, the refuge staff was excused before the discussion began. Then, the facilitator reviewed the goal and guidelines for the session and began the discussion, which was guided by the following questions:

- Speaking on behalf of local community residents, what comes to mind when they hear outdoor recreation?
- What motivates people in this community to participate in outdoor recreation?
- What barriers prevent greater access or enjoyment of outdoor recreation opportunities by people in this community?
- What can be done to promote greater participation in outdoor recreation and use of the refuge by people in your community?

Following the discussion on barriers to outdoor recreation opportunities, participants were asked to indicate the three barriers they perceive as the greatest factors in limiting participation in outdoor recreation for nearby communities by marking them on the flip-chart notes. Participants were asked to do this again for strategies that could encourage greater engagement with the refuge. At the conclusion of the discussion, refuge representatives were invited to speak with the workshop participants and answer any specific questions about the refuge. The primary role of the refuge staff at this point in the discussion was to listen to the workshop participants, and be available to answer any specific questions the facilitator may not have been able to answer.

Analysis and Reporting

All notes from the workshop were compiled and organized by the guiding questions. Each set of notes was analyzed to identify themes representing workshop participants' comments. Themes for each question are summarized below, and, where appropriate, specific examples are provided from the notes. While these should not be considered verbatim quotations, as no recording devices were used, they adhere to the meaning and context of the speaker's original statements.

This report captures workshop findings for an individual refuge. Findings for individual refuges were prepared independently of one another by the workshop leaders, therefore variations in presentation may exist across the seven reports. Results for this refuge will be combined with results from workshops held at the other 6 refuges in a final report. A final report will include major themes and patterns that emerged from the combined data, as well as management and communication implications that could be drawn from the themes and patterns. Final results will be instrumental in the design of future strategies for communicating with diverse urban audiences, and for providing tools and resources that Service staff and affiliates can use to better engage all of America.



Elementary school students letting loose on a field trip to Don Edwards San Francisco Bay NWR. Credit: Justine Belson/USFWS

Community Workshop Findings for Don Edwards San Francisco Bay NWR

Workshops were conducted with community representatives at Don Edwards San Francisco Bay NWR (Don Edwards) in March 2014. To recruit participants for these workshops, contacts were identified by the refuge staff and research team, and then a snowball technique was used; those identified were asked to recommend other individuals and organizations to participate in the workshops. These individuals were then contacted. Furthermore, following an extensive Internet search, organizations with a focus on recreation, conservation, environmental education, or other community-based activities (e.g., social or environmental justice, libraries) that work within the communities near the refuge were also contacted to participate. Fifty different organizations were identified and contacted via email and phone to participate through a rigorous process of multiple contacts; ten people participated in the workshops (Table 2).

Table 2. Organization of individuals who participated in the community workshops.

Organization
Bayshore Christian Ministries
Citizens Committee to Complete the Refuge
City of Newark: Government representative
Collective Roots
Earth's Creations Ecology School & Family Childcare
Teacher at James Logan High School, Union City
Newark resident
Raven Works Field Sports Ministry
Santa Clara County Parks

Summary of Key Themes

The following summarizes themes that emerged from discussions around the following questions for the workshop.

1. Speaking on behalf of your local community residents, what comes to mind when they hear outdoor recreation?

Ten general themes emerged from discussions on outdoor recreation. These themes are summarized below.

Common outdoor recreation activities: Participants described activities that are commonly associated with outdoor recreation, including walking, running, hiking, fishing, camping, backpacking, biking (general cycling and mountain biking), wildlife observation, birding, and hunting. Participants described walking outdoors as the most common activity for many local community residents, particularly the elderly. All-terrain vehicles (ATVs) and

motorcycling were also described as activities in which people participate while outdoors. Other activities included horseback riding, archery, and just general shooting (e.g., particularly BB guns for younger boys, although this type of shooting activity is rarely allowed in urban areas now-a-days).

Unstructured outdoor activities: Participants suggested that many community members thought outdoor recreation consisted of physical activity that is best performed outside in an unstructured way. Such activities included going to the woods or park, throwing or skipping rocks, general exercise, and having fun outside. Having some time outside was very important to participants.

