

1. Category Application/Project Overview

National Wildlife Federation (NWF) and its partner organization the Natural Learning Initiative (NLI) at North Carolina State University request a grant of \$192,000 from the National Urban and Community Forestry Challenge Cost-Share Grant Program to launch the Natural Play and Learning Areas Design Guidelines Project. The project employs an action-research model and represents an important collaboration and innovative program that will advance the role of urban and community forests in promoting physical and mental health in America's children by making trees, forests, and natural systems an integral part of the design of all of the urban places where children play and learn. The range of settings where the design guidelines will be applicable include residences, childcare centers, schools, museums, botanical gardens, arboreta, zoos, nature centers, parks, and public lands.

This proposal is motivated by mounting evidence that while children's health is in alarming decline, play and learning in nature brings mental, physical, and learning benefits to urban children. As such, play and learning environments present an underutilized opportunity to improve children's health by bringing trees and natural systems into their daily experience. With this effort, we will develop, pilot, evaluate, and distribute research-based design guidelines for natural play and learning areas. The action-research approach will result in the implementation of five pilot design projects as well as a post-occupancy evaluation to test the efficacy of the guidelines. With these case studies, we will also be able share our research findings about the most effective design content in a range of urban contexts.

2. Scope and Applicability/Justification

A. How this project addresses the intent of the category

We request support in the "Influence of Community and Urban Forests upon Public Health" category in order to develop, pilot, test, and distribute design guidelines for children's natural play and learning areas. As noted above, there is broad consensus in the scientific and public health community that time outdoors is essential to children's physical health and general wellbeing and protects children from a wide range of maladies associated with inactive indoor childhoods: obesity, diabetes, rickets, attention disorders, and depression. Today's generation of "indoor children"—spending on average seven and a half hours a day using television, internet, video games, and cell phones—is missing the physical, emotional, and developmental benefits of active outdoor play in natural settings. Research indicates that when children play and learn in nature, they do so with more vigor, engagement, imagination, and cooperation than children playing in wholly artificial environments and that symptoms of attention deficit and depression are reduced. Experts agree that children need access to nature the same way that they need good nutrition and adequate sleep. Our project will help restore children's relationship with nature by bringing it back to the play and learning spaces of everyday life.

NWF's principal collaborator in the project is NLI at North Carolina State University, which is led by Professor Robin Moore who has designed dozens of natural play and learning areas and has documented their health benefits in research projects funded by the Robert Wood Johnson Foundation and Blue Cross Blue Shield Foundation of North Carolina. As demonstrated in the attached literature review and in the words of leading advocate and author Dr. Howard

Frumkin, "we know enough to act" on initiatives that will increase children's contact with nature.

The guidelines will advance urban forestry and encourage the use of trees by identifying the benefits and addressing the barriers of tree planting in children's play and learning environments. Trees are underutilized in children's play environments because their benefits are not widely appreciated and because guidance is not readily available on how to use trees in play environments. Research demonstrates that trees (even small ones) provide significant shade benefits to children of shorter stature who are often underestimated by taller adults; offer important gross motor benefits through climbing affordances; provide stimulating play materials; spark creative play; and can provide opportunities for learning about the role of trees in ecosystems and human culture, economy, and history. Our guidelines will address issues related to tree selection by identifying criteria to consider in order to maximize the play and learning value of trees (such as texture and smell, edibility and toxicity, climbing affordances, and species of regional historical and cultural significance). In addition, they will address tree placement considerations, such as avoidance of fall zones and maximization of shade benefits, and management issues, such as soil compaction.

The guidelines will be developed in parallel with the design of five pilot projects to be constructed with funds provided by partner organizations (see attached letters.) These pilots were selected for geographical distribution (Michigan, Mississippi, New Mexico, and Texas) and a variety of institutional settings (parks, nature centers, museums, and childcare centers). This diversity of pilot locations along with the diversity and reach of our 15-member project steering committee, will boost effective dissemination and utilization of the guidelines.

B. Objectives

The project has three principal objectives in the funding period:

1. Develop comprehensive guidelines for designing and managing natural environments installed where children play and learn in their daily lives, addressing various issues, such as plant and tree selection and placement, management of the living elements of the system, compliance with accessibility and safety requirements, and liability issues.
2. Promote the endorsement and utilization of these guidelines by professional associations, governments, regulatory bodies, and others by leveraging our steering committee organizations' ability to publicize them through their professional networks and at conferences. Utilization will also be promoted by working with partners on the design, construction, and evaluation of pilot demonstration natural play and learning areas in Michigan, Mississippi, New Mexico, and Texas.
3. Develop a vibrant and user-friendly website that will publicize the guidelines free of charge and allow adopters to register the natural areas that are constructed.

C & D. Target audience and benefit to national organizations that can utilize our guidelines

The target audience for our project includes organizations that build and manage children's play and learning environments. To reach this audience effectively, representatives of these organizations assumed a governance role on the project steering committee at a June 2009 meeting. Steering committee members include NWF and NLI as well as the American Society of

Landscape Architects, Chicago Park District, Children & Nature Network, City Park Alliance, Keep America Beautiful, Head Start Body Start National Center for Physical Development and Outdoor Play, National Association for the Education of Young Children, the North American Association of Environmental Educators, National Association of State Park Directors, the National Recreation and Parks Association, and several federal agencies.

The project will benefit our target audience by providing them with research-based design guidelines that address all of the common issues that arise when designing a natural play and learning area, such as plant selection and placement, use of water features, and management and liability concerns. At present, organizations that wish to construct a natural play area must hire a landscape architect and resolve these issues on an ad hoc basis. By collecting and synthesizing best practices in the field, the design guidelines will lower cost and reduce uncertainty to increase confidence in natural play areas as a practical alternative to traditional structures.

E. Why the project should be done now

Children's health is at risk as evidenced by the childhood obesity epidemic. To address this, youth must be motivated to spend more time outdoors and a confluence of factors must be overcome. Our guidelines can help by providing a powerful addition to the interdisciplinary/inter-professional toolbox already taking shape in many areas of the country. There is a growing demand among parks, childcare, and education professionals for guidance in creating natural play areas, which this project will provide. Many of the project steering committee members have made important contributions to the field of natural play area design, and we share a common conviction that in order to meet the challenge of naturalizing children's environments at a transformative scale, we must develop easily accessible open-source design guidelines that are available to the public without cost.

3. Literature Review

American children face an alarming array of health problems. The prevalence of overweight children ages 6 to 11 has more than doubled in the last 20 years, increasing to 18.8% in 2004, and the rate among adolescents has more than tripled (CDC 2007). Overweight and obese children suffer from a variety of health problems, including higher risks of cardiovascular disease, diabetes, bone and joint problems, and sleep apnea (Ogden 2006). In fact, these health problems are so severe that researchers warn of the possibility that for the first time in American history, life expectancy may actually *decrease* because of the health impacts of the current childhood obesity epidemic (Olshansky et al 2005). Additionally, in the area of mental health, over two million children in the United States have been diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD) (Louv 2005).

Many factors have led to the childhood obesity crisis, one of which has been the emergence of the 'indoor child' who has replaced 'green time' with 'screen time.' Today's children spend an average of 7.5 hours a day using media, including TV, computers, and music players—almost a full-time job (Rideout 2010). More time in front of computers and televisions means less time outdoors. A study documents a 50% drop in children's outdoor time over the last 20 years; now children ages 3 to 12 spend only 1% of their time outdoors compared to 27% of their time watching TV (Juster 2004).

PROPOSAL COVER SHEET
Prepared by National Wildlife Federation, for:

2011 U.S. Forest Service
National Urban and Community Forestry Challenge Cost-Share Grant Program

PROJECT CONTACT NAME, ORGANIZATION, ADDRESS, PHONE NUMBER, FAX NUMBER AND EMAIL ADDRESS:

Allen Cooper, National Wildlife Federation
44 East Ave. Ste. 200, Austin, TX 78702
512.610.7769 (office) 512.476.9810 (fax), coopera@nwf.org

PROJECT TITLE: The Natural Play and Learning Areas National Guidelines Project

Federal Funds Requested & Non-Federal Match Anticipated:

Federal: \$188,091; Match: \$580,000 Project Total: \$768,091

This represents a cost sharing of 25% from federal and 75% from non-federal match.

PROJECT ABSTRACT:

Incidences of childhood maladies are on the rise, including obesity, diabetes, rickets, attention disorders, and depression. Today's "indoor children" are missing the physical, emotional, and developmental benefits of outdoor play in natural settings. Research indicates that children in natural settings play and learn with engagement, imagination, and cooperation and symptoms of attention deficit and depression are reduced. Experts agree: children need access to nature the same way they need nutrition and sleep. Our project will restore children's relationship with nature by bringing nature to play and outdoor learning spaces at schools, child-care centers, parks, museums, and zoos. We will develop national design guidelines which define core elements of a natural play and learning area and address the management, liability, and accessibility issues that any design must confront. The Natural Play and Learning Areas National Guidelines Project will bring natural play and learning area design into the mainstream by 1) developing comprehensive guidelines for designing and managing natural play and learning environments at all of the major settings where children play and learn, including schools, and childcare centers; 2) endorsing use of these guidelines; and 3) providing technical support for those who create and manage natural play and learning areas.

