SoCal Urban Wildlife Refuge Project: 2017-2019 Project Impact Report

Submission Cover Sheet

Title	SoCal Urban Wildlife Refuge Project: 2017-2019 Project Impact Report
Abstract	In 2014, urban wildlife refuge managers throughout Southern California responded to a challenge issued by United States Fish and Wildlife Service's (USFWS) leadership to connect the urban dwelling population in the region with wildlife and urban refuges. Five years later, the SoCal Urban Wildlife Refuge Project's reach and impact are significant. Program evaluation results established promising evidence of Project effectsincluding increases in nature-related talk, knowledge about local animals and their conservation, and intents to engage in conservation-specific behaviors. This summary report highlights the collective impact of the Project's work between 2017 and 2019 and accomplished through community partnerships across the region. These accomplishments are made possible through the work of 13 funded partners and their USFWS mission-aligned programs.
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SoCal Urban Wildlife Refuge Project 2017-2019 Project Impact Report

Realizing the U.S. Fish & Wildlife Service's Urban Wildlife Conservation Program Mission Through Community Engagement and Education



Key Findings

Aggregated pre-program survey responses were compared to post-survey responses, following engagement in a SoCal Urban Wildlife Refuge Project program. Results demonstrate the following, differences:

- amounts of nature-related talk with family and friends
- levels of knowledge about local animals and how to help them.
- Ievels of ascribed import for nature refuges
- Ievels of intent to engage in conservation behaviors
- percentage of participants indicating an interest in a science-related career in greater following their programs

In 2014, urban wildlife refuge managers throughout Southern California responded to a challenge issued by United States Fish and Wildlife Service's (USFWS) leadership to connect the urban dwelling population in the region with wildlife and urban refuges.

Today, and through a competitively awarded \$1 million in annual funding, the team is supporting a suite of partners who are using multiple strategies to engage local communities and serving a demographic reflecting the nation's changing racial and ethnic mix.

Five years later, the SoCal Urban Wildlife Refuge Project's (the Project) reach and impact are significant. Initial program evaluation results have established promising evidence of Project effects—including increases in nature-related talk, knowledge about local animals and their conservation, and intents to engage in conservation-specific behaviors.

Working together, Project leaders and program partners are successfully:

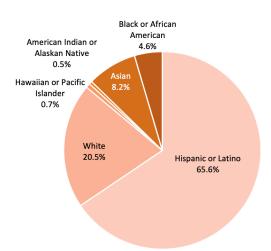
- Connecting diverse urban youth and adults to nature reversing the current trend of a U.S. population becoming increasingly isolated from nature;
- Creating ways for individuals to interact with the natural environment by observing wildlife, restoring habitats, learning about nature—to help them gain an appreciation and understanding of what nature offers, and why it should be protected;
- Providing opportunities for historically underrepresented young people to explore and develop an interest in Science, Technology, Engineering and Mathematics (STEM) careers;
- Empowering teachers by increasing their understanding of effective and creative strategies to instill the wonder of science in their students, to develop the next generation of scientists needed in our changing world; and
- Inspiring people to become tomorrow's stewards of the environment and be aware of their impact on the world around them.

This summary report highlights the collective impact of the Project's work between 2017 and 2019. These accomplishments are made possible through the work of 13 funded partners and their USFWS mission-aligned programs.

Who We Reach

The Project serves the second largest metropolitan area in the United States with over 17 million people, and with a demographic that reflects the nation's projected racial and ethnic mix in 2060.

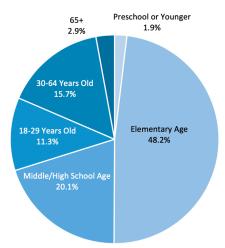
Launched in 2014, the Project has engaged almost 90,000 people in conservation programs, refuge visits, and educational and skill-building activities. Through its program partners, the Project targets communities surrounding refuges, from San Diego to Los Angeles. Demographic figures demonstrate the breadth of the Project's reach—and the diversity of the participants.



Reported Participant Ethnicities

Reported Participant Socio-Economic Status (SES)

Reported Participant Ages



SoCal Urban Wildlife Refuge Project: By the Numbers

45,208	Number of Participants in this Reporting
172,371	Number of Contact Hours in this Reporting Period
89,452	Number of People Reached by Project Since 2014

Finding 1: Participants indicate that they are engaging in greater amounts of nature-related talk following their programs.

SoCal Urban Wildlife Refuge Project participants indicated the frequency with which they "talk about what you know about nature" with their friends and family using a five-point frequency scale.

A comparison of weighted responses received pre- and post-program indicates:

An additional 19% of participants indicating they were engaging in nature-related talk with family at least once a week and 14% fewer indicating never.

An additional 23% of participants indicating they were engaging in nature-related talk with friends at least once a week and 15% fewer indicating never.