Water-based recreation: Participants discussed water-based recreation, such as jet skiing, boating, rowing, kayaking, water skiing, inner tubing and floating down rivers, swimming, and rafting, as common activities for some local residents. However, other residents in the local area may be unable to participate in certain types of water-based recreation because of associated high costs (e.g., equipment). Additional water-based activities included fishing and netting of crabs or other sea creatures.

Food-related activities: Participants indicated that many families from diverse backgrounds engage in food-related activities in the outdoors. These types of activities include having picnics outdoors, as well as gardening at home or going to Farmers Markets. Food was mentioned as an important way to bring everyone together and have family time.

Sports: Sports such as soccer, basketball, football, baseball or softball, golf, and Frisbee or disc golf were mentioned by participants as forms of outdoor recreation that are common in the local communities. Soccer was mentioned as particularly important to many Hispanic residents. These activities were repeatedly referred to as more formal sports and ball-handling sports.

Educational activities: Participants discussed activities that are associated with environmental education for students and general science outdoors. Activities may include school groups learning while in the outdoors (e.g., learning about tide pools or marine biology), or local residents participating in citizen science projects. Butterfly gardening and learning specifically how to attract and care for particular wildlife species were also mentioned as activities that some local residents do while outdoors.

Service-related activities: Participants indicated that community members also participated in outdoor activities that were perceived as providing benefits to others or the environment (i.e. service-related activities). Activities included restoration, volunteering, trail building, planting trees, and general community service outdoors. While some people may volunteer of their own volition, others may be participating in community service due to “sentencing” by a judge or court-order.

Contemplative, training-based activities: Participants described certain activities that some local community residents participated in outdoors that were contemplative, and had some element of practice or training to them. These types of activities included yoga, tai chi, and meditation.

Creativity-based activities: Participants mentioned that some community members also liked to participate in activities that are considered to be creative while outdoors. These activities included painting, drawing, sketching, art classes in the park, and nature journaling and writing.

Interaction-based activities: Many different types of activities that were described by participants had some level of social and physical interaction with others. These activities took a variety of forms, including treasure hunts with families (e.g., geocaching, letter boxes), ropes courses, petting zoos, hula hoop classes, biking or birding clubs, flower or gardening groups, scouting groups, Boys and Girls Clubs, afterschool programs, and festivals such as *Day on the Bay*.

2. What motivates people in this community to participate in outdoor recreation?

Participants' responses to this question were grouped into twelve themes. These themes were broadly related to why people participate in outdoor recreation as well as to why people are drawn to Don Edwards in particular. These motivation themes represent important ideas voiced by members of communities located near the refuge. The themes are as follows:

Family and social interaction: Participants indicated that time with family, friends, and other people who are perceived as similar to themselves was a strong motivator for being outdoors. Specifically, family-based activities were mentioned as being very important to local community members. Word-of-mouth between friends and family can also motivate people to explore something new, as people want to have social connections with, be able to engage with, and have stories to tell their family and friends. Building memories with family was also a motivation for participating in outdoor recreation.

Escape: Participants discussed how outdoor recreation provided an opportunity for people to escape from the inner city and the chaos of city life. Outdoor recreation gives people a chance to break out of patterns and clear their minds. For some local community members, outdoor recreation was viewed as a luxury (e.g., a vacation for which a family must save up money and have the time to take) rather than something that is a part of their everyday lives.

Exploration/Adventure: Exploration and adventure were considered motivations for why people participate in outdoor recreation. When outdoors, people can discover new places they had not yet visited or experience something new they had not yet tried. This "newness" in terms of exploration and adventure leads to a sense of discovery and wonderment.

Fun/Enjoyment: Enjoyment and having fun were considered motivations for why people participate in outdoor recreation. For example, people may enjoy looking at flowers. Also, people, especially young children, like outdoor recreation because being outdoors can be very exciting and fun.

Overcoming fear: Participants discussed how outdoor recreation can help people overcome their fears and really challenge themselves to meet new goals. There was also some

discussion that people who had disabilities or were not super athletic could participate in outdoor activities such as archery, and have a sense of accomplishment for doing something they thought they were unable to do.