RESPONSES TO REVIEWER COMMENTS:

COMMENTS TO APPLICANT

(+)—Positive Comments

- This is a good project if it is doing urban forestry. Provide more focus on Urban Forestry and trees.

Response:

This is clarified in the first full paragraph (which is new) on page 2 of the narrative.

- Strong collaboration with organizations outside the traditional urban forestry community.

Response:

Included are multiple letters of partnership and support, including non-traditional groups such as museums and children's health and learning centers.

- On-the-ground demonstrations with post-occupancy evaluation are a plus.

Response:

A core component of our work plan is to create usable guidelines with partner input, build pilots, evaluate them and modify guidelines as needed for maximum utility and effectiveness.

- The literature review is very effective in establishing the importance and urgency of the topic area.

Response:

Please see the revised literature review discussion in our proposal narrative on pages 3-4 as well as the attached literature review, selected with relevancy and urgency of need in mind.

(-)—Negative Comment

- The requested budget amount may seem high, given that partners have committed to cover the costs of building the demonstration parks. Please justify the amount.

Response:

Our pre-proposal budget request was \$300,000 and is now reduced by over one third to \$188,091. We made these adjustments by securing fiscal sponsorship from Scotts Miracle-Gro to cover a portion of our costs and by removing steering committee meeting costs from our expenses. We also secured an additional partner committed to building a playscape during the grant period at the estimated cost of \$100,000 (Lower Colorado River Authority), which increases our match to \$580,000. We have modified both the Budget Justification (page 10 of the narrative) and Budget Narrative (first attachment) to better explain and reflect the cost sharing and effectiveness of this effort.

Researchers agree that play and physical activity have an important role to play in restoring children's health and wellbeing (Luepker 1999, Sturm 2005, Henig 2008). A leading pediatrician, writes that play "is essential to the cognitive, physical, social, and emotional well-being of children and youth" (Ginsburg 2007). Both the American Academy of Pediatrics (2009) and the Centers for Disease Control (2009) have formal recommendations supporting daily physical activity for children.

A growing body of scientific literature shows that outdoor play *in nature* has a wide array of additional physical and mental health benefits for children, including the following:

- **Advances Physical Fitness.** Kids who play outdoors are generally more fit than those who spend the majority of their time inside (Fjortoft 2004). Kids who play outside in natural areas also showed a statistically significant improvement in motor fitness with better coordination, balance, and agility (Fjortoft 2004).
 - **Promotes Cognitive Development.** The "richness and novelty" of being outdoors stimulates brain development (Rivkin 2000). Research shows that "direct, ongoing experience of nature in relatively familiar settings remains a vital source for children's physical, emotional, and intellectual development" (Kellert 2004).
 - **Lessens the Symptoms of ADHD.** Research demonstrates that spending time outdoors reduces the severity of symptoms of children with ADHD. Even short walks in urban parks increases concentration and lessens ADHD-related symptoms (Kuo & Taylor 2004, Taylor et al 2001).
 - **Promotes Self-Confidence and Improves Concentration.** Children who spend time playing outside are more likely to take risks, seek adventure, develop self-confidence, and respect the value of nature (UKSDC 2007). Additionally, outdoor recreation experiences like camping can improve children's self-esteem (Marsh 1999), and green spaces outside the home can increase concentration, inhibition of initial impulses, and self-discipline (Taylor 2001).
 - **Reduces Stress and Aggression.** Time spent in green spaces, including parks, play areas, and gardens, has been shown to reduce stress and mental fatigue (Taylor 2001). In one study, children who were exposed to greener environments in a public housing area demonstrated less aggression and violence and less mental stress (Kuo & Sullivan 2001) than their counterparts. In fact, just viewing nature reduces physiological stress responses, increases interest and attention levels, and decreases feelings of fear, anger, and aggression (Burdette & Whitaker 2005.)
- Builds Environmental Stewardship Ethic.** A number of studies indicate that childhood contact with nature contributes to shaping a lasting environmental ethic and an interest in environmental professions (Wells & Lekies, 2006). Studies funded by the U.S. Forest Service's Urban and Community Forestry program found that respondents who played in wild natural environments were more likely to have positive perceptions of natural environments and outdoor recreation activities (Bixler & Hammitt 2001).

Thus, we have a growing scientific consensus that a vital part of the solution to our childhood obesity epidemic is to encourage children to play outdoors in natural settings. Further studies suggest that due to urban sprawl and parental apprehension, we are at a turning point in history for children to be able to explore nature, which until recently was taken for granted and must now be intentionally created (Louv 2005; Rivkin 1995). This project takes up the challenge of making the documented health benefits of nature available in designed urban settings.

4. Organization/Methodology

In order to meet our desired outcome, we propose the following next steps:

January-March 2012

Complete literature review and synthesis
Complete initial guideline draft

April-June 2012

Have guidelines reviewed by steering committee members
Have technical advisory committees review guidelines

July 2011-September 2012

Launch project website
Release draft guidelines for public review
Receive public comment on guidelines

October-December 2012.

Release final guidelines
Begin design process for five pilot projects
Establish system for registering other pilot projects
Develop evaluation plan utilizing behavior-mapping protocol and user-satisfaction questionnaires

January-March 2013

Secure endorsements from 10 national organizations
Present workshops on guidelines at national conferences
Complete design assistance for five pilot projects
Train on-site personnel in evaluation protocol

April-June 2013

Present workshops on guidelines at national conferences
Conduct on-site evaluations

July-September 2013

Present workshops on guidelines at national conferences
Compile and analyze evaluation data on pilot projects

October-December 2013

Publish and distribute evaluation data on pilot projects

5. Product

A. Deliverable products and intended recipients/stakeholders

1. A comprehensive literature review on the design, children's health and development, and liability aspects of children's natural play environments will be produced and posted on a project website. Stakeholders/recipients: steering committee, public health professionals, and professionals involved in developing and constructing children's environments.

2. A project website will be launched. Stakeholders/recipients: steering committee, children's environments professional community, and the general public.
3. A 45-page booklet of guidelines for the design, construction, and management of natural play and learning areas will be released in print and web format in draft and final versions. Stakeholders/recipients: steering committee, children's environments professional community, and the general public.
4. Five pilot natural play and learning areas will be constructed. Stakeholders/recipients: partner organizations constructing pilots and steering committee.
5. Guidelines will be distributed and publicized by six national organizations through website postings and conference workshops. Stakeholders/recipients: steering committee, children's environments professional community, and the general public.
6. Evaluations of the pilot natural learning areas will be completed. Stakeholders/recipients: partner organizations constructing pilots and steering committee.

B. How products will be disseminated beyond the basic urban forestry network

Our products will be disseminated on a project website and through the networks and websites of steering committee members, most of whom are not urban forestry organizations.

C. Number of products that will be produced

1000 copies of a printed executive summary and 200 copies of the full guidelines booklet will be produced. Downloads of digital files and web visits will be the primary means of distribution.

D. Cost of fees associated with receiving final products

There will be no fee for the guidelines; please see above for quantities.

6. Collaboration

The project is led and administered by two organizations: National Wildlife Federation (NWF) and the Natural Learning Initiative at North Carolina State University (NCSU), and decision-making authority is held by a steering committee comprised of representatives from 15 organizations. For the purposes of this grant proposal, NWF is the applicant organization and NLI is a partner organization. Five other partner organizations have committed to spending funds to construct pilot natural play areas, including Lower Colorado River Authority (Texas), Bernalillo County Parks Department (New Mexico), Kalamazoo Nature Center (Michigan), Mississippi Museum of Natural Science, and Outdoor Discovery Center (Michigan). Scotts Miracle-Gro has committed \$50,000 to the development of the natural play design guidelines and will provide additional in-kind and cash support for publicizing the guidelines and constructing model natural play and learning areas.

Steering committee members include the American Society of Landscape Architects, Chicago Park District, Children & Nature Network, City Park Alliance, Keep America Beautiful, Head Start Body Start National Center for Physical Development and Outdoor Play, National Association for the Education of Young Children, the North American Association of Environmental Educators, National Association of State Park Directors, the National Recreation

National Wildlife Federation

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and Parks Association, National Arbor Day Foundation, National Wildlife Federation, Natural Learning Initiative and several federal agencies. (Letters from several of these groups are attached.)

The steering committee will review and evaluate draft guidelines to ensure that they are responsive to their concerns. Committee members will also aid in the distribution of the design guidelines as described in greater detail below. Pilot partner organizations will receive technical assistance to design natural play and learning areas, will fund the design and construction of the pilot natural play and learning area, and will participate in an evaluation that provides feedback on the design guidelines and the use and user satisfaction of the pilot project.

