

# A Survey of U.S. Fish and Wildlife Service Employees Regarding Constraints to Connecting Children with Nature—Summary Report to Respondents

By Joan M. Ratz and Rudy M. Schuster



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# A Survey of U.S. Fish and Wildlife Service Employees Regarding Constraints to Connecting Children with Nature—Summary Report to Respondents

By Joan M. Ratz and Rudy M. Schuster

### **Executive Summary**

This report provides a summary of responses to the questions included on a survey of U.S. Fish and Wildlife Service (FWS) employees regarding constraints to connecting children with nature. The survey was sponsored by the Division of Education Outreach (DEO) at the National Conservation Training Center (NCTC) and conducted by U.S. Geological Survey (USGS) personnel in the Policy Analysis and Science Assistance (PASA) branch. The data collection process started on February 25, 2010 and ended on March 9, 2010. The dataset includes the responses from 320 individuals. The adjusted response rate for the survey was 55 percent. In this report, we provide the summary results for the survey questions in the order in which the questions were asked. The text of comments provided by respondents to open-ended questions is provided.

Our preliminary conclusions are based only on frequencies and averages of responses to the survey questions. In-depth analyses will be reported in the completion report for this project. We asked respondents to rate nine statements on the basis of their relevance to the component of the FWS mission that addresses connecting people with nature. The statements described diverse possible outcomes of connecting people with nature. The pattern of responses indicated that all the statements were viewed as relevant. We asked about the more general issue of connecting people with nature when asking about the mission of the FWS because that is consistent with the language used by the FWS. The remainder of the questions on the survey focused on connecting a specific subpopulation—children—with nature.

Respondents believed that their own and the FWS' past efforts at connecting children with nature have been moderately successful and that future efforts will be successful. Respondents seem to be anticipating increased success in future efforts to connect children with nature.

We provided 10 issues that may present problems in connecting children with nature. The ten issues were:

- Children's schedules (for example, school schedules, homework, other activities, lack of free time)
- Parents' fears (for example, of strangers or of wildlife)
- Parents' attitudes (non-fear related) and lack of information about the outdoors
- Practical issues (for example, parents' work schedules, distance to natural areas from children's residences, and lack of transportation options)
- Children's lack of interest and lack of comfort in the outdoors
- Competition from technology and technology-based activities
- Lack of information about the most effective techniques to connect children with nature
- State education standards and lack of an environmental education curriculum

- Funding issues
- Staffing issues

When asked to select the one that creates the biggest problem, the most frequently selected option was staffing issues. We asked respondents to rate the 10 issues on how big a problem each created in efforts to connect children with nature. Based on the frequency of responses and the average responses, children's scheduling issues, parents' fears, children's lack of interest and comfort in the outdoors, and lack of information about effective techniques were viewed by survey respondents as only small problems. Parents' attitudes, practical issues, state educational standards, and funding were viewed as problems. Competition from technology and staffing issues were most frequently identified as being big problems; however, the average rating for these issues put them at the next lower level on the scale: that of "problem" as opposed to "big problem".

When respondents indicated that a particular issue was a problem, they were asked a series of additional questions about that problem to measure perceived change and controllability and to determine whether the respondent believed the issue to be internal (originating within self) or external (originating outside of self) in origin. Respondents tended to believe that nine of the ten issues are likely to get worse. Only lack of information about the most effective techniques to connect children with nature was viewed as likely to improve.

We assessed respondents' perceptions of controllability by asking whether they (respondents) could directly or indirectly affect the issues. Based on the average responses, respondents perceived that they were slightly likely to be able to directly or indirectly affect children's schedules, competition from technology, state educational standards, funding, and staffing. Respondents perceived that they were somewhat likely to be able to directly or indirectly affect parents' fears, parents' attitudes, children's lack of interest and comfort in the outdoors, and lack of information about effective techniques. Finally, respondents indicated they were slightly likely to be able to affect practical issues directly and somewhat likely to be able to affect practical issues indirectly.

The results regarding perceived internality/externality of issues generally indicate that the 10 issues are perceived as being predominantly external. On the basis of the most frequently selected responses, nine of the ten issues were perceived as "100% because of others." The exception was the issue lack of information about effective techniques for connecting children with nature. The most frequent response for this issue was "50% me, 50% others." However, the average response to the question of internality for each issue indicates that "100% because of others" was the average only for the issues of state educational standards and staffing issues. The eight other issues had an average response at the "25% me, 75% others" point on the response scale.

We asked respondents seven questions regarding their attitudes about the importance of connecting children with nature and the priority of this issue to the FWS. Respondents strongly agreed that connecting children with nature is important to the mission and the future of the FWS and they generally agreed that the goal of connecting children with nature should be given higher priority within the FWS. Respondents strongly disagreed that connecting children with nature should not be a concern of the FWS. They generally disagreed that the FWS dedicates adequate resources (staffing, time, or materials) to efforts to connect children with nature and generally disagreed that connecting children with a statement that the FWS recognizes and rewards efforts to connect children with nature, the most frequent response was "neither agree nor disagree" and there were responses at the agree and disagree sides of the scale.

The demographic questions on the survey indicated that the majority of respondents are employed as permanent federal employees in the FWS, 59 percent of respondents were female, and that all regions participated in the survey.

### **Purpose of this Report**

This is a report to survey respondents. The intent of this report is to provide those who responded to the survey with feedback regarding the overall responses to the survey questions. This report includes brief descriptions of the purpose of the survey and of the procedure followed to conduct the survey. The survey results that are described in this report include the response rate to the survey and the descriptive results for each survey question. The survey questions are listed in the order in which they appeared on the survey, and the frequencies with which the response options were chosen by survey respondents are provided. When appropriate based on question type, the average of the responses is provided.

It would be inappropriate to draw conclusions or make recommendations based upon the level of analyses included in this report. Detailed results and conclusions will be included in the completion report for this study.

### **Purpose of the Survey**

The Children and Nature movement is focused on strengthening the connection between children and the natural environment. The effects of a weak relationship between children and nature are discussed in the popular, nontechnical book <u>Last Child in the Woods</u> by Richard Louv (2005). Barriers in getting children to connect with nature have been identified; however, the progress made toward addressing those barriers is unknown. The common perception seems to be that these potential barriers are significant impediments to connecting children with nature. The questions are: what keeps the conservation community within the U.S. Fish and Wildlife Service (FWS) from experiencing greater success with connecting children with nature, and how significant are these issues?

The FWS names "connecting people with nature" as one of its priorities in the online Service Employee Pocket Guide (U.S. Fish and Wildlife Service, 2010). In September 2006, the FWS hosted "A National Dialogue on Children and Nature" conference. In 2007, the National Conservation Training Center (NCTC), specifically the Division of Education Outreach (DEO), took the initiative to identify issues that currently impede greater progress in addressing the barriers to connecting children with nature. The DEO formed a working relationship with the Policy Analysis and Science Assistance (PASA) branch of the U.S. Geological Survey (USGS) to conduct a study on these issues. The initial intention was to address issues faced by all conservation and environmental education professionals including those outside the FWS. For project expediency, the final decision was to limit the survey to FWS employees and to restrict the questions to those concerning issues affecting FWS employees' efforts towards connecting children with nature. Although the FWS priority addresses connecting people with nature, we limited this study to issues regarding connecting children with nature because issues arising from connecting those in other age groups are likely to differ. To address all of the age groups in one survey would have resulted in a lengthy survey. The survey and its results are available to the public so that other agencies and organizations can conduct similar surveys with their own constituencies if they so desire.

### **Conducting the Survey**

A letter written by Janet Carrier Ady, the Chief of the DEO, to introduce the survey was sent to the individuals in the survey sample. Even though the letter was from the DEO Chief, it was sent by PASA personnel to maintain the privacy and protect the identity of those in the survey sample. No NCTC personnel know the names of those who responded to the survey. A few days after the introductory letter was sent, we sent a message that included a link to the survey to the FWS employees in the survey sample. The survey was administered online using KeySurvey© software. About one week after the initial survey distribution, we sent a reminder to those who had not yet completed the survey. On the last day survey data were being collected, a final reminder was sent to those who had not submitted a complete survey. The data collection period lasted from February 25, 2010 to March 9, 2010.

We determined a sample size for each region to maximize the likelihood of a representative sample. To identify specific employees to include in the sample, we first included all those who subscribe to the VOICES electronic distribution list. VOICES is a list targeted to those who are interested in environmental education; it is hosted by DEO. We expected that the list subscribers were individuals who would be knowledgeable and active in outreach activities targeted towards children and particularly attuned to issues regarding the FWS mission to connect people with the environment. To complete the survey sample, we had to add more FWS employees in each region. We selected employees from a list of FWS employees who had taken training through NCTC during the time period from October 1, 2007 to June 24, 2009. The sample for this survey included 604 FWS employees.

### Results

#### **Response Rate**

Of the 604 surveys initially sent, 19 were undeliverable because the individuals were no longer with the FWS. Two individuals were out of the office for the duration of the data collection process. This left us with a potential sample size of 583. Three hundred fifteen individuals submitted a completed survey in the survey software. Partial responses were received from 13 individuals who started but did not complete the survey online. Five of those thirteen answered most of the questions before exiting the survey. We included responses from those five respondents in our data set. The eight other partial responses were from respondents who only answered the first few questions. We did not include those responses in the data. With the partial responses included, the survey results are based on the responses of a total of 320 respondents. Our adjusted response rate was 55 percent. Every region had a regional response rate of at least 47 percent.

#### **Question Summaries**

The descriptive results for the survey questions are provided here in the order in which the questions were asked on the survey. Because this was an adaptive survey, not all questions were asked of all respondents. Because some respondents skipped questions or did not complete the survey, we provide a response *n* indicating the number of respondents who answered the question. We provide the percent of respondents that selected each response option. Percents are rounded to whole numbers and therefore may not always add to 100. There are a few instances in which so few individuals selected a particular response that the percent rounded down to zero. In those few situations, we use "<.05%" to indicate that the response was selected by at least one respondent. If a response option is left blank, no

respondents selected that option. The responses selected most frequently are bolded. Averages are provided when appropriate and are also rounded to whole numbers.

#### **Introductory Questions**

The questions in the introductory section were used to introduce the topic of the survey; this was done to focus the attention of the respondents on relevant information. The introductory questions were also used as a basis for the adaptability of the survey. The set of questions each individual was asked was based on their answers to questions in the introductory section.

# As part of your job, do you perform any conservation education, environmental education, or community outreach activities targeted toward children? (n = 320)

Yes 68% No 33% If respondents answered "Yes" to this question, they received this follow-up question:

In an average week, approximately what percentage of your time is spent doing these conservation education, environmental education, or community outreach activities? Please consider all aspects of accomplishing this task (including preparation time, report writing, travel, etc.) (n = 216)

1–25%	26–50%	51–75%	76–100%
69%	8%	13%	10%

#### Which of the following statements best describes your current situation? (n = 320)

(a) Education and outreach activities are in my position description, and I perform education and outreach activities.	45%
(b) Education and outreach activities are in my position description, but I do not perform education and outreach activities.	1%
(c) Education and outreach activities are not in my position description, but I do perform education and outreach activities.	31%
(d) Education and outreach activities are not in my position description, and I do not perform education and outreach activities.	19%
(e) I do not remember what tasks are in my current position description document, but I do perform education and outreach activities.	3%
(f) I do not remember what tasks are in my current position description document, and I do not perform education and outreach activities.	<.05%

If respondents selected option (b) or (c) for this question, they received a follow-up question. Those who indicated that education and outreach activities were part of their position but that they didn't perform those activities (option b) were asked the following question:

#### What is the primary reason you do not perform education and outreach activities? (n = 4)

Time	
Limited contact in my position with the general public	50%
Lack of funding	
Lack of supervisor support	
Education and outreach activities do not have any effect	
I do not enjoy conducting educational or outreach activities	
Other: [open-ended response]	50%

All comments provided in the open-ended response to this question indicated that the respondent supervised individuals who performed education and outreach activities.