Beauty: Participants thought that some residents may be encouraged to get outside because the Bay Area was considered to be very scenic. The area was considered to have beautiful weather with lots of sunshine and relatively warm weather throughout the year.

Entertainment that is affordable: Being outdoors was considered to be a cheap (or free) way to entertain families as opposed to going to places in the city. People want to have fun, and being outdoors is an affordable way to do so. However, participants indicated that certain outdoor activities are considered cost-prohibitive and a barrier to participation.

Connection to nature: Participants indicated that some people are motivated to participate in outdoor activities because they want get back in touch with nature and the environment. Others may participate in outdoor recreation because they simply love being outside. The outdoors was also described as a powerful place to learn, because it provides hands-on ways to connect to the world (e.g., catching and cleaning fish that you can then eat).

Educational opportunities: The educational value of nature was identified as a motivator for participation in outdoor recreation. Participants discussed this idea in numerous ways: people could learn a variety of skills, including the practice of historical crafts, new activities never yet tried, or how to survive (e.g., growing your own food); people could also explore ideas, such as where food comes from and other life lessons (e.g., how to be quiet, how nature works). Being outdoors was also described as being hands-on and a great place to take school programs for student learning.

Service: Participants described certain activities performed outdoors as a way for people to be “in service” to others and their community. Volunteering was one way in which people were motivated to be outside, and people were motivated to do so because they wanted to make a difference in the world (e.g., impact a child’s life).

Improve health and wellness: Participants described outdoor recreation as a means for maintaining and improving one’s health, for unwinding and relaxing (important for mental health), and to experience clean air. Participants also thought that some community members were active outdoors because it makes them feel good.

Spirituality: Participants indicated that some community members participate in outdoor activities or choose to be outside because of a desire to feel spiritually connected.

3. What barriers prevent greater access or enjoyment of outdoor recreation opportunities by people in this community?

The major themes that emerged as barriers are summarized below.

Concerns for Safety: Participants discussed how some members of local communities think that safety (real *and* perceived safety) is a barrier to participation in outdoor activities. Kids being outdoors without adult supervision can be an opportunity for kidnapping or other dangerous events such as being harmed or worse by other humans, as well as from environmental dangers such as snakes or mountain lions. Another environmental danger mentioned was the contamination of fish caught in the bay or salt marshes. Participants also discussed how parents who do not participate in outdoor recreation themselves or have not been exposed to such activities often do not consider being outside as a safe place for their family.

“Hiking, going for a picnic – these things are out of people’s comfort zone. It feels unsafe to not be around people they know.”

“A lot of times, the edges of a community are marked. Outside of that safe zone, there might be stereotypes and racial profiling – there are reasons people don’t want to go to certain places.”

“There are concerns about safety... For example, everyone used to walk to school. Now parents drop off their kids. Parents don’t feel it’s the right thing to do anymore – they’re worried about kidnapping and all sorts of stuff.”

“I went to East Palo Alto to pick up hominy when I first moved here. They were like, ‘What are you doing here? It’s not a safe place to be for anybody.’ Safety is a factor.”

“There’s mercury in the fish.”

Fears: Participants mentioned a variety of fears people may have when participating in outdoor recreation or going to a refuge. Examples included a fear of being off pavement or walking up an incline, getting lost, the quiet (when accustomed to city noises), holding up the group (for elderly and obese), and not being capable of participating (e.g., lack of control, do not know how). For some people, just the fear of the unknown can be a barrier, as people are not comfortable doing things that are uncommon for them. There was also discussion around a fear of authority and people in uniform, and this fear was particularly apparent within immigrant communities. Other examples include fear of encounters with animals, such as mountain lions or snakes, or fear of getting mercury contamination when fishing.

“Lots of people are afraid to do it. I have to say to them, ‘Once you know how to do an activity, you can do it.’ Their perceived lack of control causes fear. They don’t think it’s something they can do... We have to explain that it’s ok... There’s a way to go about being in the environment that’s new to them. It’s HUGE for them – once they get experience, they want to go everywhere and do everything.”