7. National Distribution/Technology Transfer of Project Findings

The design guidelines will be distributed through a project website that will be developed with grant funds and also through the websites and organizational networks of each project steering committee member. The project website will host the design guidelines in digital form, will include information about funded pilot projects, and will also host a certification system that will make it possible to track the implementation of the project guidelines. NWF will utilize the full capacity of our web and communications team to publicize this project to hundreds of thousands through our proven ability to obtain earned media in the press. Web and television will also leverage this work, allowing us to reach even more people and direct them to our project materials. Already, our access to a network of 420,000 online activists, 47,743 current Facebook fans, 38,000 Twitter followers, and 1.3 million members provides a tremendous network for immediate outreach.

Steering committee members will play an important role in distributing the guidelines. Each steering committee organization has a distinct interest in the project and will aid in the dissemination of the guidelines in different ways. American Society of Landscape Architects has an emerging professional practice group in children's environments that will distribute the guidelines through workshops at the association's annual conference and direct communications with interested landscape architects. National Recreation and Parks Association provides training for parks professionals across the country, including training for playground safety inspectors, and will play a role in distributing the guidelines to members and incorporating them into existing training programs. National Association of State Park Directors has members who are interested in constructing natural play areas and are seeking guidance in the area. Keep America Beautiful is looking for tools to provide its member associations that help them develop beautification projects at a moderate cost. The guidelines will be a simple tool with multiple applications, and because diverse partners and steering committee members have been engaged in the project from the beginning, distribution and utilization will be rapid.

8. Project Evaluation Plan

Activity Area	Evaluation Measures
Goal 1: Development of natural play and learning area guidelines	
Literature review	Produce literature review and post to project website
Release of Natural Play and Learning Areas Guidelines	Participation in public comment opportunities Media coverage of guidelines release Project website launched Number of visits and downloads from project website Attendance at conference education presentations
Goal 2: Construct and evaluate 5 pilot natural play areas; promote the endorsement and utilization of these guidelines by other organizations	
Five natural play areas constructed and evaluated	Technical assistance provided
Encourage and publicize model natural play and learning projects activities	Website tool developed for listing and tracking model projects Model projects identified for research and evaluation Results of research and evaluation of model projects publicized
Secure publicity of guidelines by national organizations	Announcements of guidelines posted and distributed Workshops at national conferences conducted
Pilot projects evaluated for efficacy of guidelines, user satisfaction, and level of physical activity	Evaluation protocol developed and implemented Evaluation results distributed
Goal 3: Develop a vibrant and user-friendly website that will publicize the guidelines free of charge and allow adopters to register the natural areas that are constructed	
Launch documentation feature of website	200 model sites documented by the end of the grant period

9. Organizational and Professional Experience and Access to Resources

A. & B. Past experience, training, and other qualifications

National Wildlife Federation: Founded in 1936, NWF's national reach includes 10 regional offices, 48 affiliates, and four million members and supporters nationwide. NWF is a national leader in environmental and nature-based education. We provide formal and informal educators with quality programs, such as our Eco-Schools USA, Climate Classroom, Schoolyard Habitats, NatureLink, and Forest for Every Classroom programs. We also develop effective curricula, including Access Nature and NatureScope, as well as multi-media learning platforms, such as Happenin' Habitats and Wildlife University. We also author the world-renowned children's publications *Ranger Rick*, *Your Big Backyard*, and *Wild Animal Baby*. With these combined materials and programs, NWF reaches at least five million children annually. Finally, NWF also has a long history of receiving and managing federal grant awards.

The Natural Learning Initiative: NLI is a research and extension program of the College of Design, North Carolina State University. NLI's mission is to promote the importance of the natural environment in the daily experience of all children and families through design, research, education, and dissemination of information. NLI has designed dozens of natural play and learning areas, including areas at the North Carolina Zoo, Marbles Kids Museum, and numerous childcare centers. NLI is a leader in utilizing natural design to combat childhood obesity through its Preventing Obesity by Design and Shape NC initiatives, which are supported by Blue Cross Blue Shield Foundation of North Carolina.

Key Staff and their Experience: The project director for this project is **Allen Cooper, JD, MPP**. Cooper is the Senior Manager for State Education Policy Initiatives at NWF. He holds degrees in law from the University of Texas at Austin and public policy from Princeton University and is licensed to practice law in the state of Texas. He will be responsible for overall oversight of the project, fiscal control and reporting, managing relationships with project steering committee members, and overseeing the promulgation of the guidelines.

Robin Moore, Dipl.Arch. MCP, is Professor of Landscape Architecture at NCSU. Moore will be responsible for coordinating the project technical team, the timely execution of tasks, and resource allocation to tasks. Moore is an expert in the design of play, learning, and educational environments and has degrees in architecture from London University and in city and regional planning from MIT. Pursuing this interest for 30 years, he has conducted a series of action-research projects in both North and South America and in England. Moore is former chair of the Environmental Design Research Association and has held faculty appointments at UC Berkeley and Stanford University. His most recent publications include *Natural Learning* (1997), co-authored with educator Dr. Herb Wong, and "Healing Gardens for Children," in *Healing Gardens* (edited by Cooper Marcus & Barnes, 1999). His other books include *Plants for Play* (1993) and *Childhood's Domain: Play and Place in Child Development* (1986, 1992), and he co-authored *Complete Playground Book* (1993), the *Play For All Guidelines* (1987, 1992), and the *Play For All CD* (1995).

Nilda Cosco, PhD, Education Specialist, Natural Learning Initiative. Dr. Cosco will contribute her expertise to the development of the design guidelines and the evaluation protocol. Cosco holds a degree in Educational Psychology from Universidad del Salvador, Buenos Aires, and a PhD in Landscape Architecture from Heriot Watt University, Scotland. She has an interest in the impact of outdoor environments on health outcomes, such as obesity, sedentary lifestyles, attention functioning, and wellbeing. Her current research is supported by the National Institute of Environmental Health (NIEHS), the National Science Foundation (NSF), and the Buffalo Hospital Foundation. She was the Co-PI of the Post Occupancy Evaluation (POE) of Kids Together Park sponsored by the Center for Universal Design in 2005, and she is the co-author of "Well-being by Nature: Therapeutic Gardens for Children."

C. Adequacy of resources to carry out the project

As demonstrated with the attached letters of partnership and support, this project has broad backing by numerous agencies and organizations. The diversity of national support and resource commitments is also evidenced by the strength of our partners and breadth of the in-kind goods and services they are providing: donations of time and travel to steering committee

meetings; public parks and institutions donating time, goods, and services to the construction of play spaces; project and partner staff, institutional resources, and capabilities being provided in-kind to help ensure a timely effort and valuable product; anticipated provisions from local businesses, such as refreshments during meetings and construction and donated space; and many organizations pitching in to help make this project a success. NWF, NLI, and our entire steering committee is very hopeful that we will be able to leverage the partnerships and community support that we have begun by developing the committee, this project, and the guiding principles of the guidelines by continuing this exciting multi-faceted effort to boost public understanding of, appreciation for, and use of natural play spaces to benefit children's mental and physical health. In laying the groundwork for the next phase of this project while preparing this application, we have generated significant interest and excitement from all our potential partners as well, all of whom are eager to see the proposal implemented.

D. Please see attached letters from partners and supporters of this effort.

10. Budget Justification

There is broad recognition and concern throughout the nation and around the world about the high public health costs and risks that stem from the growing childhood obesity epidemic. Our project addresses these risky costs directly by emphasizing the proven health and obesity-reduction benefits of natural play settings for children. Beyond reducing public health risks and costs, our project is extremely cost effective. We have included implementation cost savings to the guideline users by stressing a systematic, evidence-based approach to common design issues related to natural play areas (e.g., risk factors) and allowing for the use of locally available natural components, which are generally cheaper and more sustainable than manufactured play systems.

This project also far exceeds the one-to-one match requirement; with 75% of the costs coming from non-federal funds already secured by our partners and more anticipated in the future, our match is \$580,000 toward a \$188,091 request. In addition, well beyond the costs shown in our budget, this partnership will also benefit from the whole of NWF, NLI, and the steering committees' capacities and resources. In addition, NWF's communication and web team will contribute significantly to the partnership well beyond what is shown in the attached budget by messaging this effort to millions through multiple media channels, including our website, children's magazines, and television and radio promotions.

We have also constructed a budget that is focused on targeted methods that will deliver the maximum results while being mindful of costs. At NWF, we recognize that real leadership means real cooperation across many levels—from government and business to academia and conservation organizations to policymakers and private citizens—to better leverage our combined resources and produce even greater results. These partnerships are the hallmark of our work because we know this is what it takes to achieve important victories. To that end, we are bringing an array of partnerships to this particular collaboration with USFS, including a variety of national and regional organizations; corporate sponsors, such as Scotts Miracle-Gro; multiple local, state, and federal public agencies (including USFS); and academia. As demonstrated in the attached letters of partnership and support, these groups have expressed a strong commitment to this effort and are hopeful our proposal will be favorably considered.