Data Analysis:

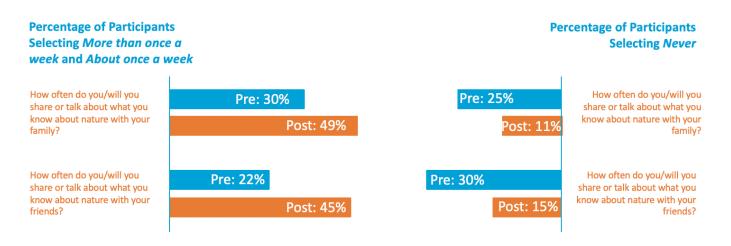
Participants were asked to describe their nature talk frequency by selecting one of the following descriptors: *More than once a week, About once a week, A few times a month, Less than once a month, or Never.*

Increases for those Selecting Highest Frequencies

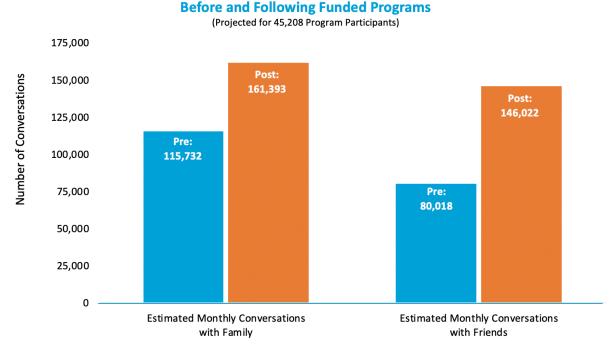
The percentage of participants selecting *More than once a week* and *About once a week* increased from pre-to-post.

Decreases for those selecting Never

The percentage of participants selecting *Never* decreased from pre-to-post.



Number of Nature-focused Monthly Conversations



Using weighted sample response percentages for each of the five conversation frequency categories, we projected a conservative estimate to represent the number of nature-focused conservations occurring before and following program engagement. On average, for the 45,208 Project participants during the 2017-2019 reporting period, there would be a projected additional 66,004 monthly conversations with friends and a projected additional 46,661 conversations with family.



Finding 2: Participants indicate higher levels of knowledge about local animals and how to help them following their programs.



Participants self-assessed and indicated their levels of knowledge about local animals and avenues for supporting the conservation of these animals.

A comparison of weighted responses received pre- and postprogram indicates:

an additional 19% of participants rated their knowledge level about local animals in the two highest categories, while 6% fewer indicated no knowledge. an additional 20% of participants rated their knowledge level about how to help local animals in the two highest categories, while 8% fewer indicated no knowledge.

Data Analysis:

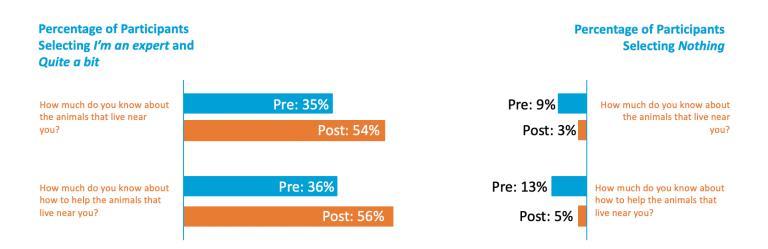
Participants were asked to describe their local animal knowledge by selecting one of the following descriptors: I'm and expert, Quite a bit, Some, Very Little, and Nothing.

Increases for those Selecting Highest Levels

The percentage of participants selecting *I'm and expert* and *Quite a bit* increased from pre-to-post.

Decreases for those selecting Nothing

The percentage of participants selecting *Nothing* decreased from pre-to-post.





Finding 3: Participants indicate higher levels of importance for their refuge, following their programs.

Participants were asked to assign a level of importance to their community's wildlife refuge using a five-point scale.

A comparison of weighted responses received pre- and post-program indicates an additional 12% of participants indicated an increased level of importance for their community's refuge following their programs.

Data Analysis:

Participants indicated their beliefs about the importance of the community refuge by selecting one of the following levels: *Tremendously, Quite a Bit, Some, Very Little,* and *Not at All.*

Increases in Refuge Importance, in Spite of High Pretest Levels

The percentage of participants selecting *Tremendously* and *Quite a bit* increased from pre-to-post.



Finding 4: A greater number of participants indicate an intent to engage in conservation behaviors following their programs.

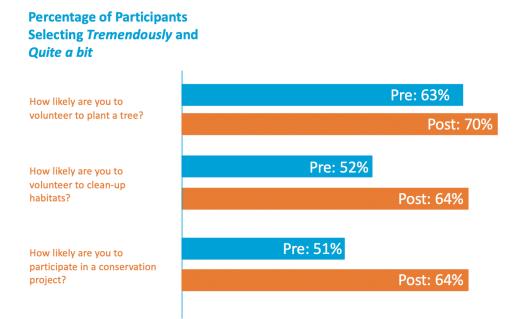
Participants were asked to indicate their likelihood of participating in three different conservation efforts.