“There’s also a fear of getting lost... There’s all these new fancy devices (GPS, etc.), but older generations don’t know how to use them and don’t want to get lost so they don’t go.”

“I took a field trip of 2nd and 3rd graders outdoors... they were afraid to walk on an incline or unpaved surface. We were totally stunned.”

“I don’t want to be in the back dragging everyone down.” [Commonly-heard fear told to someone who organizes group trips for elderly residents]

“Some of these kids have seen parents arrested by someone in uniform, and they don’t know the difference between a park ranger and an immigration officer.”

Cultural barriers: Participants discussed a range of barriers that are related to culture. Examples included people of non-white ethnicity feeling uncomfortable in the outdoors, not having outdoor experience or being exposed to the outdoors in a positive way, and not wanting to be viewed as an outsider when participating in outdoor recreation. Some people may be perceived (or feel they are perceived) as a threat to others or think they will be discriminated against when they are outdoors. For some residents, outdoor recreation might be seen as a privilege or vacation only, so they do not regularly participate in outdoor recreation.

“When recreating outdoors, you feel like people are watching or looking at you. You feel like an outsider and alienated. If I come to a refuge and see people riding \$800 bikes with all the gear (equipment, clothing, etc.), then I feel like an outsider.”

“Even out at campsites, when our culture comes, people don’t understand us or they think, ‘We have to watch them, they drink.’ A lot of people drink – it’s not just our culture. Or, they think, ‘Oh, they will play music loud.’ A lot of people play music loud. It’s important for rangers, whomever, to be intentional about getting different cultures out to these places to make the places feel inclusive to everyone.”

“When I do outdoor activities the kids in our programs are like ‘You do archery? You hunt?’ And when there are other black instructors, they’re like ‘You do this?’ They don’t expect black people to be doing these things.”

“There are a lot of distinctions in how different cultures perceive the outdoors. We access outdoors and wildlife in a specific way. A lot of people need to be taught and brought into those different communities.”

Family dynamics: Participants indicated that there are barriers to participation in outdoor recreation associated with family dynamics. For example, households where a single parent or both parents work multiple jobs to make ends meet may be unable to take their children outside. Low-income households may not be able to afford programs or activities that occur outdoors either. Also, parents that have not been exposed to outdoor recreation themselves are less likely to take their children because they are unfamiliar with what all recreation entails.

“Our community is blue collar to no collar. There are a lot of parents, single parents, working 2 or 3 jobs, and a lot of young people without adult supervision that don’t have

shepherded access to programs. Unless someone comes and takes them out, they can't do it."

"If parents haven't been exposed, kids aren't. With my group, none had been camping. When I said, 'We're going camping' they said, 'You mean cabins?' 'No, tents.' They say, 'No, we don't camp'. Ok, so I made the first group camping trip mandatory. Once they got exposure, just like 2 hours being out there, they said 'This is great! Can we make this annual?' There is not enough exposure."

"It's very clear that... moms and dads are too tired to do this regularly, locally with kids, and very clear that kids prefer natural unstructured environments, like the refuge, to any playground in town... The kids I take out then go home and teach their parents. Parents are like, 'wow you took all these kids out there!' Well, who else is going to do it?"

"Some parents feel uncomfortable outdoors so they don't want their kids to go there. It's outside of their comfort zone. In many ways it is a very valid concern, not irrational."

"I can tell whose moms takes them walking and whose don't. Some are dying going uphill, saying 'Oh my legs' – some already have run to the top of the hill. The couch potatoes – that's probably what mom does. Go home sit, eat, watch TV, go to bed, get up, turn on the TV..."

Lack of knowledge and awareness: Participants indicated that some residents do not know the refuge exists or where it is located. Other residents who know of the refuge's existence are unaware of the opportunities the refuge provides. In general, some residents don't know where to go to participate in outdoor recreation. Other people can be overwhelmed by the choices in the area, and not know which one is the right one for them. Some residents are unaware of why people participate in outdoor recreation and what benefits recreation provides. Still others are unaware that they can do their normal exercise routines of walking on the refuge.

"It's a lack of knowledge about where to go. Where are these places? Some have never even heard of the refuge."