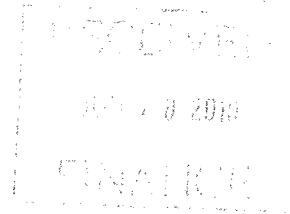


United States Department of the Interior
National Business Center
ACQUISITION SERVICES DIRECTORATE
Indirect Cost Services
2180 Harvard Street, Suite 430
Sacramento, CA 95815



June 8, 2010

Ms. Dulce Gomez-Zormelo, Chief Financial Officer
and Treasurer
National Wildlife Federation
11100 Wildlife Center Drive
Reston, Virginia 20190-5362



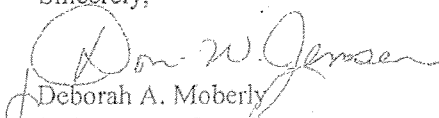
Dear Ms. Gomez-Zormelo:

Enclosed is an original copy of the Indirect Cost Negotiation Agreement for the 12-month periods ending August 31, 2008, and 2010, between the Federal Government and the National Wildlife Federation.

Please visit our Web site at <http://www.aqd.nbc.gov/ics> for guidance and updates on submitting indirect cost proposals. In addition, you will find helpful tools such as a completeness checklist, indirect cost and lobbying certificates, sample proposals, Excel worksheet templates, and important links to other Web sites.

If you have any questions regarding this agreement, please write or call Ms. Maria Nua, Program Analyst, at (916) 566-7111.

Sincerely,


Deborah A. Moberly
Indirect Cost Coordinator

Enclosure

Ref: J:Other/Nonprofit/NWLPh646/Issue.ltr

We want to hear from you! Please let us know how we are doing in meeting your needs by taking a short survey at: <http://www.aqd.nbc.gov/survey>.

Nonprofit Organization
Indirect Cost Negotiation Agreement

EIN: 53-0204616

Organization:

National Wildlife Federation
11100 Wildlife Center Drive
Reston, Virginia 20190-5362

Date: June 8, 2010

Report No(s) : 10-A-766(08F)
10-A-767(10P)

Filing Ref.:
Last Negotiation Agreement
dated March 18, 2009

The indirect cost rates contained herein are for use on grants, contracts, and other agreements with the Federal Government to which 2 CFR 230 (OMB Circular A-122) applies, subject to the limitations in Section II.A. of this agreement. The rates are negotiated by the U.S. Department of the Interior, National Business Center, and the subject organization in accordance with the authority contained in 2 CFR 230.

Section I: Rates

Type	Effective Period		Rate*	Locations	Applicable To
	From	To			
Final	09/01/07	08/31/08	14.71%	All	All Programs
Provisional	09/01/09	08/31/10	14.71%	All	All Programs

*Base: Total direct costs less capital expenditures, the portion of subawards in excess of \$25,000, and grants for conservation and education programs.

Treatment of fringe benefits: Fringe benefits applicable to direct salaries and wages are treated as direct costs; fringe benefits applicable to indirect salaries and wages are treated as indirect costs.

Treatment of paid absences: Vacation, holiday, sick leave, and other paid absences are included in salaries and wages and are claimed on grants, contracts, and other agreements as part of the normal cost for the salaries and wages. Separate claims for the costs of these paid absences are not made.

Section II: General

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A. Limitations: Use of the rates contained in this agreement is subject to any applicable statutory limitations. Acceptance of the rates agreed to herein is predicated upon these conditions: (1) no costs other than those incurred by the subject organization were included in its indirect cost rate proposal, (2) all such costs are the legal obligations of the grantee/contractor, (3) similar types of costs have been accorded consistent treatment, and (4) the same costs that have been treated as indirect costs have not been claimed as direct costs (for example, supplies can be charged directly to a program or activity as long as these costs are not part of the supply costs included in the indirect cost pool for central administration).

B. Audit: All costs (direct and indirect, federal and non-federal) are subject to audit. Adjustments to amounts resulting from audit of the cost allocation plan or indirect cost rate proposal upon which the negotiation of this agreement was based will be compensated for in a subsequent negotiation.

C. Changes: The rates contained in this agreement are based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in organizational structure, or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate in this agreement, require the prior approval of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowance.

D. Provisional/Final Rates: Within 6 months after year end, a final rate must be submitted based on actual costs. Billings and charges to contracts and grants must be adjusted if the final rate varies from the provisional rate. If the final rate is greater than the provisional rate and there are no funds available to cover the additional indirect costs, the organization may not recover all indirect costs. Conversely, if the final rate is less than the provisional rate, the organization will be required to pay back the difference to the funding agency.

E. Agency Notification: Copies of this document may be provided to other federal offices as a means of notifying them of the agreement contained herein.

F. Record Keeping: Organizations must maintain accounting records that demonstrate that each type of cost has been treated consistently either as a direct cost or an indirect cost. Records pertaining to the costs of program administration, such as salaries, travel, and related costs, should be kept on an annual basis.

G. Reimbursement Ceilings: Grantee/contractor program agreements providing for ceilings on indirect cost rates or reimbursement amounts are subject to the ceilings stipulated in the contract or grant agreements. If the ceiling rate is higher than the negotiated rate in Section I of this agreement, the negotiated rate will be used to determine the maximum allowable indirect cost.

H. Use of Other Rates: If any federal programs are reimbursing indirect costs to this grantee/contractor by a measure other than the approved rates in this agreement, the grantee/contractor should credit such costs to the affected programs, and the approved rate should be used to identify the maximum amount of indirect cost allocable to these programs.

I. Central Service Costs: Where central service costs are estimated for the calculation of indirect cost rates, adjustments will be made to reflect the difference between provisional and final amounts.

J. Other:

1. The purpose of an indirect cost rate is to facilitate the allocation and billing of indirect costs. Approval of the indirect cost rate does not mean that an organization can recover more than the actual costs of a particular program or activity.

2. Programs received or initiated by the organization subsequent to the negotiation of this agreement are subject to the approved indirect cost rate if the programs receive administrative support from the indirect cost pool. It should be noted that this could result in an adjustment to a future rate.

3. New indirect cost proposals are necessary to obtain approved indirect cost rates for future fiscal or calendar years. The proposals are due in our office 6 months prior to the beginning of the year to which the proposed rates will apply.

Section III: Acceptance

Listed below are the signatures of acceptance for this agreement:

By the Nonprofit Organization:

By the Cognizant Federal Government
Agency:

Dulce Gomez Zornelo /s/
Signature

Deborah A. Moberly /s/
Signature

DULCE GOMEZ ZORNELO
Name (Type or Print)

Deborah A. Moberly
Name

Indirect Cost Coordinator

CHIEF FINANCIAL OFFICER / TREASURER
Title

Indirect Cost Services
Title

U.S. Department of the Interior

National Business Center

Agency

6/2/10
Date

Date June 8, 2010

Negotiated by Muberra Guvenc

Telephone (916) 566-7111

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 4040-0006
Expiration Date 07/30/2010

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. NWF's Natural Playscapes	10.675	\$	\$	\$ 188,091.00	\$ 580,000.00	\$ 768,091.00
2.						
3.						
4.						
5. Totals		\$	\$	\$ 188,091.00	\$ 580,000.00	\$ 768,091.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	NWF's Natural Playscapes				
a. Personnel	\$ 64,000.00	\$	\$	\$	\$ 64,000.00
b. Fringe Benefits	17,280.00				17,280.00
c. Travel	8,700.00				8,700.00
d. Equipment	0.00				
e. Supplies	3,000.00				3,000.00
f. Contractual	115,000.00				115,000.00
g. Construction	0.00				
h. Other	540,000.00				540,000.00
i. Total Direct Charges (sum of 6a-6h)	747,980.00				\$ 747,980.00
j. Indirect Charges	20,111.00				\$ 20,111.00
k. TOTALS (sum of 6i and 6j)	\$ 768,091.00	\$	\$	\$	\$ 768,091.00
7. Program Income	\$	\$	\$	\$	\$

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Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. NWF's Natural Playscapes	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text" value="580,000.00"/>	\$ <input type="text" value="580,000.00"/>
9. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12. TOTAL (sum of lines 8-11)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text" value="580,000.00"/>	\$ <input type="text" value="580,000.00"/>

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text" value="188,091.00"/>	\$ <input type="text" value="47,000.00"/>	\$ <input type="text" value="47,091.00"/>	\$ <input type="text" value="47,000.00"/>	\$ <input type="text" value="47,000.00"/>
14. Non-Federal	\$ <input type="text" value="580,000.00"/>	<input type="text" value="50,000.00"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="530,000.00"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text" value="768,091.00"/>	\$ <input type="text" value="97,000.00"/>	\$ <input type="text" value="47,091.00"/>	\$ <input type="text" value="47,000.00"/>	\$ <input type="text" value="577,000.00"/>

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. NWF's Natural Playscapes	\$ <input type="text" value="116,628.00"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
17. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20. TOTAL (sum of lines 16 - 19)	\$ <input type="text" value="116,628.00"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: <input type="text" value="747,980"/>	22. Indirect Charges: <input type="text" value="20,111"/>
23. Remarks: <input type="text" value="NWF has a negotiated cost rate of 14.48% for indirect expenses for federal applications (attached). However, we reduced the indirect charge on this application for the consultant fees to 8% and none for non-federal match."/>	

Key Personnel Qualifications

Allen Cooper, JD, MPP, is Senior Manager for State Education Policy Initiatives at National Wildlife Federation and will serve as project coordinator. He holds degrees in law from the University of Texas at Austin and public policy from Princeton University and is licensed to practice law in the state of Texas. He will be responsible for coordination of the project, fiscal control and reporting, managing relationships with project steering committee members, and oversee the promulgation of the standards.