Those who indicated that education and outreach activities were not part of their position but that they did perform those activities (option c) were asked the following question:

What is the primary reason you perform education and outreach activities even though they are not required by your job? (n = 99)

No one else is available to do these activities	10%
I enjoy these activities	11%
I think these activities are important	56%
I have been told to perform these activities by my supervisor	2%
Other: [open-ended response]	21%

We grouped the comments provided in the open-ended response into categories. The categories were based on the topic of the comment. The seven comment categories included the following topics: multiple reasons motivate the performance of education and outreach activities, the individual was asked to perform the activity by another (non-supervisor), staffing shortages are the reason they perform outreach activities, they have the necessary skill set to perform these activities, they provide support to others who are doing outreach activities, respondents' descriptions of the specific education and outreach activities in which they participate, and a miscellaneous category for comments not obviously fitting into any of the other categories. The comments are provided in their entirety.

Multiple reasons:
I enjoy the activities AND KNOW they are important
Both enjoy and think they are important
My supervisor encourages it and I enjoy it
Multiple reasons.
I enjoy these activities; these activities are important, have been told my supervisor to perform these activities
Asked by other:
I've been asked to perform these activities
I was asked to help with a project by a refuge biologist
Staffing shortage:
No position at station to perform these duties
I do very little and with young children only when no one else is available
Sometimes short on staff
Necessary skill set:
I had previously worked in environmental education and have some expertise
No one else available with particular skill set
Support role:
I support the work of others
Providing guidance and assistance to those performing ed/out activities
Library maintains literature to support ed and outreach
Specific activities:
Only activities consist of presenting during classes; providing technical assistance
Part of work with partners that is in my performance standard.
I interact with the public during the CCP planning process and at public meetings.
I volunteer with a hatchery 'Open House' designed to acquaint children and fishing.
Miscellaneous:
No net loss of my time for other duties
It's what I do outside of work. I am a scout leader, and a mother.

As part of your job, do you make decisions about the following aspects of conservation or environmental education or outreach programming? (*n* varies by option)

	Yes	No
Allocation of funding $(n = 313)$	37%	63%
Allocation of staff time ( $n = 314$ )	44%	56%
Content of programming ( $n = 318$ )	64%	37%
Implementation of programming ( $n = 318$ )	64%	36%
Other: I make decisions about [open-ended response] (n = 47)		

Forty-seven respondents provided comments in the open-ended response option when asked about what decisions they make about conservation or environmental education or outreach programming. Their responses have been sorted into topical categories for easier reading. The comments are provided in their entirety. The alterations made to the comments include correction of spelling and grammar. In some comments, respondents addressed several different topics—in these cases, we split the comments into segments so that each addressed only one topic. The presence of ellipses (...) indicates that the comment was separated from another part of a single response.

The comments addressed allocation of resources (time and funding), grant administration and seeking, how lack of funding impedes outreach, personnel support, supporting others, program planning and administration, partnerships, presentations, and other external activities. Comments that did not clearly fit into other categories were grouped together in a miscellaneous category.

Allocation of resources:

...How much money, if any, can be spent on supplies and materials needed for the individual programs.

Deciding whether my employees participate in volunteer activities targeted toward children in nature.

How often I participate in environmental education and outreach programming

When to give impromptu lab tours or describe my job to visitors when I'm in the field.

...assigning staff to planning projects that result in public outreach efforts.

Priority Setting: Although I get many requests, it is not always evident whether EE or Outreach should take priority over other duties. Sometimes I make these decisions, sometimes not.

Which groups requesting programs I have time and knowledge to help...

Helping provide conservation and outdoor activity information to parents of children.

Grant administration and seeking:

Allowability of grant-related activities.

Grants

Whether proposed conservation and environmental education or outreach programming is approvable under a national grant program.

...grants to seek...

I do not make decisions about base funding, but I have input into our base budget needs. I can get extra \$ for EE through Challenge Cost Share and other grants, and I'm encouraged to do this by my supervisor.

Lack of funding impedes outreach:

There is no funding and the only staff time allocated besides my own is through volunteers....

I am a supervisor in a Field Office. We have no budget to develop an outreach program. Wish we did, but do not even have adequate funds to accomplish our regulatory obligations.

...(FWS needs more funding in this area - funds that go directly to O&E and CPWN activities; not just discretionary Project Leader discretion with year end money and all line supervisors must support the cause and believe it is equally or more important to protecting species, research, monitoring, restoration, etc.!). How can we accomplish our mission without the support of our publics? People will ultimately decide and research indicates children are where we need to direct our priorities. But this has always been the back burner or lower priority for FWS offices in the field.

#### **Personnel support:**

Attending training that would involve outreach/ environmental ed

Training

Distance learning options

Staff recruitment/hiring Hiring and training of staff Training needs Professional development for staff ... **Supporting others:** Teaching staff how to create content and implementing their programming. ... I guide and review graduate students in preparation of conservation plans for rare nonlisted plants I supervise regional staff that provide guidance and assistance to field station ed/out staff **Program planning and administration: Regional Programming** Regional policy and guidance Initiation of new programming - I decide what is needed and I drum up new outreach 'business' on my own and through partnerships and collaborative planning with other environmental educators throughout the state. On and off site program coordination Setting themes and general direction the PROGRAM takes. Program focus Coordinating volunteers for environmental education programs. We have not started an actual EE program at the refuge, but I coordinate outdoor education programs provided by one of my volunteers. Monitoring and evaluation, a.k.a. adaptive management in terms of implementation. Also, I make decisions about strategy and objectives. What to include in our O&E program; delivery methods, target audiences, partners, materials, evaluation, cost,... 1. What items an individual can receive for the Suitcase for Survival wildlife kit located in my office. 2. How long that individual can take the kit. **Partnerships:** ... building partnerships in EE. Methodology, education partnerships Decisions regarding who to partner with and how. ....Most of the time, I work with other USFWS employees outside of my own Program;... **Presentations:** Exhibit design and fabrication Put together and give presentations to students. Presenting material ...Attend public hearings and make presentations. ...If I am asked to present a talk, I prepare it and do it. I am occasionally asked to provide display tables, career orientation or environmental presentations. I try to plan general overall exhibits like Earth Day and school activities locally. Since I'm in Administration, I rely on Biologists to give me the information that I disseminate for them. Internet content... ...although I do personally create the content of my own Fisheries booth/display and I do personally decide how to interact with the particular type of audience(s) (kids, Scouts, students, adults, fishermen, etc.) **External activities:** Participation as a volunteer to staff booths or science fairs, etc.... I help with judging a poster contest for Keep ND Clean. As a former Girl Scout leader I do participate in Earth Day activities and other outreach programs with the Scouts. Which high school science fair student projects to give a recognition award to. Miscellaneous: Environmental education and outreach can be two very different things. If you're looking for information on educating children or getting people in nature, you need to be clear. The outreach included in my PD and daily activities targets news media and elected officials and is rarely targeted to environmental education or getting people in nature. I act independently of my office in much of my outreach activities.... Currently, I am a staff of one - so no one to delegate or help with these programs.

Do you supervise one or more employees or volunteers who perform conservation or environmental education or outreach programming? (n = 320)

Yes, FWS employees only	23%
Yes, volunteers only	13%
Yes, FWS employees and volunteers	12%
No	53%

Outside of your job with the FWS, do you volunteer in conservation or environmental education related activities? (n = 320)

Yes 60% No 40%

**Questions Regarding Definition of Connection** 

All survey respondents were asked about their interpretation of what the FWS is trying to achieve through its mission to connect people with the environment.

Please rate how relevant each of the following items are to the FWS' mission to connect people with nature. (n varies by statement and is included in the table below)

	Not relevant (1)	Slightly relevant (2)	Moderately relevant (3)	Relevant (4)	Very relevant (5)	Completely relevant (6)
The FWS wants young people to be interested in conservation and wildlife management careers. $(n = 318, \text{ average} = 5)$	1%	3%	4%	17%	23%	53%
The FWS wants more people to participate in outdoor recreation activities such as fishing and hiking. $(n = 317, \text{ average} = 5)$	1%	2%	8%	17%	27%	45%
The FWS wants people to have a feeling of appreciation for public lands. ( $n = 317$ , average = 5)		1%	3%	11%	23%	62%
The FWS wants people to be concerned about the preservation of public lands. ( $n = 317$ , average = 5)		1%	4%	11%	23%	61%
The FWS wants more people to participate in agency- sponsored outdoor education programming - for example, higher participation rates in fishing derbies. (n = 317,  average  = 4)	2%	9%	13%	27%	23%	27%
The FWS wants more people to politically support, through voting and lobbying, issues of importance to public lands. ( $n = 317$ , average = 5)	3%	4%	8%	26%	23%	37%
The FWS wants more people to be knowledgeable about the environment, including about issues such as climate change and about specific plant and animal species. ( $n = 317$ , average = 5)	1%	1%	5%	15%	21%	57%
The FWS wants people to have more health benefits, such as physical fitness, from outdoor activities. (n = 318,  average = 4)	3%	13%	18%	25%	17%	24%
The FWS wants to provide more educational support to schools to improve environmental education. (n = 317,  average = 5)	2%	6%	11%	21%	24%	36%

# Optional question: What other (if any) outcome or goal is relevant to the Service mission regarding connecting people and the environment? [open-ended response] (n = 52)

Fifty-two respondents commented in the open-ended response option when asked about what outcome or goal is relevant to the Service mission regarding connecting people and the environment. Their responses have been sorted into topical categories for easier reading. The comments are provided in their entirety. The alterations made to the comments include correction of spelling and grammar and removal of identifying information when necessary. If respondents addressed several different topics in one comment, then we split the comments into segments. Ellipses indicate that the comment was separated from another part of a single response.

The comments included the following topics: benefits of nature, the need for people to have comfort and excitement in the outdoors, the intended outcomes of science literacy, understanding the human role in the ecosystem, the development of an environmental/land ethic, and wise use of the land. Other comments regarded either a focus on children or a wider focus on nontraditional visitors to public lands. Comments were made regarding how the FWS has supported in the past or should currently support this initiative and it was suggested that the FWS should focus on being a resource for environmental education. Another set of comments addressed career opportunities in the FWS. A few comments were made regarding the survey. A number of comments did not seem to fit into any of these categories and those are grouped into a category of miscellaneous statements.

#### **Benefits of nature:**

The FWS wants people to understand the mental and physical impacts of reduced time outdoors, especially in children

The FWS wants more people to spend relaxed time outdoors in nature, simply to rekindle and recognize the connection between a person and nature.

The Service wants people to recognize and appreciate the contribution of environmental amenities (birds, insects, plants, water) in their daily existence (urban or rural)....

The FWS wants to provide outdoor education that not only improves physical fitness, but also mental wellness. The FWS wants to establish environmental education partnerships with other agencies to maximize benefits to communities.

#### **Comfort in nature:**

Kids need to HAVE FUN and BE COMFORTABLE outdoors.

The FWS wants young people to believe that it is safe to be in nature.

...Third, to finally really answer this optional question, I think the most relevant goal is not only getting people outside, but once they are there, make sure they have the comfort/confidence and possibly 'tools' to enjoy it such as observation skills and wildlife and habitat to observe and appreciate. This is applicable for all ages.

#### Excitement about environment:

Giving people (young and old) the opportunity to develop an excitement about outdoor activities.

The FWS wants people to have the opportunity to create a 'Sense of Wonder' about the environment.

#### Science literacy:

Gain an appreciation of how an understanding of scientific information can help the public make better decisions concerning a sustainable lifestyle (e.g. long-term vs. short term eco-economics)

The FWS wants to foster greater understanding and appreciation for the sciences, including: ecology, biology, zoology, etc There is a need to increase scientific literacy about the biological sciences and ecology...

The FWS wants more people to understand the connection between the availability of quality habitat and healthy wildlife populations. The FWS wants more people to understand the health benefits or detriments of eating wild foods (fish and game)

#### Human role in ecosystem:

The Service wants the public to be more aware of the impact of their actions on fish and wildlife, and what actions they can take to benefit fish and wildlife.

The FWS wants people to be knowledgeable about ecological processes so they can make educated decisions about how their actions impact the environment.

There is a need to increase scientific literacy about the biological sciences and ecology and their relevance to all of our lives. What I mean by this is an effort that goes beyond 'traditional' environmental education to develop a realization that we humans are also part of the problems and the solutions. Perhaps we should engage in community sustainability issues including education, energy, and food security.

Public understanding that our energy use has a direct impact on habitat, wildlife and the environment in general, regardless of climate change impacts.

**Environmental/Land ethic:** 

Development of a land ethic

FWS wants people to care enough about wildlife, habitat and the environment to care for it.