"Awareness. Lots of people don't know about the refuge."

"Even knowing what to search for online is difficult. It can be overwhelming to figure out what to do; there are so many options in the Bay Area – people say 'I think I'll just stay home and garden'."

"Awareness is a barrier. People walk in their neighborhood, but don't think of the refuge as a place to do that."

"Many people are not aware that Don Edwards or Coyote Hills [Regional Park] exist."

Transportation: Many people in the local community are limited from participating in outdoor recreation or getting to the refuge due to transportation barriers. Examples of

these barriers included traffic, distance to the refuge, and lack of public or personal transportation options. For some local residents, the location of the refuge is considered too far away. Also, the cost of getting to the refuge is a barrier for some groups [see *Costs* below].

"If you don't have transportation, then you can't get out here."

"There are tremendous programs at the refuge, but getting here is a big issue."

Costs: Participants indicated that certain outdoor recreation activities and related programs can be very costly. These costs can prohibit people from being able to participate or maintain participation more than once. Transportation was also mentioned as being very costly, particularly for school groups.

"For our free programs, people do it the first time and then they want to sign up every single time. We have to ask them not to sign up, so other people can try it out. But then they can't do it more than once, because it's not free anymore."

"The biggest thing is that transportation for schools costs so much."

Language: Language was considered a barrier for some local community residents, as many materials publicizing outdoor recreation areas or their programs are offered only in English. Participants indicated that Spanish is spoken by many residents near the refuge, and that other languages such as Vietnamese were also spoken by some residents.

"Language is a big barrier. We have a really big Hispanic population in the area."

"It is hard to find good bilingual qualified staff. We can't promote in languages we don't speak, because someone might call the number you put on that flyer." [Suggesting that just having promotional materials in other languages is insufficient]

Lack of interest: Some participants described a lack of interest in being outdoors or what the outdoors has to offer as a barrier. This barrier may have roots in a lack of exposure to the environment at an early age, or fears for safety and feeling uncomfortable when outdoors. For others, this may be because of a preference for being in urban areas.

"I went on a field trip with a child's class and one of the parents said, 'We're disappointed with Fremont because it doesn't look like New York City.' I had not considered that before. They were looking for the excitement of an urban area."

"Outdoor recreation is not in some people's purview as a way to spend time."

Technology: Participants also indicated that some people are too caught up with technology to spend quality time outdoors. Others may not be familiar with how to use technology (e.g., the Internet) to access information about the refuge, such as its location.

"It's very clear that there is too much technology."

"All these new fancy devices (GPS, etc.), but the older generation doesn't know how to use them. Also, some don't have access or skills to use the internet."

Perceptions of refuge: Some barriers that participants discussed were specific to perceptions about the refuge. For example, participants indicated that some community members associated the refuge with smelling like the dump (one area of the refuge is adjacent to a landfill). Others commented that the trails are too short to really be engaging or that dogs are not allowed in most areas of the refuge. The refuge was also perceived as a place for adults to go to, rather than youth, because adults know what they want to do already. Additionally, temporary trail closures are not always listed on the refuge website, which can be frustrating to those trying to access particular trails. There was also acknowledgement that the refuge could not provide everything desired by the public due to limited staff resources.

"People talk about the smell and say things like 'That's where the dump is'."

"The trail goes only a ¼ mile out to the bay. The other option is a trail that goes south the same distance."

"The refuge is set up for adults who need to take a break. For youth, they need something to do. If they come and there is nothing to do, it will be bad exposure."

"It's more challenging here. The refuge is set up as place where people are expected to come and know how to access it and know what to do. Not everyone is at that level."

"The refuge staff are always fairly limited. There are not very many of them."

4. What can be done to promote greater participation in outdoor recreation and use of the refuge by people in your community?

Twelve themes were identified as ways to engage urban audiences near the refuge and promote greater participation in outdoor recreation. These themes are summarized below.

Host family-friendly events: Participants thought that the refuge could help to address barriers by hosting family-oriented field trips. These field trips could include opportunities for families to provide service such as volunteering, planting trees, or restoring a particular area that the family could then return to over time. Having food available at these types of events is also a great way to bring in families.