Robin Moore, Dipl.Arch. MCP (PI), The Natural Learning Initiative, Professor of Landscape Architecture at NC State University, will be responsible for coordination of the project technical team, the timely execution of tasks, and resource allocation to tasks. He will be involved day-to-day in project implementation and will call regular coordination meetings of the project team to ensure timely resolution of project implementation issues. He will develop the content of the guidelines, facilitate meetings with stakeholders and national representatives, make public presentations, conduct online training sessions, and develop the impact evaluation package.

Nilda Cosco, PhD, Education Specialist, Natural Learning Initiative, will contribute her expertise to the following tasks: design, administration, and reporting of the stakeholder online survey; background literature search; organization, reporting and follow up of stakeholder meeting; coordination of the policy guidelines review process; and website development. She will make presentations in national conferences as needed and develop online and face-to-face training sessions and materials.

County of Bernalillo

State of New Mexico

BOARD OF COUNTY COMMISSIONERS

ART DE LA CRUZ, CHAIR
DISTRICT 2

MAGGIE HART STEBBINS, VICE CHAIR
DISTRICT 3

ALAN B. ARMJO, MEMBER
DISTRICT 1

MICHAEL C. WIENER, MEMBER
DISTRICT 4

MICHAEL BRASHER, MEMBER
DISTRICT 5

THADDEUS LUCERO, COUNTY MANAGER



ONE CIVIC PLAZA N.W. 10th FLOOR
ALBUQUERQUE, NEW MEXICO 87102
ADMINISTRATION 505-468-7000
FAX 505-462-9813

KAREN L. MONTOYA, ASSESSOR
MAGGIE TOULOUSE OLIVER, CLERK
MERRI RUDD, PROBATE JUDGE
MANUEL GONZALES III, SHERIFF
PATRICK J. PADILLA, TREASURER

November 22, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (I- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

Dear Ms. Stremple,

This letter of partnership demonstrates Bernalillo County Parks & Recreation's commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

This letter demonstrates Bernalillo County Parks & Recreation's intent to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This park will be built to serve the community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that Bernalillo County Parks & Recreation's is willing to commit the necessary resources to build such a park—at an estimated cost of \$50,000. If USFS awards this grant, and the guidelines are thus developed, we intend design and construct such a project during the grant period.

I believe this project offers an innovative approach for utilizing urban and community forests improve children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

Thaddeus Lucero
County Manager
Bernalillo County

cc: Julie M. Baca, Deputy County Manager for Community Services
Ed Chismar, Parks and Recreation Department Director



December 1, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

This letter of partnership demonstrates the Lower Colorado River Authority's (LCRA) commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

This letter demonstrates the LCRA's intent to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This play area to be built in one of the LCRA's parks will be built to serve the community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that the LCRA is willing to commit the necessary resources to build such a play area—at an estimated cost of \$100,000. If USFS awards this grant, and the guidelines are thus developed, we intend to design and construct such a project during the grant period.

This project offers an innovative approach for utilizing urban and community forests which improve children's health. We hope the USFS funds this project, and the LCRA looks forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Morgan", is written over a horizontal line. The signature is fluid and cursive in style.

Frank Morgan
Executive Manager, Community Services

Lower Colorado River Authority



City of Austin

Parks and Recreation Department
200 South Lamar Blvd, Austin, TX 78704

November 17, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (I-Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

Dear Ms. Stremple:

This letter of partnership demonstrates the City of Austin's (COA) commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

This letter demonstrates COA's intent to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This park improvement will be built to serve the community as intended by this USFS opportunity, and will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that COA is willing to supply some funding to build the park improvement, subject to Mayor and Council approval. If USFS awards this grant, and the guidelines are thus developed, we intend to design and construct such a project during the grant period.

I believe this project offers an innovative approach for utilizing urban and community forests to improve children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

Ms. Sara L. Hensley, CPRP
Director, Austin Parks & Recreation
City of Austin

cc: Ms. Kelly Snook, ASLA, Assistant Director, Parks and Recreation Department,
City of Austin



chicago park district

Administration Office
541 North Fairbanks
Chicago, Illinois 60611
(312) 742-PLAY
(312) 747-2001 TTY
www.chicagoparkdistrict.com

Board of Commissioners
Bryan Traubert
President

Bob Pickens
Vice President

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Dr. Scott Hanlon, D.O.
M. Laird Koldyke
Rouhy J. Shalabi

**General Superintendent
& CEO**
Timothy J. Mitchell

City of Chicago
Richard M. Daley
Mayor

chicago
PARK
DISTRICT
come out
and play

November 18, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (I- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

This letter of partnership demonstrates the Garfield Park Conservatory's support for the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

The letter demonstrates the Garfield Park Conservatory's intent to design and build a pilot natural play learning garden utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This garden will serve the community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

I believe this project offers an innovative approach for utilizing urban and community forests improve children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

Mary E. Eysenbach
Director of Conservatories
Chicago Park District



National Recreation and Park Association

November 18, 2010

Ms. Nancy Stremple,
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

The National Recreation and Park Association is pleased to offer support for the National Wildlife Federation's application to the U.S. Forest Service for funding for the Natural Areas Play and Guidelines project.

The National Recreation and Park Association has had a longstanding interest in the development of safety standards and guidelines for the development of play areas and playgrounds. NRPA sponsors the National Playground Safety Institute and conducts the training course and exam for the Certified Playground Safety Inspector program.

NRPA has followed the progress and participated in the development of the Natural Areas Play and Guidelines project sponsored by the National Wildlife Federation and the Natural Learning Initiative of the North Carolina State University, led by Allen Cooper and Robin Moore. We endorse the goals of this project and agree that this project application would do much to encourage the use of urban and community forests to materially improve children's health. As a Steering Committee member representing NRPA, I can attest to the quality of this effort and the potential benefits this project will have for the field of parks and recreation

Therefore, please accept our endorsement and support of this project application. We look forward to sharing the information gained and results from the project with our membership of more than 21,000 professionals and citizen advocates.

Very truly yours,

Richard J. Dolesh
Chief of Public Policy

Cc: Bill Beckner, Director of Research

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jessamie W. Gail, Governor • Rep. A. Stedley, Acting Director

www.dnr.mo.gov

November 24, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (1-Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

Dear Ms. Stremple:

I am pleased to offer my sincere support of National Wildlife Federation's application to the US Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project. As a co-coordinating agency for Missouri's Children in Nature Challenge (CINC), I believe the Natural Play and Learning Areas Guidelines Project will help enhance outdoor opportunities for Missouri children and for children in communities around the United States. The Missouri Department of Natural Resources' Division of State Parks is an organization which preserves and interprets the state's most outstanding landscapes and cultural landmarks and to provide recreational opportunities compatible with those landscapes. With the opportunities that Missouri state parks provide, the CINC and the Natural Play Learning Areas Guidelines Projects, can come together to heighten outdoor play experiences for Missourians.


The Missouri Children in Nature Challenge (childreninnature.mo.gov) is an incentive program for families and communities which encourages time spent outdoors. Creating or enhancing green space or play space is one particular criterion a community must reach to receive its incentive. The Natural Play and Learning Areas Guidelines Project will help set guidelines to bring natural play back to Missouri communities. I am very interested in the project receiving the necessary support and resources it needs to fully launch.

I believe this project offers an innovative approach for utilizing urban and community forests to improve children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you in advance.

Sincerely,

DIVISION OF STATE PARKS


William J. Bryan
Director

WJB:ap



**HEAD START
BODY START**

National Center for
Physical Development
and Outdoor Play

November 16, 2010

1900 ASSOCIATION DRIVE | RESTON, VA | 20191-1599 | 703.476.3454

Ms. Nancy Stremple,
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

As the Education and Outreach Director at Head Start Body Start National Center for Physical Development and Outdoor Play (HSBS) -- a non-profit dedicated to promoting physical activity, outdoor play and healthy lifestyles for young children and their families -- I am pleased to offer my sincere support of National Wildlife Federation's application to the USFS for its Natural Play and Learning Areas Guidelines Project.