FWS wants youth to develop an environmental ethic such that they appreciate and want to protect land and wildlife.

An understanding of why they should want to protect the land, the habitat, and the species.

A better understanding of cherished lands, species and health.

Protection and enhancement of fish and wildlife habitat on both public and private lands

I would think the FWS would want the public to be concerned about the conservation of resources on public lands, not the preservation (unless you meant preservation to mean keeping public lands public)....

The FWS wants to teach an appreciation of nature and the environment and how to protect these factors.

#### Wise use of the land:

First, it is more relevant for the Service to support smarter and better quality visitor use, not more and more and more of it. Doing more EE and having more public access, for example, those aren't the answers. Second, what is meant in the last statement by 'improve EE?' ...

...Many of our sister agencies have multiple use missions, we should be working with them and the public to promote wise use of public land as well as private/local gov't open space.

#### Focus on children:

We are on the cusp of losing future generations that have an interest and care about our natural resources. Most kids don't even know where their food comes from, much less have knowledge about the outdoors, wildlife, habitat, wild places. Get kids away from computers and books and out in the environment.

**Connecting nontraditional visitors:** 

Connecting non-traditional visitors/stakeholders with public lands use and recreation

Invest more time and effort into regularly conducting outreach to minority communities, groups and organizations. Identify nontraditional sources for increasing public support for FWS mission.

Connecting groups which are not otherwise nature oriented. Stop spending what little time and resources we have serving 'scouting' programs, who are already participating anyway, and reach out to untapped groups: inner city youth, at-risk families, elderly, etc...

Social networking and connecting with like minded people; providing free or low cost opportunities to people regardless of age, race, religious, or other backgrounds.

Breaking the Color Barrier was a recent event that was geared toward ALL the above mentioned concerns and should be widely supported. [Identifying information deleted]

To increase environmental awareness among minority populations.

#### FWS support:

Connecting People with Nature should be a major priority of the Service. We should have more designated staff positions and funding dedicated to these issues.

Provide monetary support and additional employees to accomplish goals. We have been asked to do MORE, but do not receive funding to accomplish the goals. We're already overworked.

#### FWS as a resource:

Provide expertise in the field of EE to others

FWS also needs to get a curriculum together that begins in the middle school age group and endures up through college!

#### Career opportunities:

Reaching out to job seekers and educating them about career opportunities within the Service, core curriculum standards, how to apply, and the importance of the federal government's world class benefits program.

Young conservationists, biologists, etc. can continue to work in the environment, therefore, jobs in those fields are continuous.

Creating pathways for young adults to become scientists, ecologists, and pursue a career in natural resources. We can hire more STEP and SCEP employees... How about 'The FWS wants more young people to become interested in any aspect of science as a career' Survey: I can't believe you included a question asking FWS staff if they support lobbying activities. I hope staff are aware of the limits placed on gov. employees and are not motivated to lobby. ...For the survey: 'Wants to' = nice and 'committed to' = funded. They're not the same. **Miscellaneous:** Connecting ADULTS is more important and would directly contribute more to the FWS 'mission' than connecting CHILDREN. Has outdoor education programming made a difference in the life of child? I honestly don't care This would be the items we plan to share with the children when we do begin an EE program. At least, that are my current thoughts. The FWS wants its employees to be involved in all the above. The FWS should promote the idea that one person can make great changes and that one person can make a difference (e.g., TR Roosevelt, Rachel Carson, Jane Goodall, etc.) Measuring outcomes of outreach/education efforts is vital, NONE should be done without measured outcomes. This rarely done for children's programs-it's just assumed to be good. The FWS wants more people to politically support, through voting, lobbying, and personal involvement issues of importance to environmental health and conservation of wildlife and their habitats. Increase awareness and appreciation for what the agency does. The FWS wants more people to sign up as volunteers to assist staff and other volunteers on public lands. For participants to become active stewards for their local watershed habitats. Facilitate enduring relationships with outdoor places, wildlife and other natural resources (as opposed to brief recreational encounters)

At this point in the survey, respondents were directed to different question sets depending upon responses to the introductory section of the survey. The survey software directed respondents to the section of questions on attitudes regarding the FWS and connecting children with nature if the respondents indicated that they do not perform any conservation education or outreach activities targeted toward children, that outreach activities are not part of their job and that they do not do them, and that they do not supervise anyone who performs conservation education or outreach programming. All other respondents were directed to the questions on success with outreach and then to questions on barriers to achieving greater success with connecting children with nature.

### Questions Regarding Success with Outreach Efforts

Respondents were asked about their perceptions of the success of past and future efforts to connect children with nature.

#### Please indicate how successful you believe each of the following efforts has been or will be. (*n* = 227)

	Not at all (1)	Barely successful (2)	Moderately successful (3)	Successful (4)	Very successful (5)	Extremely successful (6)
How successful have your past efforts been at connecting children with nature? (average = 4)	<.05%	6%	29%	27%	21%	16%
How successful do you believe your future efforts at connecting children with nature will be? (average = 4)	1%	3%	24%	29%	27%	16%

How successfully has the Service performed as an agency in their past efforts to connect children with nature? (average = 3)	2%	19%	42%	26%	10%	1%
How successful do you believe the agency's future efforts at connecting children with nature will be? (average = 4)	<.05%	7%	28%	34%	24%	6%

Questions Regarding Barriers to Connecting Children with Nature

This section of the survey asked respondents about the things that prevent them from achieving greater success with connecting children with nature. We used several types of questions. First, we asked respondents to select from a list which issue created the biggest problem in connecting children with nature.

#### Which of the following creates the biggest problem in trying to connect children with nature? (select one) (n = 229)

Children's schedules (for example, school schedules, homework, other activities, lack of free time)	6%
Parents' fears (for example, of strangers, or of wildlife)	1%
Parents' attitudes (non-fear related) and lack of information about the outdoors	9%
Practical issues (for example, parents' work schedules, distance to natural areas from children's residences, and lack of transportation options)	16%
Children's lack of interest and lack of comfort in the outdoors	6%
Competition from technology and technology-based activities	13%
Lack of information about the most effective techniques to connect children with nature	4%
State educational standards and lack of an environmental education curriculum	9%
Funding issues	10%
Staffing issues	18%
Other: [open-ended response] (n = 26)	11%

Twenty-six respondents selected the "other" response option and provided their answer to the question of what creates the biggest problem in trying to connect children with nature in a text box. Their responses have been sorted into topical categories for easier reading. The comments are provided in their entirety. The largest category of comments addresses the concern that multiple issues create problems. Other categories address the lack of support to work towards connecting children with nature and the lack of resources to do so. Other comments addressed a general disconnect with nature, time issues, and practical issues that affect connecting children with nature. Two comments did not seem sufficiently related to other comments and were grouped together to form a miscellaneous category.

Multiple options:

The last two are connected: funding and staffing to have an adequate program. Not all offices have the resources of refuges to promote these programs, but it is these offices that are in the urban areas that could reach the most people. Refuges aren't necessarily convenient to reach, or do not allow public access. Urban offices have a greater potential to reach a lot of without them having to travel far.

All of the above-they all contribute though not strictly equal

Must combine: school funding of field trips and state education standards and lack of EE curricula.

Combo-parent's attitudes and lack of information AND competition from technology-based activities ALL of the above

Schedules (children's, parents, school, staff members); parent's fears and attitudes; funding issues

No Child Left Behind, technology, parent fear, and homework

There is no simple answer to this complex issue. All of the above are contributing factors that vary from station to station. Practical issues as well as growing cost/sports take priority in most families.

All of the above are factors

Various above apply depending on age group.
Lack of support from others:
Lack of support from FWS managers to engage in additional outreach opportunities
Lack of support and respect from fellow coworkers
Management
Non interest of teachers
Lack of resources:
Lack of interesting, local, organized programs.
Lack of staff/volunteers who are themselves comfortable in the outdoors.
FWS lack of staff to give more time to children's programs
General disconnect with nature:
The overall attitude of culture which factors out all connections, needs and desires for nature. Nature used to be a part of our
lives. Now it is a hobby.
Lack of parents as outdoor 'role models' - parents themselves not connecting with nature
A general disconnect of both parents and children to nature.
Time:
Time
Time
Practical issues:
Getting kids to the refuge due to transportation costs.
Miscellaneous:
No problem in Alaska. Children here are already connected with nature.
When it becomes my primary job I will be successful in connecting children in my area to nature.

Next, we asked a specific question about how big a problem each issue on the list created. Depending on the answer to that question, respondents may have been asked more specific questions about that issue. The questions addressed the likelihood of change in the issue, ability to personally influence the issue, and whether the source of the issue was internal or external. The internal/external question was scaled as a measure of internality, so when someone selected the option that an issue was "100% because of others" it reflects a response of "0" on a scale of internality.

# How big a problem do children's scheduling issues (homework, other activities, lack of free time) create in your efforts to connect children with nature? (n = 229, average = 1)

	Only a small problem			Stops me from doing my
No problem (0)	(1)	It's a problem (2)	It's a big problem (3)	job (4)
14%	39%	33%	14%	

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem do parents' fears create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

#### How will children's scheduling issues change over the next 5 years? (n = 109, average = -2)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
15%	6%	50%	16%	13%		2%		

How likely is it that you personally could do something to actually change children's schedules?	
( <i>n</i> = 109, average = 1)	

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
42%	36%	15%	3%	5%	

How likely is it that you can indirectly influence the state of children's schedules? (n = 108, average = 1)

ĺ	Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
	(0)	(1)	(2)	(3)	(4)	(5)
	27%	46%	20%	4%	3%	

How much of children's scheduling issues is because of you (internal) or because of others (external)? In other words, is the source of children's scheduling issues internal (a characteristic of you) or external (a characteristic of others)? (n = 108, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
1%	2%	19%	38%	41%

#### How big a problem do parents' fears create in your efforts to connect children with nature? (n = 229, average = 1)

	Only a small problem			Stops me from doing my
No problem (0)	(1)	It's a problem (2)	It's a big problem (3)	job (4)
28%	36%	26%	10%	

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem do parents' attitudes (non-fear related) and lack of information about the outdoors create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

#### How will parents' fears change over the next 5 years? (n = 80, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
8%	8%	43%	15%	11%	8%	8%	1%	

# How likely is it that you personally could do something to actually change parents' fears? (n = 81, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
10%	20%	44%	21%	3%	3%

#### How likely is it that you can indirectly influence the state of parents' fears? (n = 80, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
10%	19%	41%	24%	4%	3%

# How much of parents' fears is because of you (internal) or because of others (external)? In other words, is the source of parents' fears internal (a characteristic of you) or external (a characteristic of others)? (n = 79, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
	1%	10%	27%	62%

How big a problem do parents' attitudes (non-fear related) and lack of information about the outdoors create in your efforts to connect children with nature? (n = 229, average = 2)

No problem (0)	Only a small problem (1)	lt's a problem (2)	It's a big problem (3)	Stops me from doing my job (4)
14%	30%	38%	17%	1%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem do practical issues (for example, parents' work schedules, distance to natural areas from children's residences, and lack of transportation options) create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will parents' attitudes (non-fear related) and lack of information change over the next 5 years? (n = 125, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
6%	4%	37%	9%	13%	15%	16%	1%	

How likely is it that you personally could do something to actually change parents' attitudes (non-fear related) and lack of information? (n = 124, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
7%	25%	33%	23%	7%	6%

How likely is it that you can indirectly influence the state of parents' attitudes (non-fear related) and lack of information? (n = 125, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
5%	24%	34%	24%	7%	6%

How much of parents' attitudes (non-fear related) and lack of information is because of you (internal) or because of others (external)? In other words, is the source of parents' attitudes (non-fear related) and lack of information internal (a characteristic of you) or external (a characteristic of others)? (n = 124, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
1%	1%	17%	38%	44%

# How big a problem do practical issues (for example, parents' work schedules, distance to natural areas from children's residences, and lack of transportation options) create in your efforts to connect children with nature? (n = 228, average = 2)

				Stops me from doing my
No problem (0)	Only a small problem (1)	It's a problem (2)	It's a big problem (3)	job (4)
9%	18%	39%	33%	1%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem do children's lack of interest and lack of comfort create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will practical issues change over the next 5 years? (n = 164, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
7%	6%	42%	14%	15%	8%	8%		1%

# How likely is it that you personally could do something to actually change practical issues? (n = 164, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
27%	34%	23%	8%	6%	2%