"Have more family-oriented service projects would be good. The refuge could coordinate this through schools, but have students bring their parents, grandparents, and siblings. 'Save the Bay' does some things for people to sign up as families. Family-oriented things on weekends could help to bring more people out."

"You have to have food [at events]. Otherwise, families are not going to come because they won't have time to go cook afterwards."

Host culturally-themed events: Participants thought that hosting culturally-themed events relevant to local communities would help to address barriers that exist to outdoor recreation. One example was to have culturally-themed days that highlight unique cultures at relevant times of the year. Other suggestions included having instructors for

activities that were of the same ethnicity as the group being engaged. Many people feel more comfortable around others who they believe are similar to them.

“We have a Latina instructor for archery that was out injured. The girls who did the first lesson with her were at the 2nd lesson asking, ‘Where is she?’ They were looking for her. We have great instructors, but seeing another woman doing these things makes it inviting. In terms of ethnicity; it makes a difference in lowering one’s guard [i.e., relaxing and feeling comfortable being oneself].”

“Host something like a culture day, where people can build something or plant trees around their culture, maybe trees from different places. Create a sense of ownership and show that the refuge is open to everyone.”

Engage youth in activities perceived as fun: Participants indicated that the refuge needs to be prepared for urban youth who expect to be entertained with fun experiences that appeal to their interests. This includes engaging urban youth on many different levels. Some suggestions on ways to make it fun included: having structured programs, letting kids find their own level of engagement, walking a trail, playing in the wetlands, discovering things, biking down a hill, ropes courses, or rock-skipping. Some youth may have never participated in outdoor recreation, and efforts to show them how should include hands-on activities or props that act as motivation. For example, if explaining how to participate in archery or fishing, instructors could have the bow and arrow or fishing pole for the students to touch, look at, and even use after the instruction.

“A huge part is helping youth understand things, and making it fun and engaging. Like getting flounders – you can’t stand on the bank and throw a spear. You have to get in the water.”

“Youth need their first experience to be successful. If you come to the saltmarsh, you need to have a more mature group that knows they’re not going to catch something every time. When we were not successful [catching fish], we used nets and caught crabs. Even if you have to throw them back because they’re too small, it’s okay because kids are learning and engaged.”

“Find out things they like to do. You might have a ropes course where they have to walk across planks, and if they fall in, they’re in the salt marsh. Make it fun. Make it about skill, so they learn. To be excited, they need to be interacting with something.”

Connect with school spirit: Participants also described strategies that focused on engaging diverse youth audiences through competitions and contests between schools. For example, high school students could be asked to either write or paint or draw about an experience they had at the refuge, with prizes to be awarded. Then students would help to spread the word about Don Edwards through their social networks, because they would want to show others what they did. Youth were described as very competitive, and having competitions between high schools could invoke a sense of school pride and

spirit while simultaneously getting students connected to the refuge. For example, a prize could be awarded to whichever school completed the best restoration project.

“Students like to be involved in making public service announcements or posters. Most efforts like this are geared to elementary students, but they could be geared to high school students and have a prize – the students would be really engaged. I cannot believe how fired up that makes them. To run it on local Public Access TV or put in the local Library – that’s a big deal that would really appeal to that age group.”

“It would be cool if local high school students could have an area of the refuge they were restoring.”

Have a Junior Ranger Program: Another suggestion made by participants was a Junior Ranger Program to engage local youth and help create positive images of what it is to be a ranger or person in uniform. Rangers could pass out information or stickers to people they are connected with and new people they meet. This type of program could also have an incentive, such as a weekend camping trip with trusted leaders, that is awarded once the program is completed.

“The refuge could have a Junior Ranger Program that targets low-income families. Then those youth get to know law enforcement and realize they are not so bad after all. If the kids complete the Junior Ranger Program, then they get to go on a camping trip.”

Help fund and provide transportation: Participants indicated that helping to fund transportation to the refuge, particularly for school groups or through grant opportunities, would be a strategy for overcoming transportation-related barriers.

“A lot of parents are working and don’t have the luxury to pick up kids after school and bring them to another location. So, have an afterschool program that provides transportation to increase kids’ ability to participate.”