As a steering committee member of the Natural Play and Learning Areas Guidelines Project, I believe this is a vital project. To date, there are no national guidelines recognized for natural play spaces, so many organizations are reluctant to pursue this rich and engaging environment at their centers. We know that time in nature promotes so many benefits for both children and adults alike, and creating natural play spaces is essential to providing high quality environments where children thrive and educators and parents truly enjoy spending time in.

As a member of that steering committee, I am very interested in the project receiving the necessary support and resources it needs to fully launch. I believe this project offers an innovative approach for utilizing urban and community forests improve children's health. I truly hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you in advance.

Sincerely,



Bethe Almeras, M.S.

HSBS National Center for Physical Development and Outdoor Play



National Association for
Sport and Physical Education



AMERICAN ASSOCIATION
FOR PHYSICAL ACTIVITY
AND RECREATION



February 16, 2011

Ms. Nancy Strempel,
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

On behalf of the Children & Nature Network (C&NN), I am pleased to offer my endorsement and enthusiastic support for the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project. C&NN is a non-profit organization focused on facilitating social change to reconnect children with nature in their everyday lives, for their health and well-being and the future health of the Earth itself. Since our founding in 2006, we have grown from a handful of state and local campaigns to reconnect children and nature to now more than 80 campaigns in more than 40 states as well as other initiatives. These campaigns reported serving more than a million children and youth in 2009.

I personally represent C&NN as a steering committee member of the Natural Play and Learning Areas Guidelines Project. This is demonstration of our strong belief in the value and importance of this project. Our partners and members are eager to have these guidelines and will put them to work, and disseminate them to others. We genuinely believe that the products of this project will make a positive difference in the lives of children and families—including serving to advance urban forestry as one of many positive by-products of this project.

This project represents the culmination of decades of applied knowledge from some of the most skillful and informed people in the world about how to design, effectively bringing nature and lifestyles together in healthy, appealing, ecologically appropriate and aesthetic ways. Among its attributes, it offers an innovative approach for utilizing urban and community forests to improve children's health, now and in the future. We hope that the USFS funds this project.

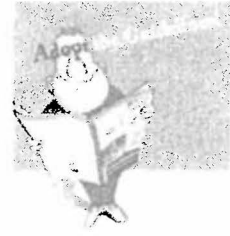
Thank you in advance.

Best wishes,

A handwritten signature in dark ink, appearing to read "Cheryl Charles", written in a cursive style.

Cheryl Charles, Ph.D.
President and CEO

**National Project for Excellence in
Environmental Education
2635 Lincoln Street
Eugene, Oregon 97405
(541) 343-0714**



11 February 2011

Ms. Nancy Stremple,
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

As the director of the National Project for Excellence in Environmental Education, I am pleased to offer my support of National Wildlife Federation's application to the USFS for its Natural Play and Learning Areas Guidelines Project. The National Project for Excellence in Environmental Education has, over the last fifteen years, developed internationally recognized *Guidelines for Excellence* that set the standards for high-quality environmental education practice.

I am an enthusiastic member of the Natural Play and Learning Areas Guidelines Project steering committee. With the increased interest and demand for high quality materials that facilitate getting children outdoors for play and learning, these Guidelines are essential. They will complement our *Guidelines for Excellence* publications that focus on environmental literacy, educator professional development, and early childhood environmental education.

I believe this project offers an innovative approach for utilizing urban and community forests to improve children's health. As a member of the steering committee, I am very interested in the project receiving the necessary support and resources it needs to fully launch. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you in advance.

Sincerely,

Bora Simmons, Director

Visit our web site
<http://eelinked.naaee.net/n/guidelines>



KEEP AMERICA BEAUTIFUL, INC.

February 18, 2011

Ms. Nancy Stremple,
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

Keep America Beautiful, whose mission is to engage individuals to take greater responsibility for improving their community environment. As the nation's largest volunteer-based community action and education organization, with a network of nearly 1,000 affiliate and participating organizations, KAB forms public-private partnerships and programs. I am pleased to offer my support of National Wildlife Federation's application to the USFS for its Natural Play and Learning Areas Guidelines Project.

As a steering committee member of the Natural Play and Learning Areas Guidelines Project, I believe this is an essential piece, which is not currently in place. Our affiliate network fields an average of 4 million volunteers each year working at the grass-roots level in their local communities. Community greening and beautification are bedrock to the mission and action of Keep America Beautiful. Those who look to us for programs and research would benefit greatly by the work of this taskforce. As a member of that steering committee, I am very interested in the project receiving the necessary support and resources it needs to fully launch.

I believe this project offers an innovative approach for utilizing urban and community forests to improve children's health. Keep America Beautiful will lend its reach and its staff to assist USFS's goals and bolster work on behalf of children. Our network has in place education committees who will be able to turnkey these guidelines quickly. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you in advance.

Sincerely,

Sue Smith

Director of Education and Training
Keep America Beautiful

PROPOSAL ATTACHMENTS

- **Budget Narrative Table**
- **Literature Review List**
- **Letters of Partnership:**
 - **NC State University, National Learning Institute**
 - **Kalamazoo Nature Center**
 - **Outdoor Discovery Center**
 - **Mississippi Museum of Natural Science**
 - **County of Bernalillio**
 - **Lower Colorado River Authority**
- **Letters of Support, including committee member commitments:**
 - **City of Austin**
 - **Chicago Park District**
 - **National Recreation and Park Association**
 - **State of Missouri Division of State Parks**
 - **Head Start Body Start**
 - **Children & Nature Network**
 - **National Project for Excellence in Environmental Education**
 - **Keep America Beautiful**
- **Negotiated Federal Indirect Cost Rate Letter**
- **Statement of Key Personnel Qualifications**

Budget Narrative to USFS Prepared by NWF

SUMMARY

	Year One	Year Two	Total
Federal:	76,966	116,628	193,594
Non-Federal:	580,000		580,000
Total:	656,966	116,628	773,594

This represents a cost share of 25% federal costs and 75% non-federal costs.

YEAR ONE BUDGET NARRATIVE

Year One Total:	461,418
Federal:	81,418
Non-Federal:	380,000

Matching funds are from our partners on this effort. Please see attached letters for details.

Personnel:	32,000
Federal Share:	32,000
Non-Federal Share:	-

<u>Name</u>	<u>Position</u>	Non		<u>hr rate</u>	<u>hrs per week</u>	<u>grant term</u>	<u># hrs</u>
		Federal %	Federal %				
Allen Cooper	Project Coordinator	50%	0%	30.77	20	104	1,040

Cooper will provide strategic direction and coordination throughout the grant term and will liaison with USFS and all partners to ensure project success.

Fringe Benefits:	8,640
Federal Share:	8,640
Non-Federal Share:	-

Fringe is based on 27% of salary. They cover pension, medical and dental insurance, disability and FICA. $32,000 \times .27 = \$8,640$

Travel:	4,350
Federal Share:	4,350
Non-Federal Share:	-

Travel includes key staff airfare (\$1,750), car rental (\$500), meals (\$400), lodging (\$1,500), and local travel (\$200) to project sites.

Budget Narrative to USFS Prepared by NWF

Equipment:

n/a

Supplies:

3,000

Federal Share:

3,000

Non-Federal Share:

-

For the printing of 1000 executive summaries and 200 guidelines.

Contractual:

55,000

Federal Share:

5,000

Non-Federal Share:

50,000

NLI, our key research and development partner, will receive \$55,000 in year one, with \$5,000 from this federal request and \$50,000 from matching funds from Scotts Miracle-Gro Co. See attached letter for details of NLI work activities for this rate..

Construction:

n/a

Other

535,000

Federal Share:

5,000

Non-Federal Share:

530,000

Federal (\$5,000):

Web Design costs in year one will be \$5,000. NWF will hire a web firm and/or perform the web portion of this project in-house.

Non-Federal (\$530,000):

- 1) The Kalamazoo Nature Center will design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. Estimated cost is \$150,000 (see attached).
- 2) Mississippi Museum of Natural Science will design and build a natural play area utilizing the guidelines NWF and its partners propose to develop with this request. The estimated cost is \$150,000 (see attached).
- 3) Outdoor Discovery Center Macatawa Greenway will design and build a natural play area utilizing the guidelines NWF and its partners propose to develop with this request. The estimated cost is \$80,000 (see attached).
- 4) Bernalillo County Parks & Recreation will design and build a natural play area utilizing the guidelines NWF and its partners propose to develop with this request. The estimated cost is \$50,000 (see attached).
- 5) Lower Colorado River Authority has committed the necessary resources, estimated at \$100,000 to design and construct a pilot natural play area during the grant period (see attached).

Note: the play areas efforts may also apply to year two, we estimated them all in year one for this proposal.