#### How likely is it that you can indirectly influence these practical issues? (n = 165, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
19%	34%	29%	11%	5%	2%

How much of these practical issues is because of you (internal) or because of others (external)? In other words, is the source of these practical issues internal (a characteristic of you) or external (a characteristic of others)? (n = 162, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
1%	1%	11%	38%	49%

# How big a problem do children's lack of interest and lack of comfort create in your efforts to connect children with nature? (n = 228, average = 1)

	Only a small problem			Stops me from doing my
No problem (0)	(1)	lt's a problem (2)	It's a big problem (3)	job (4)
16%	40%	24%	19%	1%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem does competition from technology and technology-based activities create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will children's lack of interest and comfort change over the next 5 years? (n = 99, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
11%	5%	50%	10%	4%	12%	8%		

How likely is it that you personally could do something to actually change children's lack of interest and comfort? (n = 99, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
7%	25%	35%	19%	9%	4%

How likely is it that you can indirectly influence the state of children's lack of interest and comfort? (n = 99, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
9%	25%	32%	20%	9%	4%

How much of children's lack of interest and comfort is because of you (internal) or because of others (external)? In other words, is the source of children's lack of interest and comfort internal (a characteristic of you) or external (a characteristic of others)? (n = 98, average = 1)

100% harawaa afaara	750/ may 050/ others			100% because of
100% because of me (4)	75% me, 25% others (3)	50% me, 50% others (2)	25% me, 75% others (1)	others (0)
		13%	39%	48%

How big a problem does competition from technology and technology-based activities create in your efforts to connect children with nature? (n = 228, average = 2)

				Stops me from doing my
No problem (0)	Only a small problem (1)	It's a problem (2)	It's a big problem (3)	job (4)
9%	22%	31%	37%	2%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem does lack of information about the most effective techniques to connect children with nature create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will competition from technology and technology-based activities change over the next 5 years? (n = 159, average = -2)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
31%	10%	45%	6%	4%	2%	2%		

How likely is it that you personally could do something to actually change competition from technology and technology-based activities? (n = 157, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
22%	46%	19%	12%	1%	

How likely is it that you can indirectly influence competition from technology and technology-based activities? (n = 157, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
14%	48%	22%	13%	2%	1%

How much of competition from technology and technology-based activities is because of you (internal) or because of others (external)? In other words, is the source of competition from technology and technology-based activities internal (a characteristic of you) or external (a characteristic of others)? (n = 156, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
	2%	11%	30%	58%

How big a problem does lack of information about the most effective techniques to connect children with nature create in your efforts to connect children with nature? (n = 228, average = 1)

	Only a small problem			Stops me from doing my
No problem (0)	(1)	lt's a problem (2)	It's a big problem (3)	job (4)
31%	31%	29%	8%	1%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem state education standards and lack of environmental education curriculum create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will lack of information about the most effective techniques change over the next 5 years? (n = 86, average = 1)

Will definitely get worse		Likely to get worse		Not at all		Likely to improve		Will definitely improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
2%	4%	17%	7%	8%	14%	40%	4%	5%

How likely is it that you personally could do something to actually change the lack of information about the most effective techniques? (n = 85, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
9%	21%	26%	26%	14%	4%

How likely is it that you can indirectly influence the lack of information about the most effective techniques? (n = 86, average = 2)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
8%	24%	30%	26%	6%	6%

How much of lack of information about the most effective techniques is because of you (internal) or because of others (external)? In other words, is the source of lack of information about the most effective techniques internal (a characteristic of you) or external (a characteristic of others)? (n = 85, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
4%	6%	35%	31%	25%

How big a problem do state education standards and lack of environmental education curriculum create in your efforts to connect children with nature? (n = 227, average = 2)

				Stops me from doing my
No problem (0)	Only a small problem (1)	lt's a problem (2)	It's a big problem (3)	job (4)
19%	27%	32%	19%	3%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem does the current level of funding for programs create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

How will state education standards and lack of environmental education curriculum change over the next 5 years? (n = 121, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
5%	6%	31%	6%	21%	14%	17%	1%	

How likely is it that you personally could do something to actually change state education standards and lack of environmental education curriculum? (n = 121, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
39%	34%	13%	9%	5%	

How likely is it that you can indirectly influence state education standards and lack of environmental education curriculum? (n = 121, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
27%	46%	13%	10%	3%	1%

How much of state education standards and lack of environmental education curriculum is because of you (internal) or because of others (external)? In other words, is the source of state education standards and lack of environmental education curriculum internal (a characteristic of you) or external (a characteristic of others)? (n = 119, average = 0)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
	1%	7%	29%	63%

# How big a problem does the current level of funding for programs create in your efforts to connect children with nature? (n = 227, average = 2)

				Stops me from doing my
No problem (0)	Only a small problem (1)	lt's a problem (2)	It's a big problem (3)	job (4)
9%	22%	32%	32%	6%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the "How big a problem does lack of staffing create in your efforts to connect children with nature" question. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

#### How will funding for programs change over the next 5 years? (n = 157, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
10%	7%	41%	8%	15%	13%	5%		1%

# How likely is it that you personally could do something to actually change funding for programs? (n = 156, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
35%	34%	16%	12%	1%	2%

#### How likely is it that you can indirectly influence funding for programs? (n = 156, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
26%	44%	17%	10%	2%	2%

How much of funding for programs is because of you (internal) or because of others (external)? In other words, is the source of funding for programs internal (a characteristic of you) or external (a characteristic of others)? (n = 156, average = 1)

				100% because of
100% because of me	75% me, 25% others	50% me, 50% others	25% me, 75% others	others
(4)	(3)	(2)	(1)	(0)
	4%	9%	33%	55%

#### How big a problem does lack of staffing create in your efforts to connect children with nature? (*n* = 227, average = 2)

				Stops me from doing my
No problem (0)	Only a small problem (1)	It's a problem (2)	It's a big problem (3)	job (4)
10%	21%	30%	32%	8%

If they selected values 0 (No problem) or 1 (Only a small problem), they were directed to the optional question which asked respondents to identify other major factors not addressed in this survey that have a large effect on preventing greater success at connecting children with nature. If respondents selected values 2 (It's a problem) through 4 (Stops me from doing my job), they were directed to this series of follow-up questions:

#### How will lack of staffing change over the next 5 years? (n = 156, average = -1)

Will								Will
definitely		Likely to				Likely to		definitely
get worse		get worse		Not at all		improve		improve
(-4)	(-3)	(-2)	(-1)	(0)	(1)	(2)	(3)	(4)
8%	9%	37%	12%	22%	7%	5%	1%	1%

# How likely is it that you personally could do something to actually change lack of staffing? (n = 154, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
49%	33%	10%	5%	2%	1%

#### How likely is it that you can indirectly influence the lack of staffing? (n = 154, average = 1)

Not at all	Slightly likely	Somewhat likely	Likely	Very likely	Definitely
(0)	(1)	(2)	(3)	(4)	(5)
42%	38%	12%	6%	1%	1%

How much of lack of staffing is because of you (internal) or because of others (external)? In other words, is the source the lack of staffing internal (a characteristic of you) or external (a characteristic of others)? (n = 153, average = 0)

100% because of me	75% ma $25%$ athere	E0% may $E0%$ athere	25% ma $75%$ athere	100% because of others
100% because of me (4)	75% me, 25% others (3)	50% me, 50% others (2)	25% me, 75% others (1)	(0)
	1%	5%	23%	71%

# Optional question: If there are other major factors not addressed in this survey that have a large effect on preventing greater success at connecting children with nature, please name them in the text box below. (n = 73)

The 73 respondents who answered this optional question provided comments covering a wide array of topics. As with other open-ended questions on this survey, we sorted the responses into topical categories for easier reading. The comments are provided in their entirety. The alterations made to the comments include correction of spelling and grammar and removal of identifying information when necessary. If respondents addressed several different topics in one comment, then we split the comments into segments. Ellipses indicate that the comment was separated from another part of a single response.

The topics address issues internal to the FWS, such as the need for dedicated staff and workload issues, as well as external issues. Some comments address environmental education in general or suggest specific ideas. Others suggested an expansion of groups on which outreach efforts are focused

to include groups that are nontraditional refuge visitors. The school system, transportation, and cultural issues were identified as concerns. Comments were made regarding the survey and other miscellaneous topics that did not seem to fit into other topic categories.

#### **Dedicated staff:**

Need a staff person at the local level whose time is exclusively dedicated to this issue to have a significant impact.

The most effective way to have a quality, comprehensive program is to have a staffer dedicated to it. The service is currently understaffed, especially in the education division.

Because of contractual work responsibilities, I can not spend as much time connecting children with nature as I would like. Dedicated funding for connecting children with nature would help to solve this problem.

I think to be really effective at the refuge I work at a full time staff person should go around to the 45 schools to connect children with nature. Most schools are over 30 miles from the refuge which prevents children from coming to the refuge through the school system.

VSS have too many hats to do this job properly.

Lack of staff that are really comfortable w/ kids in the outdoors. Lack of enthusiasm of the outdoors by staff - many staff members never get out - it's a 'do as I say, not as I do' kind of thing

Employees running the ee programs do not have a passion for it and don't do a dynamic job of spreading messages. They work because of the pay check!

... I strongly believe there needs to be one FTE for each of the Big 6 on the national level AND whose major purpose is to pull us together on each of the Big 6 and show us the way....

Part of the issue is lack of staff dedicated to outreach that (1) could keep current with best techniques & share with others, (2) identify priority audiences; and (3) develop programs and materials that others could use.

#### **Training:**

There should be training for refuge staff in how to interest children in nature. At this time there appears to be no training available. Some staff say they know what to do on their own, but others would like training in managing groups and how to reach out to children.

Training Opportunities of Staff and Volunteers

...We need to be educated on the best ways to connect with these under-represented cultures so that we may be more effective in our jobs.

...3. Inadequate or non-existent training in place-based education -- we do alot of interpretation and call it EE and we do alot of traditional 'cook book' EE instead of focusing on getting outside in our own local ecosystems. Let's put the field back in field trips! 4. Non-existent training in education theory and methodology (brain-based theory, constructivism, inquiry-based learning, etc.) We need to put the education back in EE....7. We need not only training but details or job shadowing to see on the ground in action just how other stations are doing good EE. I know there are stations willing to host, but it seems like pulling teeth to get employees to do it because either they think they already know it all (they don't) or because their managers don't get it.

#### Lack of management support:

Lack of support from local FWS managers for staff (beyond certain designated staff) to engage in such activities, leading to missed opportunities.

...5. Refuge managers who actually get it, who understand the value of EE in visitor services as a resource management tool. Most managers have to make decisions about visitor services but are completely untrained in it, including in EE. We need them to understand and support our profession -- it is a legitimate profession which can create fantastic public support for field stations when maintained with consistency and continuity, not based upon trendy directives or personal whims. We also need them to understand that every station doesn't have to do all Big 6 to the extreme but should focus on what's most natural and successful for that station....

#### Time/workload:

Workload is an issue. The CPWN Initiative relies heavily on FWS employees using 8 or more hours annually to help with activities that connect children with nature. Unfortunately, the vast majority of FWS biologists I have talked with feel that they do not have enough time to complete their required duties, so taking extra time for this initiative is difficult. There are very few FWS positions that have education/outreach as part of their position description.

Time- we have a full plate, something is going to have to fall off or not get done

Time to do activities with people (children) in Nature is limited by 'higher priorities.'

Too heavy workload overall, relegating outreach and connecting opportunities to a back burner.

...lack of time in employee's schedules...

Lip service/lack of support:

Need Connecting People with Nature to be a critical element on Performance, otherwise this is blown off as 'others duties as assigned' and is not a priority as far as the supervisor is concerned.

Connecting People with Nature is not always considered an appropriate use of USFWS staff or money. It is undervalued in this agency. Until we change the mindset of people in the agency, and give this a higher level of priority, funding and staff, things will not change. This needs to be a fundamental change at the upper levels of the agency and the gov....

There is a lot of lip service given to connecting children with nature initiative, [text deleted to protect identity]. Staff considers any contribution to VS activities to be a burden and something to avoid as much as possible. Willingness to fund VS needs is the last on the list. Until FWS employees understand the importance of the public side of the conservation equation, we will ultimately fail our mission.