“Fund transportation for school field trips. If you want diverse communities to come here, at least for the first time, they will get here that way and some will come back. Parents can come as chaperones.”

“Find a way of becoming a funding source for transportation of groups.”

Advertise widely about the refuge: Participants described many different ways to advertise about the refuge to local communities to help increase awareness of the refuge’s existence, as well as what activities can be done there. Fliers for events could be posted in public areas (e.g., libraries, event or recreation centers), while social media could help to spread the word to diverse audiences.

“We have a recreation center [The Silliman Activity and Family Aquatic Center] on Mowry Avenue – or the Newark Library – fliers there would be great.”

“Advertising through the internet, Mercury News [San Jose newspaper], Instagram, Facebook. Facebook is easier to use and better than just seeing it in a newspaper, because you see that your friends are doing it.”

Make a personal connection to local communities: Making a personal connection was described as an important part of increasing awareness of and interest in the refuge. Participants acknowledged that this would be time-intensive for staff, but felt that it was a necessary part of engaging diverse audiences. Volunteers or other partners who were interested in making and maintaining such connections could help implement this strategy.

“Communities need someone to reach out and say, ‘What would it take to get you out to the refuge?’ This is definitely a way to do it, but it needs to be customized to different audiences and the refuge needs to make a personal connection.”

“How many refuge people go to [local city governments or residents] and ask, ‘What can the refuge do for you?’ It’s not happening. How many times do we go out and meet pastors and churches in the area? Why do we only have 3-4 schools total that we’re involved with?”

Create new and effective partnerships: Participants indicated there were a variety of ways for the refuge to partner with other agencies, organizations, businesses, and non-profits. Suggestions included joining or starting a *Healthy Parks, Healthy People* type-program for refuges, and establishing a presence at known events, such as *Day on the Bay*. Teaming up with other organizations could help the refuge to have a bigger presence outside of their known networks. Schools were also discussed as being a vital partner with which to engage. Another suggestion was to make partnerships official so that organizations, particularly non-profits, could list those partnerships with the refuge on grants or programs they offer.

“Engage in partnerships, such as the Mid-peninsula Environmental Educators’ Alliance (MEAA) and National Association for Interpretation (NAI). Go to their events, meet people – find common problems and ways you could work together. Meetings take time away, but are invaluable – you then have a leaping off point and partners to share resources.”

“Coordinate with other local land management entities, such as [city governments]. You could work together and sponsor events.”

“Healthy Parks, Healthy People is a partnership with Kaiser Permanente and others. Doctors are saying ‘Sign up for this program’ and meeting clients for a hike on the weekend. That’s huge. This kind of thing is only possible with partnerships.”

“Organizations are dying to partner with agencies. Look at websites and see who these groups are working with. Try to work in strategic partnerships – We need resources and facilities. We’re about getting kids out to discover these things.”

Create resources that describe self-directed activities: Another idea participants thought would help to overcome barriers that exist was for the refuge to develop resources that describe activities on the refuge that could be used by non-profit organizations or others working to get diverse audiences outdoors. These types of resources could consist of a list of seasonal activities, resources for borrowing equipment, and even trail access points that others could use to plan trips out to the refuge. This would help organizations ensure they know the rules, regulations, and what to expect during different times of the year, while lessening the burden on the refuge to provide staff to run such programs. While some organization plan these types of field trips months in advance, many smaller organizations work on different time-scales and look for activities for their groups on short notice. Resources that describe self-directed activities available on the refuge (and in other area locations) would be a huge benefit to these groups.

“Organizations that want to bring people here could develop a program based on a template provided by the refuge.”

“If you want to promote getting families out here, there may be organizations like churches that are already family-oriented. What they need is a template that says, ‘Hey, here’s what you could do for ½ a day at the refuge.’”

“Design programs to be grab-and-go – with seasonal opportunities. We’re not designed to set up field trips months in advance.”