Budget Narrative to USFS Prepared by NWF

Total Direct Charges	637,990
Federal Share:	57,990
Non-Federal Share:	580,000
Indirect Charges:	1,073
Federal Share:	1,073
Non-Federal Share:	-
TOTAL YEAR ONE	\$ 639,063

NWF has a negotiated federal indirect rate of 14.48% however we are not charging the full rate for the consultant fee to NLI, instead we are charging 8%. For the non-federal we are not charging any indirect.

YEAR TWO BUDGET NARRATIVE

Personnel:	32,000	
Federal Share:	32,000	32000
Non-Federal Share:	-	8640

<u>Name</u>	<u>Position</u>	Non		<u>hr rate</u>	<u>hrs per week</u>	<u>grant term</u>	<u># hrs</u>	
		Federal %	Federal %					
Allen Cooper	Project Coordinator	50%	0%	30.77	20	104	1,040	32000
								8640
								4350
								55000
								5000
								11638

Fringe Benefits:	8,640
Federal Share:	8,640
Non-Federal Share:	-

Fringe is based on 27% of salary. They cover pension, medical and dental insurance, disability and FICA. $\$32,000 \times .27 = \$8,640$

Travel:	4,350
Federal Share:	4,350
Non-Federal Share:	-

Budget Narrative to USFS Prepared by NWF

Airfare	\$1750
Car Rental	\$500
Meals	\$400
Lodging	\$ 1500
Miles Reimbursed	\$ 200
Total	\$4,350

Equipment: n/a

Supplies: n/a

Contractual: 55,000

Federal Share: 55,000

Non-Federal Share: -

For NLI, our key partner, we request \$55,000 in federal funds for year two. See attached letter for details of NLI work activities for this rate.

Construction: n/a

Other 5,000

Federal Share: 5,000

Non-Federal Share: -

Web Design costs in year two will be \$5,000. NWF will hire a web firm and/or perform the web portion of this project in-house.

Total Direct Charges 104,990

Federal Share: 104,990

Non-Federal Share: -

Budget Narrative to USFS Prepared by NWF

Indirect Charges:	11,638
Federal Share:	11,638
Non-Federal Share:	-
TOTAL YEAR TWO	116,628

NWF has a negotiated federal indirect rate of 14.48% (letter attached). In this application we are not charging the full rate for the consultant fee to NLI, instead we are charging 8%.

Literature Review List

- American Academy of Pediatrics. (2009). "Promoting Physical Activity," <http://www.aap.org/family/physicalactivity/physicalactivity.htm>.
- Bell, Anne C., and Janet E. Dymont. nd. Grounds for action. Promoting physical activity through school ground greening in Canada: Evergreen.
- Berg, M., and E. Medrich. 1980. Children in Four Neighborhoods: The physical environment and its effect on play and play patterns. *Environment and Behavior* 12 (3):320-348.
- Bixler, R. and Hammitt, W. 2001. Managing Urban Forest Fear/Safety and Vegetation/Safety. (<http://www.urbanforestrysouth.org/resources/library/managing-urban-forest-fear-safety-and-vegetation-privacy>) (accessed 11-23-10)
- Bixler, R., Floyd, M., Hammitt, W. 2002. Environmental Socialization : Quantitative Tests of the Childhood Play Hypothesis. *Environment and Behavior* 34:795.
- Boldemann, C, M. Blennow, H. Dal, F. Mårtensson, A. Raustorp, K. Yuen, and U. Wester. 2006. Impact of pre-school environment upon children's physical activity and sun exposure. *American Journal of Preventive Medicine* 42:301-308.
- Burdette, Hillary, and Robert Whitaker. 2005. Resurrecting free play in young children: looking beyond fitness and to attention, affiliation, and affect. *Archives of Pediatrics & Adolescent Medicine* 159 (1):46-50.
- Cavanna, R.C. 1974. Backyard options in residential neighborhoods,. MLA Thesis, Berkeley: University of California.
- Centers for Disease Control. 2007. Prevalence of overweight among children and adolescents: United States, 2003-2004. *National Center for Health Statistics*, http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_child_03.htm.
- Centers for Disease Control. 2009. "Physical Activity for Everyone: How Much Physical Activity do Children Need?" <http://www.cdc.gov/physicalactivity/everyone/guidelines/children.html>.
- Chawla, L. 1986. The ecology of environmental memory. *Children's Environments Quarterly* (Winter 1986):34-42.
- . 2002. Spots of Time: Manifold Ways of Being in Nature in Childhood. In *Children and Nature*, edited by J. Kahn, P. and S. Kellert. Cambridge, MA: : MIT Press.
- . 2006. Learning to Love the Natural World Enough to Protect It. *Barn* (2):57-78.
- Chawla, L., and K. Malone. 2003. Neighborhood quality in children's eyes. In *Children in the City: Home, Neighborhood and Community*, edited by P. C. a. M. O'Brien. London: Routledge.
- Chawla, Louise, ed. 2002. *Growing Up in an Urbanising World*. Edited by L. Chawla. Paris: UNESCO/Earthscan.

- Cooper Marcus, C. 1974. Children's play behavior in a low-rise, inner city housing development. In *Childhood City*, edited by R. Moore and D. Carson. Stroudsburg, PA: Dowden, Hutchinson and Ross.
- . 2003. Shared outdoor space and community life. *Places: Quarterly Journal of Environmental Design* 15 (2):32–34.
- Cooper Marcus, C. . 1978. Remembrances of landscapes past. *Landscape* 22 (3).
- . 1993. Postoccupancy evaluation of Cherry Hill, Petaluma, CA: University of California, Berkeley.
- Cooper Marcus, C., and W. Sarkissian. 1986. *Housing As If People Mattered: Site Guidelines for Medium-Density Family Housing*. Berkeley, CA: University of California Press.
- Cosco, N. 2006. Motivation to Move: Physical activity affordances in preschool play areas. Doctoral Thesis, School of Landscape Architecture, Edinburgh College of Art, Heriot Watt University, Edinburgh.
- Cosco, N., and R. Moore. unpublished report. Baseline Survey of Environmental Conditions of Outdoor Play Areas in North Carolina Childcare Centers. Raleigh: NC State University, College of Design.
- Cunningham, C., and M Jones. 1999. The playground: A confession or failure? *Built Environment* 2 (1):11-17.
- Davis, A., and L. Jones. 1996. Children in the urban environment: An issue for the new public health agenda. *Health and Place* 2 (2):107-15.
- . 1997. Whose neighborhood? Whose quality of life? Developing a new agenda for children's health in urban settings. *Health Education Journal* 56:350-63.
- de Vries, S., I. Bakker, W. van Mechelen, and M. Hopmann-Rock. 2007. Determinants of Activity-Friendly Neighborhood for Children: Results from the Space Study. *American Journal of Health Promotion* 21 (4):312-316.
- Drayton, W. 2000. Secret Gardens: How to turn patchwork urban backyards into neighborly communal parks. *The Atlantic Monthly* 285 (6).
- Dymont, Janet. 2005. Gaining ground: The power and potential of school ground greening in the Toronto district school board, edited by A. C. Bell: Evergreen.
- EEHC. 2005. Spain. The NAOS strategy: a strategy for nutrition, physical activity and obesity prevention. *European Environment and Health Committee*, http://www.euro.who.int/eehc/implementation/20051129_2.
- Eubanks Owens, P. 1988. Natural landscapes, gathering places, and prospect refuges: Characteristics of outdoor places valued by teens. *Children's Environments Quarterly* 5 (2):17–24.
- Faber Taylor, A. , A. Wiley, F. Kuo, and W. Sullivan. 1998. Growing up in the inner city: Green spaces as places to grow. *Environment and Behavior* 30:3-27.
- Fjørtoft, I. 2001. The Natural Environment as a Playground for Children: The Impact of Outdoor Play Activities in Pre-Primary School Children. *Early Childhood Education Journal* 29 (2):111-117.