There is a lot of talk about the importance of environmental education and connecting children with nature but the leadership is unwilling to make it a reality with more staff and funding. We have 1 ORP for all of ND (has the most NWRs) and 0 in SD. Folks that work part time on environmental education are not supported and in fact they told to spend less and less time on EE and outreach.

The lack of support by the U.S. Fish and Wildlife Service for Environmental Education and Visitor Services in general due to lack of funding for staff, transportation for groups, and materials.

It is not recognized at field office levels as important. It needs to be emphasized from the WO all the way to the field offices. Many field supervisors do not consider it a priority. There are not dedicated positions either full or part-time to connecting kids with nature in general. Attitudes in the FWS are that connecting kids with nature is not as important as the other work we do.

Not considered a priority by staff

CCWN takes time, man power, money, and interest. I think the interest is growing but there is not enough financial support to make it grow. We have to choose between doing our field station mission vs. doing outreach.

FWS/DOI regularly identifies new priorities without dropping previous priorities. People in Nature was identified as a priority, but never even made it through an earnest budget cycle before being overwhelmed by Climate Change, then LCC, then???

#### Organizational disconnect:

Are we 'connecting people with nature' -or 'connecting children with nature'? Who was responsible for taking Richard Louv's elegant concept of 'children and nature' and morphing it into some sort of generalized, dumbed-down idea of 'connecting people with nature' and 'going outside'. This program needs to keep its focus on the central premise of Mr. Louv's book -- getting the next generation involved with nature and the out-of-doors. If we spread ourselves all over the waterfront in some sort of amorphous, generalized 'campaign' among everyone it's not going to go very far, nor be very sustainable over the long-run. Let's keep our focus on the most appealing, definable, and specific audience possible - the 'key' audience of the next generation, instead of 'the world'.

CPWN Program Administration. The program feels like it has little direction, even after the national workshop produced a random list of recommendations, with no plans for implementation or defined links to the related Youth in Nature Careers program. Revising the CPWN Strategic Plan was put off limits for the CPWN Team to comment on or offer suggestions, even though there was agreement the Plan needs to be updated. Thus, the produced list of CPWN recommendation does not move the program in a direction guided by a current and relevant CPWN Strategic Plan. Recommendation. The FWS CPWN program needs a manager who is highly organized and managerially effective to maximize the contribution from the regional and program CPWN representatives who mostly contribute work time to the CPWN program.

A major disconnect between what actually occurs on refuges and what is perceived by regional offices. No one knows what I actually do, but how much I get in support and funding is directly the result of decisions made by others. We are all groping along, hoping to make a change with huge initiatives but with little cooperative planning within the service.

Lack of interest from other program areas that are still looking at refuges from a 'wildlife first' mentality. Lack of positive interaction with program areas on refuges. Lack of understanding how important connecting children (and adults) with nature really is for the health of the whole refuge system by other program areas.

...6. Lack of a clear, strong, progressive voice on a national level in the FWS directing the EE ship we're all sailing on, but without obvious leadership, we're all scattered about, haphazard, unorganized, not moving forward together doing the best kind of EE we can do for kids and our future....

We should be partnering with other agencies (FS, NPS) that have the same agenda and provide a united front. At this time, each agency (State and Federal) is advertising to come to their property and get outdoors. We should be focusing on getting outdoors regardless of where it is done.

#### Funding and action on the ground:

There are too many people thinking and discussing how to and ways to connect children with nature and not actually doing it on the ground, i.e., bringing kids outdoors and/or bringing the information directly to them. Most of these Bureaucrats have never interacted with kids besides their own. It is more important to get kids outdoors and interested in the outdoors than to argue about which Programs should deliver the message, what kinds of curricula are used, what colors should be the brochures, what shape should be the displays, etc. etc. Go out there and get your hands dirty!!

Too much of the funding that is coming is staying in headquarters (Region 9) and not getting out to the field stations, visitors centers, refuges, etc. where we can best connect children with nature. Sometimes it doesn't take much funding to make a huge difference, if it can get out to the field.

It's important that we actually get out and do things with our young people. There are many competitors for their interests and time.

Inefficient use of limited resources

Friends groups/partnerships:

Need FWS grants to help fund friends or partners that want to initiate and or improve EE.

Our Fishery Friends groups could be very instrumental in helping us connect children with nature. It would be helpful if they were given more recognition and tools to help us (FWS) and our communities.

#### Diversity of approaches:

There are lots of different kinds on kids, natural history resources, opportunities, venues, etc. We need to encourage all staff to experiment and report what works for whom at what level where and run with that for a time. Large uniform 'plans' kill enthusiasm of staff.

...inability to try outside-the-box efforts, because of group-think.

#### **Build ongoing relationships:**

I think what has happened is this initiative has created a plethora of huge events that occur once a year. I feel that having the studies available that show that working with the same group of students, girl scouts, 'such and such group', etc. connects children with nature more effectively than a one-time event. I feel we in the service need to promote the philosophy of 'adopt a group' (any group of children' and reward the employees that create the multiple visits into the out-of-doors. It seems we think bigger events are better. We should create our own 'Big Brother/Big Sister' type association within the agency so that 'mentoring' a child or a group of children could create a successful program of connecting children with nature. We should also have a mechanism for capturing what is already occurring within our agency....

Historic USFWS methods (i.e. one day visit to by school to refuge or hatchery, give a one time talk in the classroom) to deliver EE to children are not as effective as repeat visits using the environment as the integrating context for traditional subject matter.

#### **Environmental education:**

Making environmental education a priority

Why so little emphasis on interpretation? Interpretation is A mission-based communication process that forges emotional and intellectual connections between the interests of the audience and meanings inherent in the resource. What is keeping us from using interpretation to connect children with nature? Interpretation is not the same as EE.

...In addition, it seems we keep blending environmental education with connecting children with nature. I think the two are exclusive of each other. I think we need to be very clear on what Connecting Children with nature really means - is it 'walking in the woods - just for the fun of it' or is it 'walking in the woods this child will be able to identify three kinds of trees when they are finished'? Environmental education has goals and objectives that I think are fundamentally different than the CCwithNature initiative is striving to achieve.

#### Marketing/advertising:

An overarching marketing plan is needed for all DOI or all federal government to achieve the CPWN goals.

Just making the connection is huge. Once you get a school group out here it's almost always repeat business. Getting the word out to schools that we're available is huge. We need to spend more time advertising.

Ideas:

Need central, funded location to use as a clearing house for sharing of information.

When there is evidence that practical circumstances restrict connecting children at refuge sites, we should be more willing to go to their location, i.e. school, community center, etc to make that connection. I realize this will take a level of creativity that might be challenging, but this is a component of the challenge we face as a product of down-turned economy requires more parents to work longer hours, limit funds for visitation, as well as time restrictions. I see great potential in developing mobile interpretive centers that can take needed information, samples, activities, etc to those that are restricted or never have had the opportunity to get outdoors such as in large urban environments or economically depressed areas.

...Focus on outdoors and nature certain times of the year. DOI and EOE work together on something. The time is coming.

Extremely 'buggy' weather prohibits the amount of programs we provide in the summer. I use this time to educate off site. Working in an Ecological Services office, I do not have any public Service lands here. For example, I cannot have a school field trip visit me at my office. I have to leave the office and 'search out' opportunities to connect people to nature in other outdoor places. It would be wonderful, if my office could have a backyard habitat display area with a short walking trail and interpretive/informational signage.

#### Focus on parents/adults:

I feel we as a conservation agency can only do so much with kids and their education. I think a major obstacle in reaching our kids is a lack of parental involvement. So, this lends itself to the question, should we also be have a two pronged approach to environmental education? One toward kids and one toward adults/parents. In some ways, getting parents 'reconnected' to nature may assist in reaching our youth.

Parenting is a HUGE factor starting at an early age. Parents should model healthy behaviors that involve moving your body outside versus sitting in front of a computer or TV 90% of their free time.

#### Nontraditional groups:

We seem to put greater focus on these efforts in rural areas but it should be in urban/suburban areas as more people live in cites, need to connections to green spaces and have more health environment issues. Would reach a different constituency to support our mission.

Of course, DIVERSITY. It's no secret that these activities have been geared more toward one race of people, but that is slowing changing. More exposure is needed for those in lower income areas.

Service employees have been given little guidance as to how we should approach work with diverse groups, particularly children of color, to get them more interested in the out of doors. Demographics are changing but our efforts are not keeping up with the times. ...

#### School system:

School budgets

Schools themselves are constrained by funding and time to allow for more field trips and hands-on experiences. That is the biggest problem.

...Also, Education standards (federally and by state) have to change. We need to move away from putting so much stress on standardized testing. Teachers are often not allowed to 'go outside of the box' and do experiential learning and teaching.

Schools can't afford bus transportation. Mandatory testing in schools monopolizes students' time.

One question that I'm not sure hit the point was about school standards. It's less an issue with lack of EE components as it is an emphasis on state standards and testing, that prioritizes classroom work far above field trips.

Difficulty making teachers understand children need to run and play safely, and not always be 'controlled'

School funding and transportation resources

1. No Child Left Behind: testing, teaching to the test, teaching to standards -- this REALLY competes with time for teachers to take kids outside. ...

I have suggested year-round school time to incorporate the environmental lessons as well as the three R's....

#### **Environmental education in schools:**

There needs to be an environmental education course (nature, wildlife, etc) taught to every grade level and be at the same importance level as reading, math and writing. Needs to be one hour everyday kindergarten-college. Otherwise, the trend of people losing touch with nature will get worse and worse.

...2. Lack of EE standards in education -- for example, in WI, along with math, science, language arts, and social studies, there are EE standards -- this is very unusual but helps! I think it would help if the national education standards that states and districts draw from included EE....

#### **Transportation:**

There is little motivation for the schools to improve their outdoor or environmental programs, there are no monies to support programs and transportation funding is the major issue for me. Visitor centers cost millions and then need to be funded for upkeep of heat and cooling along with the need to divide my time doing paperwork grant writing and other non-student activities and the kids are inside again! Give support to transport kids to the outdoors for hands-on outdoor experiences.

Transportation to natural areas

Transportation

Cultural/economy issues:

General economy and fears of future unknowns prohibit much of the public from trying something 'new'; even if getting outdoors and involved in nature education, learning, recreation and family activities is low to no cost, most are still not willing to try something different from the norm, even if it means spending money to enjoy nature.

Media and legislators need to get on board to promote healthier lifestyles for Americans - including improved nutrition and outdoor exercise, etc.

The illusion that other fields or career choices could be more rewarding because of the potential to make more money. **Survey:** 

I think this survey hits the main ones: parents' attitudes, transportation, funding, and staffing.

I think you need to offer a 'not applicable' option in answer to your questions.

I believe they've all been addressed in this survey.

Miscellaneous:

I hope you are surveying the public because my perspective is limited and may not really reflect key challenges.

How many children, parents and teachers know what the FWS is? Answer 5% Let's start with this reality!

FWS rules and policies (for example, using a government vehicle or boat to access a part of the NWR)...

#### Questions Regarding Attitudes about Connecting Children with Nature

Respondents were asked to indicate their level of agreement with the following statements regarding the FWS and connecting children with nature. The number of respondents providing an answer for each statement differs. The n is provided with each statement below.

	Strongly disagree (1)	Slightly disagree (2)	Neither agree nor disagree (3)	Slightly agree (4)	Strongly agree (5)
Connecting children with nature is important to the future of the Fish and Wildlife Service. (n = 314,  average = 5)	<.05%	1%	4%	8%	87%
Conservation and environmental education outreach activities are important to achieving the overall mission of the FWS. n = 313, average = 5)	<.05%	1%	4%	13%	82%
Emphasis on connecting children with nature is not consistent with the position of "Wildlife first." (n = 311,  average = 2)	50%	25%	12%	8%	5%
The goal of connecting children with nature should be given higher priority within the Fish and Wildlife Service. ( $n = 312$ , average = 4)	3%	6%	20%	26%	46%
The Fish and Wildlife Service dedicates adequate resources (staffing, time, materials) to efforts to connect children with nature. (n = 314, average = 2)	33%	30%	19%	14%	6%
The Fish and Wildlife Service recognizes and rewards efforts to connect children with nature. $(n = 314, \text{ average} = 3)$	11%	20%	31%	27%	11%

#### **Demographic Questions**

Our demographic questions help us understand to what extent the participants in this survey are representative of employees of the Fish and Wildlife Service.