Create a “human treasures” program: Participants indicated that having a database or list of individuals who were associated with the refuge and could be called-upon or referred to when an outside organization is bringing a group to the refuge would be useful. These “human treasures” may harbor unique information about the refuge or local flora and fauna, be clearly engaged and invested in particular aspects of the refuge, or have the patience, willingness, and time to provide extra details and guidance to different types of audiences. This would play up the skill-sets of interested volunteers who are willing to do this specific type of work and make their volunteer experiences more meaningful and rewarding.

“What’s unique about my organization is that we’re looking for people with a background and expertise that can do these things on-the-fly. People want to do it – they want to use their knowledge. Now, we call up [CA] Fish and Game people. We’d like to have accessible people at Don Edwards.”

“Take the time to do that extra hand-holding and build confidence in people. You could find a volunteer to be a liaison that can relate to specific audiences; be patient, and communicate with them on the level where they’re at.”

Conclusion: Addressing Barriers at Don Edwards San Francisco Bay NWR

During the workshop, participants were asked to identify the three most important barriers and the three most important strategies that the USFWS could implement to reduce those barriers when considering the best ways to engage local communities in outdoor recreation.

Collectively, the three largest barriers were identified as:

- 1) transportation,
- 2) family dynamics and lack of exposure to outdoors by families, and
- 3) cultural barriers.

The three strategies for engagement that were most heavily emphasized were:

- 1) help fund and provide transportation,
- 2) create inviting situations for families and people of diverse cultures, and
- 3) be prepared for urban youth.

Participants suggested several strategies that refuge management could implement to engage urban audiences and address barriers to participation in outdoor recreation for local community members. **First, participants indicated that the refuge should help to fund and/or provide transportation to local community members, particularly school groups.**

Transportation is a barrier for many families, with traffic and commute times making a trip to the refuge seem unrealistic, particularly for working families who may be struggling to make ends meet. Specifically, participants thought that it would be helpful for the refuge to provide grants or small-pots of money to local schools that were interested in taking field trips to get students out on the refuge, considering many schools were cutting back on funding these types of trips. Because this experience may be the only type of exposure that students have to the refuge, participants felt that it was important to support such trips in some capacity. Other suggestions included working with or helping to fund organizations that provide transportation to families wanting to participate in outdoor recreation (or wanting their kids to participate) who are also in need of this type of assistance due to time or budget constraints.

Second, participants thought the refuge should host events that are family-friendly and centered on culture. These events would help to draw diverse community members to the refuge, because such events would highlight awareness of and interest in the unique cultures of the people living near the refuge. Participants indicated that this type of event could be held around culturally-relevant holidays, or could be held as one event that is multi-cultural. A multi-cultural event would help to introduce people of different cultures to different ways in which people have participated in outdoor recreation in the past, as well as introduce community members to the recreation interests of these groups today. Family is also valued by people of many cultures, so having events that bring family together would help to create a welcome space in which people could connect with the outdoors and each other. Events that highlighted the artwork of local community members could be another draw that brings people in. For example, culturally-relevant art displayed at the Visitor Center would bring residents to this location. This artwork could also include the results of a local student competition in response to questions such as “What do YOU do at the refuge?” or “What outdoor recreation activities

do you participate in?” Events that had food available (particularly for free) would make it much easier for families to attend. Efforts to have such inviting events would be greatly welcomed by local community members, and may best be accomplished through partnerships with organizations or community leaders who could help to advertise through their networks.

Finally, participants discussed the importance of being prepared for urban youth at Don Edwards San Francisco Bay NWR. There were many ways in which participants felt that youth could be engaged in learning more about the refuge or participating in traditional activities on the refuge; however, the difference with this particular strategy is that urban youth likely have their own expectations regarding what they want from a refuge experience. Specifically, urban youth want to have fun, but they are accustomed to having fun in urban environments. This type of fun may include group activities with friends or interactive activities that are hands-on or centered around games. Some urban youth may have little to no experiences with being outdoors and should be led into the experience with sensitivity and understanding. Knowing what these students expect and know about the outdoors before going to a place is an important first step in ensuring the refuge is prepared for urban youth.

Overall, participants indicated that there were many ways to address the barriers that exist for local community residents and were glad for the opportunity to engage with the refuge in overcoming such barriers.