A comparison of weighted responses received pre- and post-program indicates an additional: 7% of participants would volunteer to plant a tree an additional 12% would volunteer to clean-up a habitat, and; an additional 13% would participate in a conservation project.

Data Analysis:

Participants indicated their projected participation in future conservation efforts by selecting one of the following descriptors: *Tremendously, Quite a Bit, Some, Very Little,* and *Not at All.*

Increases for those Selecting Highest Likelihood of Future Action, in Spite of High Pretest Levels The percentage of participants selecting *Tremendously* and *Quite a bit* increased from pre-to-post.



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Finding 5: A greater number of participants indicate interest in a science-related career following their programs.

A comparison of weighted responses received pre- and post-program found that, when asked "How interested are you in a career that involves some aspect of science?," an additional 8% of participants indicated the highest level of interest following their programs.

This rate, projected across the 26,854 elementary, middle and high school aged participants, equates to an estimated **2,148** additional individuals expressing an interest in a science-related career.



Data Analysis:

Participants indicated their interest levels in a science-related career by selecting one of the following descriptors: *Tremendously, Quite a Bit, Some, Very Little,* and *Not at All.*

Increases for those Selecting Highest Likelihood of Science-related Career

The percentage of participants selecting *Tremendously* and *Quite a bit* increased from pre-to-post.

Percentage of Participants Selecting *Tremendously* and *Quite a bit*



SoCal Urban Wildlife Refuge Project Partners

To maximize the impact of programs focused on connecting urban communities with the great outdoors, the SoCal Urban Wildlife Refuge Project includes the San Diego National Wildlife Refuge Complex at the south end of the Southern California region, the greater Los Angeles area via the Los Angeles Urban Wildlife Refuge Partnership, and Ventura County and portions of Santa Barbara County through the participation of the Hopper Mountain National Wildlife Refuge Complex.

The SoCal Urban Wildlife Refuge Project funded the work of the following nature-based community organizations and programs during the reported program period.



Program Evaluation Methodology

During the 2017-2019 school years, we fielded the Cross-Project Survey. This instrument employed selected response questions to cover the following constructs:

Cross-program content-related knowledge Affective domains, for example beliefs and values Actions, for example talking to others about nature and conservation behaviors

Eleven Project partners participated in the survey pilot, with the total number of completed surveys at 9,279. It must be noted that respondent identifiers were not permitted. Therefore, depicted comparisons have been made using the complete pre- and post-survey datasets received from each Project partner. To support equivalency of pre- and post-survey groups to the extent possible, the analysis included only surveys where the number of post-surveys was at least 50% relative to pre-surveys. In addition, where school names were provided on survey responses, only school groups with both pre- and post-survey responses were analyzed.

To address varying sample sizes across programs, weights were applied to all individual responses by program. The weighted, analyzed sample has been adjusted to equally represent the six programs that conducted the pilot survey—regardless of the number of survey responses received.

This analysis approach provides a global view of the Project's outcomes and collective impact, assuming an equal number of individuals were assigned to each of the six programs that collected data for the pilot study.

To conservatively predict the number of conversations reported in Finding 1, the following numbers of monthly conversations were assigned to each response category: Never = 0 conservations, Less Than Once a Month = 0 conservations, A Few Times a Month = 3 conservations, About Once a Week = 4 conservations, More Than Once a Week = 8 conservations. Weighted response percentages for each category, from pre- and post-program surveys, were then applied to the total number of participants (45,208) to estimate total monthly conversation totals.

Demographic figures are estimates which are based on figures available to Project partners. For example, in some cases available percentages represented schoolwide demographics, while program participants were limited to a single grade or grade band. In these and similar cases, percentages were applied proportionately to the participating population to compute estimates for key demographics reported here. Having completed its fifth year, the SoCal Urban Wildlife Refuge Project has increased the rigor of its program implementation and realized its first reporting of collective impact. During this reporting period the program directly involved over 17,000 Southern California residents through programs highlighting conservation and providing opportunities to connect with nature. These opportunities, and the resulting impact reported here, are made possible through the high-performing partnerships that have been established throughout Southern California.

The total of these efforts has made an indelible mark on the Southern California region. Among the outcomes: students are learning about the California condor's environment and conservation efforts for the majestic bird; teachers are bolstering their knowledge about conservation as they teach our next generation of conservation stewards; at-risk youth are engaged in conservation work around the Los Angeles River and making a difference for their community and their futures.

The SoCal Urban Wildlife Refuge Project continues today and into the future, and includes an ongoing commitment to evaluate and improve the work being done, and to demonstrate the impact achieved through this important, future-oriented work.



The SoCal Urban Wildlife Refuge Project staff can be reached at: San Diego National Wildlife Refuge Complex 1080 Gunpowder Point Drive Chula Vista, CA 91910 619-476-9150 ext. 105