#### What is your employment status with the Fish and Wildlife Service? (*n* = 315)

Permanent Federal Employee	96%
Term/Temporary Federal Employee	3%
Other	1%

#### What is your gender? (n = 312)

Male	41%
Female	59%

#### How long have you worked for the U.S. Fish and Wildlife Service? (n = 315)

Less than 1 year	1–3 years	4–8 years	9–13 years	14–17 years	18 or more years
	10%	16%	28%	13%	33%

#### How long have you worked at your current duty station? (n = 311)

Less than 1 year	1–3 years	4–8 years	9–13 years	14–17 years	18 or more years
5%	23%	27%	24%	11%	10%

#### How long have you worked in your current position? (n = 314)

Less than 1 year	1–3 years	4–8 years	9–13 years	14–17 years	18 or more years
7%	26%	30%	21%	7%	9%

#### In which region is your duty station? (n = 320)

1	10%
2	9%
3	13%
4	16%
5	11%
6	11%
7	5%
8	9%
9	17%

## What is your WG/GS/GM level? (n = 310)

-	
4	<.05%
5	1%
6	3%
7	6%
8	<.05%
9	11%
11	23%
12	26%
13	21%
14	8%
15	2%

#### Do you subscribe to the VOICES listserv? (n = 304)

Yes	44%
No	56%

#### What is the numerical code for your Job Series? (examples: 401, 023, 1713)

We formatted this question as an open-ended response because providing all possible options on a checklist would have made a lengthy response drop list. Responses were provided by 295 survey respondents. However, a few of them provided responses such as question marks or the words "don't know" that were not indicative of a job series. There were 47 different job series codes provided. The eleven most frequent responses were:

0401 (General Biological Science)	24%
0025 (Park Ranger)	15%
0485 (Wildlife Refuge Management)	14%
0486 (Wildlife Biology)	5%
0023 (Outdoor Recreation Planning)	4%
0303 (Miscellaneous Clerk and Assistant)	4%
0482 (Fishery Biology)	4%
2210 (Information Technology Management)	2%
1701 (General Education and Training)	2%
1001 (General Arts and Information)	2%
1035 (Public Affairs)	2%

#### **General Comments**

Survey respondents were provided with the opportunity to comment as they wished at the end of the survey. Their responses have been sorted into topical categories. We excluded the few comments in which people indicated they had no comments or simply typed "n/a." The comments are provided in their entirety. The alterations made to the comments include correction of spelling and grammar and removal of respondent names and contact information (to protect respondent identity since this is a publicly available document). In some comments, respondents addressed several different topics. We split the comments into segments so that each addressed only one topic. The presence of ellipses indicates that the comment was separated from another part of a single response.

# If you have any thoughts or comments about issues regarding connecting children with nature OR comments about this survey, please leave them here. We value your feedback. (n = 103)

The comments provided to this last open-ended question cover a variety of topics, many of which were also addressed in earlier open-ended questions. Many comments address concerns specific to the FWS such as the priority placed on connecting children with nature, how resources are allocated to this initiative, and suggestions for what the FWS should do to accomplish the goal of connecting children with nature. Other comments address the need to define "connecting" children with nature more concretely; finally, some comments address which groups—children, parents, or other nontraditional visitor groups—should be the focus of outreach efforts. There were comments on the survey, both positive and negative. Some comments did not align with other topics and are grouped together as miscellaneous comments.

#### FWS priority:

Outreach/education (e.g., connecting children with nature) should be a part of any professional biologist job component (e.g., 401, 480, 482, 485, 486, etc.) whether they be in the WO, ROs, or Field Stations. It should be mandatory at field stations (e.g., NWRS & NFHS) where the Service has lands, buildings, and other assets (e.g., ponds) that can be dedicated to outreach/education activities. Besides annual volunteer numbers, every Region should collect this outreach/education information for the Service.

If the FWS is serious about connecting children with nature, it needs to be serious about funding the program. If it is a priority it should be a GPRA/performance goal and it should be funded.

Connecting children with nature is an important mission of the FWS; however, it needs to be in balance with the many other important missions of the Service. It should not be left behind nor should it displace our other important missions.

I think we need Regional positions to address Youth/CPwN Initiatives. Most folks are participating in this effort as time permits, which minimizes the effectiveness of implementing this initiative.

The FWS is poised to be the leading federal agency to connect people, especially children, to the natural world. Emphasis on this aspect should come from the top executives right down to the employee in the field, and everyone in between. An attitude of including children in our work should be a standard operating procedure, and new and creative ways of reaching this goal will not only strengthen our future constituents, but will enliven and revive our workforce to produce even higher results.

I feel that the FWS makes the CPWN Initiative a priority in that it was mentioned often by our former director Dale Hall. I think it was a creative idea of the FWS to encourage all FWS employees to use 8 hours or more to help these other entities with existing projects. That way the FWS is not re-inventing the wheel and rather is assisting ongoing efforts by others. However, the vast majority of FWS employees do not participate because they feel that they don't have enough time....

The FWS needs to actually decide what its priorities are and then support them adequately. I think connecting people with nature is important, but we have not clearly defined what that means, what success looks like and how we reach that success.

I really cannot at this time see any great value to this effort. It seems like there are too many people in FWS sitting at desks and computers. This also seems like a very top heavy organization. At my station I see much of the work at the NWR done by volunteers and even foreign contract labor. I don't really see the value of expending effort to connect kids with nature when they may wind up wanting to work with nature. There are a lot of smart hard working young people that come thru where I work - but no permanent jobs appear.

I am glad there is a push happening within the FWS - CPWN I do for my job on a daily basis. The Give 8 outdoors for AK is the only tracking tool I know right now but it doesn't really fall under an 'award'

If we seek to pursue this in a substantial way, I believe perhaps we should ratchet up the target/goals; for example, not piecemeal, but systemic: e.g., what proportion of U.S. schools can we get to implement a FWS generated curricula; and e.g., lobby at all levels, as appropriate, to have ecology as a fundamental part of the general curriculum (for ALL students throughout USA)

...the questions posed brought forth a strong and purposeful response as to me, connecting children and nature is a key and elemental component of our mission.

...This is an initiative that we should not let fall by the wayside when administrations change and new buzz words come into vogue....

Environmental Education or connecting people with nature, whatever you wish to call it has always been a low priority to the FWS in general due to lack of funding.

I thought the initiative was 'Connecting PEOPLE with Nature' so I'm a bit confused as to why this survey is so narrow. Did the initiative change and we are not informed in Region 3? Also, I don't think there is a clear plan on what the Regions are supposed to be doing to support the Connecting People with Nature or the Connecting Children with Nature....

#### Lack of resources:

National Wetlands Inventory had a kids and educators page (that I developed) but no longer has one. I don't have the time to develop content or keep the links current. We also don't have the staff time to participate in or resources to pay for handouts for kids events or to give out at Refuges. I target my outreach to other Federal, State, and Tribal agencies. If we were able to hire a web person this year, kids would be my second priority (after our 50 million customers) and we would put up a page on the wonders of wetlands.

It is wonderful that one of the priorities of the FWS is becoming Connecting People to Nature because the future of the Fish and Wildlife Service depends on it. However, it would be great if more Visitor Services positions could be added at the field level. So many Refuges do not even have 1 person dedicated to Visitor Services and they will have a hard time achieving these goals.

Every station should have a person dedicated to connecting children with nature since schools and parents are not filling the void. Environmental education should not be a collateral duty which it is on many stations.

Funding for Connecting People with Nature needs to be equally distributed among ALL offices - make it a required WAG. Don't just fund Refuges, ES would like to participate.

If FWS wants connecting children/people with nature to be a priority, then the agency needs to provide dedicated funding to the program. Otherwise, it just becomes another duty as assigned, and we all have enough of those to do.

We turn school groups away every year because we do not have the staff or facilities to accommodate them all. It is heartbreaking.

See my comments earlier in the survey. We are constantly asked to do MORE with less funding and insufficient staff. We could do such wonderful things if this situation was improved.

I'm located at a mid-size Refuge Complex, consisting of 3 NWRs, and in my opinion it is a disgrace that we do not have one visitor services position on staff, especially considering the large visitor use programs we offer at our refuges. In order to promote these priorities within the Service, we need the staff to do it. Long gone are the days when we can expect our Managers to do it all, Visitor Services included. I manage these programs on my complex because I have no one else to do it, but mostly because I value them and understand their importance to wildlife conservation in the long term. If I had someone on my staff dedicated to Visitor Services we could do so much more outreach, involving the community in what we do, maintaining a volunteer program, and connecting children with nature.

Having standard portable tabletop or popup floor displays and banners, with associated literature, handouts on the program, available from state FWO or ES offices for field station to 'check-out' on loan would be very helpful for supporting outreach efforts on this directive. We need the products to help get the word/message out to public but with no station funds, it needs to come from a higher level if we are expected to promote the LGO and other programs.

The FWS does not have enough resources to be effective at connecting children with nature on a national scale. Even with training and changes in priorities, large scale success is unlikely. We can be a partner in such efforts and should be.

\$\$ is very tough, and will be for years... We just have so much ES regulatory work (listing, consultation, lawsuits, etc) that I could not ask my employees to develop and implement and participate in outreach at this time....

...We have not received very much support from our Regional Office due to the serious lack of funding. We do what we can at this station. We work nights weekends with our volunteers because we believe that Environmental Education is important, not because we are told to do these programs by our Regional Office. We lost two Visitor Services positions in our state and currently have no permanent or term staff in SD to assist with any Education Outreach efforts. This is due to lack of funding for all positions, and the first positions not to be filled after a vacancy are entry level management positions and Visitor Services positions. Due to the economy I see this very unlikely to change in the near future, which is a shame.

I would love to participate in Connecting Children w/Nature (or any other) outreach activities, but am not given the opportunity. In general, the Refuges that we manage do not run many programs, which I think is a shame.

#### Specialized staff:

I think that the Service's commitment to connecting children with nature is good, but I think leaving it as a job for all of us as a collateral duty with 8 hours a time is not the best approach. These activities should be planned and conducted by trained professionals. There is little unity and strategy behind the current efforts.

... The key is to get engaging individuals in environmental education roles.

People who are hired to specifically to do outreach and education should have a visible passion, if not they need to move on. It is frustrating to have to collaborate with someone you don't believe should have their position let alone believe they are inspiring the youth!

Stations without a position to Connect Children with Nature are very limited to what can be accomplished. The larger stations have several positions, however some have none. It falls on other staff to connect children to nature.

I believe connecting Children with Nature is very important and I enjoy the opportunities that I have while in my current position. However, there is an expectation within the Service to provide these opportunities, and without the specialized staff, opportunities are probably not as numerous as they could be; especially given the amount of requests we have.

...I support EE programs, but FWS should invest in hiring more staff with those specific qualifications, freeing up staff biologists to do the work they were originally hired to do.

#### **Training:**

An employee who is expected to do public outreach to children and the public as any part of their job should have training available to them from experts in programs to interest children especially, and the public in general, in nature.

...I hope that this new emphasis also leads to greater appreciation for and emphasis on professionalism in the field of EE and interpretation in FWS. I would like to see more training courses offered for employees in these fields.

#### Lack of support within FWS:

Before there was an FWS initiative to do this, it was what we were doing anyway at this station. It is a good thing, though, to see it receive extra emphasis and support, because some in the agency have regarded it as a 'frill', and not really necessary.... The project leader or other station lead ultimately determines the amount of outreach conducted at a field station.

Lack of support from the biological community within the service

...This program is a great one and the WO leadership has to be commended in trying to implement, which is passed down to the RO. At the local level there appears to be resistance within my office when people are seeking out ways to be involved with this great program. When ever it is brought up Mgmt is always thinking of someone goofing off for the day. Never an atta boy go out and do great things, encouragement, or here are some ways to get involved etc, but always questioning if it is the best use of time. After awhile just give up because it is unproductive! No vision within the office, which is hard to break. Can understand in a way, with all the administrivia that keeps being pushed down to the field such as contracts, etc that have to be done, these new programs just don't fit into an 10 or 12 hour days and 40-50 hr work weeks. Extra time spent on just getting the things done that are required are not recognized or appreciated.

...Many of us do a lot of individual outreach without much support from our respective offices because we have a passion and vision for the importance of teaching the youth about the environment. I am very active outside my work in a variety of environmental programs in the evenings and weekends.

#### Impact on future:

I've long held the belief that we need to foster a love of nature in our youth if our public lands are to survive in the future and have based all my contacts with the public on this premise. I'm glad to see this becoming a tenet of the government. Connecting children to nature IS our future!!

I believe how well we connect children to nature today will have a direct impact on the USFWS tomorrow. These are the people that will either determine Refuges are places to treasure or some disconnected place that is not needed anymore.

Yes, the future of FWS relies on connecting children with nature. They are our future leaders and voters. If they are not taught how to appreciate nature, they surely won't support it in adulthood.

...We just have so much ES regulatory work (listing, consultation, lawsuits, etc) that I could not ask my employees to develop and implement and participate in outreach at this time. That said, I agree that this sort of outreach is absolutely essential and critical to recovery of species, as our country becomes more and more urbanized - living 'on' the land, rather than 'off' the land.

... The future of wildlife depends on a strong and on-going effort to get young people connected with nature.

Too often we invest our time and efforts in short-term returns. Connecting children with nature is a long-term but very vital investment. We need to push back the knee-jerk policies and really really focus on what will be beneficial for the future of our resources

#### **Changing priorities:**

Attitudes, beliefs and values pertaining to connecting children with nature tend to change with the prevailing wind. Feel once we have a direction and we embark on it - it changes. Again.

#### Need for focused effort:

We need to get moving on this initiative. My fear is that if the administration changes during the next election, we will lose support for youth initiatives. If that is the case, all the extra positions and staffing (highly graded positions) we are currently working to fill could be a drain on our Service budget. This is a Secretary Salazar project, and a change of administration or change of Secretary could mean the funding dissolves. We will be left with many unfunded staff in the education and outreach field. I hope this does not happen, but it is something I envision might happen.

...We have done a good job of identifying a challenge and laying the foundation for solving it. Let's continue concerted action and get down the road to success.

#### Existing program:

CCWN is very valuable for children, and for adults as well.

The Give 8 program has allowed us to have more opportunities to reach out to the public and provide educational opportunities for children. We need to make this more of a focus and allow staff to do these activities more often...

The Connecting Children with Nature Program allows me to volunteer in the schools with my kids. I love this opportunity and am helping my daughter's preschool teacher set up a 2-week summer camp: 'Nature Enthusiast: No Child Left Inside'. Before this program became an FWS priority, I did not have supervisory support to spend time on outreach. Now, not only do I have the 'go-ahead' because of the policy, there are also GREAT resources available for kids of all ages. THANK YOU VERY MUCH!

#### **Support local efforts:**

Connecting children with nature must be done on local and individual levels. I feel that agencies can do the greatest good by providing small grants or 'seed money' to help LOCAL efforts. For example, bus money for a field trip.

The fish and wildlife service needs to promote local employee work groups that promote local children and nature programs. Once these local support groups have successes they need a way to share their ideas with other employees on a national level. Then maybe a national convention for the most outstanding local groups could be recognized and rewarded for their successes. This could inspire employees to promote their kids in nature ideas!

...FWS could support local efforts by attending outreach efforts by others (e.g., school programs, summer camps, 4H, local hiking grps). We could also help \$\$ these efforts, provide grants so that state or private sector could do most of the work, FWS employees could participate as time allows....

#### Need for evaluation:

...We need more methods for measuring success and our short falls. This data is critical to make constructive and productive decisions that ultimately can get more kids OUTSIDE.

...Little proof that our efforts with children make future changes happen when they grow up - it's assumed and it's a huge money sink. Sure there are benefits to going outside, but will this change our funding or staffing needs anytime soon - no! This is a very unpopular opinion but NOAA Estuaries programs did it 10 yrs ago and look at their voter support base.

#### What FWS should do...:

My experience has been that digital photography is a popular and successful way of connecting people with nature. I recommend additional educational opportunities in this regard for children as well as adults.

I strongly urge the FWS to give Fishery Friends groups the same recognition that Refuge Friends groups receive. Our Fishery Friends group is critical to connecting children and nature. We have been working on several major projects that wouldn't have been completed without Friends. They provide not only funding for our projects, but also time, labor, and advice. The Refuge system seems to have more funding for outreach with children than the Fisheries offices from my experience so Friends are critical to connecting kids with nature.

We need to establish more EE programs around NWRs modeled after the Prairie Wetlands Learning Center - Fergus Falls WMD.

Children (along with the rest of us) learn best by doing. Give them a volunteer job or a project to do, anything useful, and they'll learn more than you hoped they would learn.

Connecting 'Children with Nature' needs a more prominent role at this hatchery. Perhaps a 1 or 2 hour, weekly educational/training role for young high school age students seeking a future role as a fishery/wildlife biologist, a maintenance worker position, or an administrative position.

...I feel that FWS could help environmental education entities more by providing funding. As I work with NGOs and government agencies who are also working to connect children with nature, the biggest obstacle is almost always lack of funding. I have long advocated that the FWS narrow our focus and find a niche in the environmental education community and fill a gap. Right now we are so varied with the schoolyard habitat program, encouraging staff to spend 8 hours a year on the CPWN initiative, National Wildlife Refuge programs etc., that FWS is not very successful in any of our attempts. For example, one gap we could fill is providing transportation for school children to open space areas. I hear many environmental education folks and teachers mention that transportation for school children is always an issue. FWS could start a grant program that specifically provides funds to schools to help pay for buses. There are many other gaps we could fill as well, the transportation gap is just one example.

We should also be educating children about the impacts of climate change on nature, to complete the loop. Let them know that this wonderful outdoors is threatened at the system level.

... We also need to be strategic in how we work to connect people with nature to protect our natural resources.

There seems to be a tremendous amount of misunderstanding about what environmental education is and isn't. I think focused efforts to establish a connection for children with nature through well thought out plans and curriculum will do far more to advance the cause then having staff with no EE background traveling to local schools for impromptu classroom spiels about wildlife. The leadership of FWS would be well served to educate its own employees about what makes a meaningful EE program and how to prepare one for their local areas. I get inundated with staff requests for brochures and coloring books they can take to a local school (usually attended by one of their kids), but they have no idea how their presentation would link to curriculum standards, etc....

...I think we need to focus more on getting children out and the unstructured activities. Also, we need to start hiring younger people!!

...2. Resist the temptation to convert a good concept into a bureaucracy (org charts, endless meeting, acronyms, etc.). Keep the Louv vision. 3. There needs to be a 'cultural shift' throughout the Fish and Wildlife Service, a completely new way of thinking about sustainability of our mission in an era of generational 'tune-out' on the environment. If 'Children and Nature' becomes a pigeonholed office deep down in some obscure division, we have lost the battle.

Within reasonable sideboards, the Service should be doing everything it can to make our facilities, whether refuges or hatcheries, more inviting to children.

I think participating in the 'Connecting Children with Nature' should be entirely VOLUNTARY, and definitely not a primary focus of our duties. We have an entire Outreach division that can provide such information.

We need to get kids and their parents OUTSIDE. Fancy web sites w/ cool games, lots of \$\$\$, and cumbersome plans don't do the job. We need to get off our backsides, oil our boots and take kids backpacking, hiking, rafting, playing on a river bank, building tree houses, mucking in tidepools, jumping in piles of leaves, flying kites - you get the idea.

...FWS could have ROs develop education/outreach materials for each FO....

FWS should target actual decisionmakers to make change - high school and up (license buyers, voters, planners,

councilmembers, etc.) should be our first target....

...Let's do better visitor services and EE not more.

We need to promote staff using their volunteer efforts to work toward this goal and recognize those efforts.

...We need to develop programs such as Community Corps, where we have a focused effort to be visible in the community providing environmental outreach and programs at schools and local events....

...I already commented earlier about my thoughts about how to be successful by focusing on repeat visits with the same people/children rather then one-time events. We need to change the philosophy within. I believe there are so many offices involved now that don't understand the 'science' behind 'connecting people with nature'. I think they think, 'Oh boy, look how great we are we just had 250 people show up to watch us talk about fish and mussels' I think we would be so much better off if we gave credit to the folks that are truly helping a child or adults connect with nature more often than a one-time event.

#### **Defining "connection":**

Connecting children with nature is NOT teaching children about nature. Providing a place and an opportunity for children to experience nature on their own terms will allow their connection to develop and grow.

I imagine that most USFWS consider connecting children with nature to be mainly on refuges. That is NOT the nature they can learn and get close to. Show them how to look at their back yard and school yards.

Many persons who have connected with nature did so as children who had opportunity near their homes or in their back yards. Need that opportunity in every child and they can graduate to larger landscapes and wilder country. Logistics!

#### Focus on children:

1. Keep your focus on the 'children' in 'children and nature' (i.e., the next generation, rather than existing generations). ...

I don't really know what is happening with this issue. I have little understanding of the efforts in the field or the efforts of NCTC. I also think that we tend to focus on kids in 4th grade and up. This is when you can teach science. But if we want to touch their hearts then environment needs to be integrated into the arts as well. It is also the preschoolers that are naturally curious and open so if we want to get their attention when they are open we can't start too soon.

I think child-based programs are important....

I believe a big push should be made to encourage children to partake in conservation activities and conservation education. These children will make up the future work force of the FWS. The more inclined a child is to look toward preservation as a strategy, the likelihood of making sweeping environmental improvements in the future are much greater. Education should always be #1.

I think this a great idea and much needed. Please let me know what I can do to help. It's very important, this is their future. As adults we should be very concerned about the state of affairs that we are leaving for our children. We have to keep the CIRCLE OF LIFE rotating.

I do not think that management truly understands the goal of connecting children with nature. This is evidenced in that the phrase 'children and nature' has been replaced in many instances with 'people and the environment'. I have worked in EE for over 20 years and my experience has taught me that we really do need to focus on children and make the connection early. Young children are very receptive to nature. A strong connection at an early age will help kids to balance their indoor and outdoor interests as they grow older. It's very difficult to get a teenager to unplug and appreciate the outdoors if they do not have any previous experience....

In my previous position in Alaska I spent 1/2 my time working with children and in EE programs. Alaska put a much higher priority on EE programs than Region 6. Education is the key to our success. Education includes both within the service and outside the service but especially needs to target the next generation.

#### Focus on parents/families:

I prefer the term Connecting People with Nature, not just children. If we don't target the parents as well, how will we get parents to bring their children to our refuges or to strike out on their own to local parks, National Forests, National Parks, etc.?

In addition to EE efforts by refuges, we must also provide significant visitor opportunities on refuges in the form of hiking, canoeing, bicycling, photography, etc. to get families with kids out more than one school field trip per year. Too often we close areas on refuges to the public without sound biological reasons to do so.

In order to get children outdoors we have to get families outdoors.

Nontraditional groups:

I would like to see more attention paid to 'connecting' adults and children from different cultural/social groups, and particularly from the many subgroups of the rapidly growing Latino population.

We need to take a serious look at reality. In 20 years, children will be more urban, more tied to technology and more people of color. If our approach to environmental education is still focused on white suburban middle class kids whose parents hunt and fish, we are kidding ourselves. If the Service employees delivering our message to these kids are 95% white middle class, over 40 years old, who grew up hunting and fishing, we are also kidding ourselves!

Ensure that children with disabilities are factored into whatever plans and actions that result from this survey or other endeavors to connect children with nature.

Try to work outside the box to bring in underserved communities! Enviro-ed classes and Scout groups will go to the refuges anyway, we need more converts to outdoor and environmental interests; preaching to the choir is an inefficient way to grow support.

I wonder why we limit it to children - maybe that's a big enough task! But every single person, no matter what age, deserves opportunities to connect with nature. I think our field station programs reach all ages, which is great....

Survey:

I think it's important to see the outcome of this study -- the results, recommendations, actions taken by management at all levels of the FWS. Thank you so much.

Some of the survey questions should have been given an 'I don't know question.' On a few questions this option should have been given.

Survey way too long and detailed.

Good survey, although the 'internal/external' evaluation questions were a bit confusing to rate since I wasn't sure if I should be speaking for myself as an individual in my job or for the Service efforts in general.

I know surveys are difficult to design, having done several. In this one, some questions are difficult to answer because what I think about my personal situation is different than what I think globally. Also, be careful of providing examples, as they may influence how someone responds. For instance, whatever the question was that had fishing derbies as an example: the question had merit, but I don't consider fishing derbies to have much to do with the values we are trying to impart to future generations.

Nice work on the survey questions and format. I'd be interested in seeing the results.

The internal/external questions were confusing and difficult to answer. It is nearly impossible to separate personal and professional life when considering those questions. That section would benefit from some more instructions and a brief explanation of what it is you are trying to measure.

I'm very glad you are doing the survey. I hope the results will be shared with senior management.

My position is one of team leadership in which I direct/encourage other Service personnel, but without having the 'supervisory' role and responsibilities. I would suggest taking this into account for future surveys as other Service employees might be in the same situation that I am and any questions dealing with 'supervision' in the strictest sense of the word would immediately cause us to have to answer no.

Thank You for the opportunity to comment

Repeated questionnaires are not necessary. Also, clear up the security issues. Having to indicate that I want to see all the secure and non-secure info on every screen is a pain. Also, quit sending so many reminders. If you have a deadline, give people the time to complete the survey w/o sending more and more emails

I'm not a fan of children, don't have any, and don't want to deal with any. These surveys are a waste of time. If I don't answer the first time, don't send me more unnecessary emails

Would love to share this survey and results with our state Get Outdoors Florida! organization.

Select only one on the issues section was not a good question; they were all valid issues.

Glad this survey was done. We need to know where the needs are in order to move the FWS forward in conservation and environmental education....

Thank you for hosting this survey....

... Thanks for the opportunity for input.

I cannot thank you enough for asking for field input....

Fix the survey so the secure box doesn't pop up each time you go to the next screen....

I did not feel comfortable (guessing in many cases) answering the questions about issues preventing kids from connecting with nature; my answers may not reflect reality about the challenges. Thank you for the opportunity to add my voice to this serious issue - who will be tomorrow's conservationist?...

Very important survey and difficult for me not to either strongly agree or strongly disagree where appropriate ...

#### Miscellaneous:

The Service might want to consider its mission and the 'Connecting People to Nature' challenge as a 'Wicked Problem.' The concept of 'wicked problems' was originally proposed by H. J. Rittel and M. M. Webber in their 1973 publication, "Dilemmas in a General Theory of Planning". The term is used to describe a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing information and requirements that are often difficult to recognize. Rittel and Webber pointed out that in solving a wicked problem, the solution of one aspect may reveal another, more complex problem. Rittel and Webber suggested that the following rules define the form of a wicked problem: There is no definitive formulation of a wicked problem; Wicked problems have no stopping rule; Solutions to wicked problems are not true-orfalse, but good-or-bad; There is no immediate and no ultimate test of a solution to a wicked problem; Every solution to a wicked problem is a 'one-shot operation'; because there is no opportunity to learn by trial-and-error, every attempt counts significantly. Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions. Every wicked problem is essentially unique; and Every wicked problem can be considered to be a symptom of another problem. "Wicked Problems" are multidimensional, and may include some, or all of the following components: Economics, ideology, politics, religion, morals, ethics, culture, institutions, social issues, equity, education, and environment. A few examples? Climate change, energy supplies, loss of biodiversity, population growth, emerging resource scarcities, ecosystem degradation, invasive species, national security, and several other emerging threats. While we can readily identify roles for our agency in the conservation of biological resources there is a need to begin defining the relationship of our mission to a much larger conservation challenge - Ourselves. Why? Our collective behaviors are simply not sustainable. Sustainability: a process or state that can be maintained at a certain level indefinitely. The term, in its environmental usage, refers to the potential of vital ecological support systems, such as the planet's climatic system, and the ecosystem services provided by biodiversity to persist over time. It also includes the long-term viability of human activities such as agriculture, industry, forestry, and fisheries. Sustainability is the capacity of human communities and the various systems on which they depend to endure together over time. Addressing the issue of the sustainability of human communities as part of our FWS mission will require thinking about that mission within the framework of "Wicked Problems." Why do we need to do this? Convergence. Convergence: an adjective meaning the tendency of objects or events to move toward one point, or to approach one another. Remember those "Wicked Problems?" If they converge, even if only a few of them do, and there is an increasing probability that they will, then humanity may be looking at a "Perfect Ecological Storm." Without sustainability, the future will be one of degraded environments, destructive economics, dysfunctional societies, and no collective capacity to endure. Endangered species may become so commonplace that our program will become irrelevant in an increasingly complex array of crises. "The most important thing we have to realize, if we really do want to save the planet for our great-grandchildren with a quality of life not too different from what we have today is that we've got to stop leaving the decisions up to the decision makers. We've got to become the decision makers. We've got to realize that what we do each day really does impact the world."-Attribution: Jane Goodall. All "Wicked Problems" have one thing in common. Homo sapiens. We are creating an [response truncated due to data field limit]

Encourage Service to use distance learning as a delivery method for connecting children with nature message I chose not to put the correct region for the sake of anonymity.

...Also, I hope we'll be careful with our language. For instance, I'd rather hear us talk about 'nature' more often, rather than 'natural resources.' Nature is the fabric and lifeblood of the planet, of which we are a part. I think it's wise that we avoid talking and writing about nature and the outdoors as merely a bundle of resources for humans to use. It's good to talk about human use but also go beyond that. Louv talks about the importance of time in nature for a person's spiritual growth. When talking about all life, a bit of humility, along with respect and joy, is appropriate. Hope we'll always keep that in mind.

Parents and kids are busy! Nature activities must become a priority for their time somehow. It has to be desirable enough to be put closer to the top of their 'to do' list.

Until parents and all schools recognize the value and importance of EE and allow teachers to participate in EE events and workshops AND provide funds to do EE and go on field trips; it will be a downhill battle.

Never heard of the Voices listserv? If someone in the agency has knowledge of this they have not passed down the info....

We try to work some programs with the public to keep our mission in their eyes. I rely on others in my office for the presentations. I just relay the information to the public.

### Summary

This report includes only descriptions of the responses to the questions asked on the survey. Until the main data analyses are complete, we can only offer preliminary summaries based on these statistics.

#### **Introductory Questions**

Most of the survey respondents indicated that they do perform conservation education, environmental education, or community outreach activities directed toward children. Of those who do engage in these activities, most of them are engaged in these activities for 1–25 percent of the time in an average week. Most frequently, respondents indicated that education and outreach activities are in their position descriptions and that they perform these activities. Some respondents indicated that education and outreach activities are not in their position description but that they perform these activities anyway. When asked why they do these activities when they are not required, the most frequent response was that respondents think these activities are important.

When asked about decisions they made regarding aspects of conservation/environmental education or outreach programming, respondents indicated most frequently that they do not make decisions about the allocation of funding or of staff time. Most respondents indicated they do make decisions about content and implementation of programming. While some respondents do supervise employees or volunteers who perform environmental education and outreach, most do not. More than half of the respondents volunteer in activities related to conservation or environmental education.

#### **Questions Regarding Definition of Connection**

We asked respondents to rate nine statements on the basis of their relevance to the FWS mission to connect people with nature. The statements described various possible outcomes of connecting people with nature and are listed in this report in the "Question Summaries" section. The most frequent response to seven of the nine statements was "Completely relevant" (rated 6 on a 6-point scale) with an average response of "Very relevant" (5 on a 6-point scale). A statement regarding increased participation in agency-sponsored outdoor programming received the same number of responses at two points on the scale—"Relevant" (4 on a 6-point scale) and "Completely relevant"—with an average rating of 4. A statement about health benefits such as physical fitness was most frequently rated "Relevant", also with an average rating of 4. The statements were diverse and the pattern of responses, which indicated that all the statements were viewed as relevant, could indicate that the respondents view the mission of connecting people with nature as encompassing a wide range of outcomes. However, the degree to which survey respondents are in agreement that the statements are relevant to the FWS mission cannot be determined without further analyses.

### **Questions Regarding Success with Outreach Efforts**

Respondents were asked about their perceptions of the success of both their own and the FWS' past and future efforts to connect children with nature. Most frequently, they judged both their own and the FWS' past efforts as being moderately successful (3 points on a 6-point scale). When asked how successful they believed their and the agency's future efforts would be, the most frequently selected response for both questions was "Successful"—4 points on a 6-point scale. Respondents seem to be anticipating increased success in future efforts to connect children with nature.

#### **Questions Regarding Barriers to Connecting Children with Nature**

We provided 10 issues that may present problems in connecting children with nature. When asked to select the one that creates the biggest problem, the most frequently selected option was staffing issues. We asked respondents to rate the 10 issues on how big a problem each created in efforts to connect children with nature. Based on the frequency of responses and the average responses, children's scheduling issues, parents' fears, children's lack of interest and comfort in the outdoors, and lack of information about effective techniques were viewed by survey respondents as only small problems. Parents' attitudes, practical issues, state educational standards, and funding were viewed as problems. Competition from technology and staffing issues were most frequently identified as being big problems; however, the average rating for these issues put them at the next lower level on the scale—that of "problem" as opposed to "big problem".

When respondents indicated that a particular issue was a problem, they were asked a series of additional questions about that problem to measure perceived change and controllability and to determine whether the respondent believed the issue to be internal or external in origin. Based on the frequencies and averages for the question on change in the next five years for these issues, respondents tend to believe that nine of the ten issues are likely to get worse. Only lack of information about the most effective techniques to connect children with nature was viewed as likely to improve.

We asked questions regarding direct and indirect effects on the issues to assess perceptions of controllability. Based on average responses, respondents perceived that they were slightly likely to be able to directly or indirectly affect children's schedules, competition from technology, state educational standards, funding, and staffing. Respondents perceived that they were somewhat likely to be able to directly or indirectly affect parents' fears, parents' attitudes, children's lack of interest and comfort in the outdoors, and lack of information about effective techniques. Respondents indicated they were slightly likely to be able to affect practical issues directly and somewhat likely to be able to affect practical issues directly and somewhat likely to be able to affect practical issues directly.

The results regarding perceived internality/externality of issues generally indicates that the ten issues are perceived as being predominantly external. On the basis of the most frequently selected responses, nine of the ten issues were perceived as "100% because of others." The exception was the issue lack of information about effective techniques for connecting children with nature. The most frequent response for this issue was "50% me, 50% others." However, the average response to the question of internality for each issue indicates that "100% because of others" was the average only for the issues of state educational standards and staffing issues. The eight other issues had an average response at the "25% me, 75% others" point on the response scale.

#### **Questions Regarding Attitudes about Connecting Children with Nature**

We asked respondents seven questions regarding their attitudes about the importance of connecting children with nature and the priority of this issue in the FWS. Respondents strongly agreed that connecting children with nature is important to the mission and the future of the FWS and they generally agreed—the most frequent response was "strongly agree" but the average response was "slightly agree"—that the goal of connecting children with nature should be given higher priority within FWS. Respondents strongly disagreed that connecting children with nature should not be a concern of the FWS. They generally disagreed—the most frequent response was "strongly disagree" but the average response was "slightly disagree"—that the FWS dedicates adequate resources (staffing, time, or materials) to efforts to connect children with nature and that connecting children with nature is inconsistent with the position of "wildlife first." When asked their agreement with a statement that the

FWS recognizes and rewards efforts to connect children with nature, the most frequent response was "neither agree nor disagree" but there were responses at each option on the response scale.

### **Demographic Questions**

The demographic questions on the survey indicated that the majority of respondents are employed as permanent federal employees in the FWS, 59% of respondents were female, and all regions participated in the survey. We asked three types of tenure questions: tenure with the FWS, tenure at current duty station, and tenure in current position. Respondents represented a wide range of tenure with the FWS. All respondents had been with the FWS for at least one year. The most frequent responses to each tenure question were that respondents had worked for the FWS for 18 or more years, been at their current duty station for 4–8 years, and had worked in their current position for 4–8 years. Respondents were from grade levels 4 to 15, and from 47 different job series. Fifty-six percent of the respondents reported that they participated in the VOICES electronic distribution list. While the individuals who were included in the survey sample and who responded to the survey are likely to be overrepresentative of those who participate in environmental education and outreach in comparison to the FWS as a whole, they are not limited in geographic or demographic representation.

### **Completion Report**

This report to respondents provides a preliminary summary of the results of the survey regarding connecting children with nature. Although the frequencies of responses and the average response for the questions are useful information, these summary statistics do not constitute the final analyses of the survey data. A thorough description of the survey and the complete data analyses will be provided in the completion report. The completion report will be made available as an U.S. Geological Survey Open-File Report.

### Acknowledgments

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