- Frumkin, H. 2001. Beyond Toxicity: Human Health and the Natural Environment. *American Journal of Preventive Medicine* 20 (3):234–240.
- Frumkin, H, R Geller, and IL. Rubin. 2006. *Safe and Healthy School Environments*. New York: Oxford University Press.
- Gaster, S. 1991. Urban children's access to their neighborhood: Changes over three generations. *Environment and Behavior* 23 (1):70–85.
- Geller, R. 2006. Safety in the Sun. In *Safe and Healthy School Environments*, edited by H. Frumkin, R. Geller and I. Rubin. New York: Oxford University Press, p98.
- Ginsburg, K., and the Committee on Communications and Committee on Psychosocial Aspects of Child and Family Health. 2007. The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds. *Pediatrics* 119 (1).
- Greenman, Jim. 2005. *Caring Spaces, Learning Places: Children's Environments that Work*. Second edition ed. Redmond, WA: Exchange Press.
- Henig, Robin Marantz. (2008). "The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds," Clinical Report, American Academy of Pediatrics, <http://www.aap.org/pressroom/playFINAL.pdf> (accessed Nov. 1, 2007).
- Herrington, S. 1999. Playgrounds as community landscapes. *Built Environment* 25 (1):25–34.
- Hofferth, S. and J. Sandberg. (2001). "Changes in American Children's Time, 1981-1997." In Hofferth, S.L. and T.J. Owens, eds. *Children at the Millennium: Where Have We Come From, Where Are We Going?* Oxford, England: Elsevier Science.
- Jago, R., Baranowski, T., Baranowski, J., Thompson, D., Greaves, K. 2005. BMI from 3-6 years of age is predicted by TV viewing and physical activity, not diet. *International Journal of Obesity* 29 (6):557-564.
- Juster, F. Thomas et al. (2004). "Changing Times of American Youth: 1981-2003," Institute for Social Research, University of Michigan. Child Development Supplement, http://www.umich.edu/news/Releases/2004/Nov04/teen_time_report.pdf (accessed Oct. 27, 2007).
- Kahn, P., and S. Kellert, eds. 2002. *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*. Cambridge, MA: MIT Press.
- Kellert, S., ed. 1993. *The Biological Basis for Human Values in Nature*. Edited by S. Kellert and E. O. Wilson, *The Biophilia Hypothesis*. Washington, DC: Island Press.
- Kellert, Stephen R. 2004. *Building for Life: Designing and Understanding the Human-Nature Connection*. Island Press.
- Kirkby, Mary Ann. 1989. Nature as Refuge in Children's Environments. *Children's Environments Quarterly* 6 (No.1):7-12.
- Kuo, F., M. Bacaicoa, and W. Sullivan. 1998. Transforming inner-city landscapes: Trees, sense of safety, and preference. *Environment and Behavior* 30:28-59.
- Kuo, F.E. & A. Faber Taylor (2004). "A Potential Natural Treatment for Attention-Deficit/Hyperactivity Disorder: Evidence from a National Study," *American Journal of Public Health* 94 (9): 1580-1586.

- Lieberman, Gerald, and Linda Hoody. 1998. Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning. Poway, CA: State Education and Environment Roundtable, Science Wizards.
- Liu, G., J. Wilson, R. Qi, and J. Ying. 2007. Green Neighborhoods, Food Retail and Childhood Overweight: Differences by Population Density. *American Journal of Health Promotion* 21 (4 Supplement):317-325.
- Lohr, Virginia I., and Caroline H. Pearson-Mims. 2005. Children's active and passive interactions with plants influence their attitudes and actions toward tree and gardening as adults. *HortTechnology* 15 (3):472-476.
- Loukaitou-Sideris, Anastasia. 2003. Children's Common Ground. *APA Journal* 69 (2):130-143.
- Louv, R. 2005. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Chapel Hill, NC: Algonquin Books.
- Luepker, R.V. (1999). "How Physically Active are American Children and What Can We Do about it?" *International Journal of Obesity* 23(2): S12-17.
- Marsh, P. (1999). Does camping enhance self-esteem? *Camping Magazine*, 72(6), 36-40.
- Maxey, I. 1999. Playgrounds: From oppressive spaces to sustainable places? *Built Environment* 2 (1):18-24.
- McKendrick, J. 1999. Playgrounds in the build environment. *Built Environment* 2 (1):5-10.
- Milton, B., E. Cleveland, and D. Bennett-Gates. 1995. Changing perceptions of nature, self, and others: A report on a park/school program. *Journal of Environmental Education* 26 (3):32-39.
- Moore, L., Di Gao, A., Bradlee, L., Cupples, A., Sundarajan-Ramamurti. Proctor, M., Hood, M., Singer, M. Ellison, C. 2003. Does Early Physical Activity Predict Body Fat Change throughout Childhood? *Preventive Medicine* 37:10-17.
- Moore, R. 1980. Collaborating with young people to assess their landscape values. *Ekistics* 281:128-135.
- . 1991. Streets as Playgrounds. In *Public Streets for Public Use*, edited by A. Vernez-Moudon. New York: Columbia University Press.
- . 2006. Playgrounds: A 150 Year-Old Model. In *Safe and Healthy School Environments*, edited by H. Frumkin, R. Geller and I. Rubin. New York: Oxford University Press.
- Moore, R. and Cosco, N. 2007. Greening Montessori School Grounds by Design. *North American Montessori Teachers Association (NAMTA) Journal* 32(1): 128-151.
- Moore, R., and H. Wong. 1997. *Natural Learning: Creating Environments for Rediscovering Nature's Way of Teaching*. Berkeley, CA: MIG Communications.
- Moore, R., and D. Young. 1978. Childhood Outdoors: Toward a Social Ecology of the Landscape. In *Human Behavior and Environment*, edited by I. Altman and J. Wohlwill. New York: Plenum Press.
- Moore, R.C. 1980. Streets as Playgrounds. In *Public Streets for Public Use*, edited by A. Vernez-Moudon. New York: Columbia University Press.

- Moore, Robin. 1986. *Childhood's Domain: Play and Place in Child Development*. Dover, NH: Croom Helm, Ltd.
- . 1986. The Power of Nature: Orientations of Girls and Boys Toward Biotic and Abiotic Settings on a Reconstructed Schoolyard. *Children's Environments Quarterly* 3 (3):52-69.
- . 2003. How Cities Use Parks to Help Children Learn. In *City Parks Forum Briefing Papers*. Chicago: American Planning Association.
- Murphy, Michael. 2003. Education for Sustainability: Findings from the Evaluation Study of The Edible Schoolyard. Berkely, CA: The Center for Ecoliteracy.
- Myers, G. 2007. *The Significance of Children and Animals: Social Development and Our Connections to Other Species*. 2nd, revised ed. West Lafayette, IN: Purdue University Press.
- O'Shaughnessy, M. 2000. The child and the natural environment. *North American Montessori Teachers Association Journal* 25:119-144.
- Ogden CL, et al. (2006). "Prevalence of Overweight and Obesity in the United States, 1994-2004." *JAMA* 295: 1549-1555.
- Olshansky, SJ, D Passaro, R Hershow, J Layden, B Carnes, J Brody, L Hayflick, R Butler, D Allison, and D Ludwig. 2005. A Potential Decline in Life Expectancy in the United States in the 21st Century. *New England Journal of Medicine* 352 (11):1138-1145.
- Pellegrini, Anthony D., and P.K. Smith. 1998. Physical activity play: The nature and function of a neglected aspect of play. *Child Development* 69:577-598.
- Rasmussen, K., and S. Smidt. 2003. Children in the neighborhood, the neighborhood in the children. In *Children in the City: Home, Neighborhood and Community*, edited by P. Christensen and M. O'Brien. London: Routledge Falmer.
- Rideout, Victoria et al. (2010). *Generation M2: Media in the Lives of 8-18 Year-Olds*. The Henry J. Kaiser Family Foundation. <http://www.kff.org/entmedia/upload/8010.pdf> (accessed Nov. 24, 2010).
- Rivkin, Mary S. (2000). "Outdoor Experiences for Young Children." ERIC clearinghouse on Rural Education and Small Schools, <http://www.eric.ed.gov> (accessed on Nov. 17, 2007).
- Rivkin, Mary. 1995. *The great outdoors: Restoring children's right to play outside*. Washington, DC: National Association for the Education of Young Children.
- Sallis, J., J. Prochaska, and W. Taylor. 2000. A review of correlates of physical activity of children and adolescents. *Medicine Science of Sports Exercise* 32 (5):963-975.
- Schudel, M. 2001. No-fun zones: schools take a recess timeout - Commentary. *Technos* (Winter, 2001).
- Sobel, D. 1990. A place in the world: Adult memories of childhood's special places. *Children's Environments Quarterly* 7 (4):13-17.
- Striniste, N., and RC. Moore. 1989. Early Childhood Outdoors: A Literature Review Related to the Design of Childcare Environments. *Children's Environments Quarterly* 6 (4):25-31.

- Sturm, R. (2005). "Childhood Obesity: What Can We Learn from Existing Data on Societal Trends, Part 1. *Preventing Chronic Disease* [serial online] 2(1): 1-9, http://www.cdc.gov/pcd/issues/2005/jan/04_0038.htm
- Taylor, Andrea et al. (2001). "Coping with ADD: The Surprising Connection to Green Play Settings," *Environment and Behavior*, 33: 54-77.
- Titman, Wendy. 1994. *Special places; special people: The hidden curriculum of school grounds*. Surrey, UK: World Wide Fund For Nature.
- United Kingdom Sustainable Development Commission (2007). *Every Child's Future Matters*. http://www.sd-commission.org.uk/publications/downloads/ECFM_report.pdf (accessed Nov. 1, 2007).
- Ulrich, R. 1999. Effects of gardens on health outcomes: Theory and research. In *Healing Gardens: Therapeutic Benefits and Design Recommendations*, edited by C. C. M. a. M. Barnes. New York: John Wiley and Sons.
- Ward Thompson, C., Aspinall, P., Montarzino, A. 2008. The Childhood Factor: Adult Visits to Green Places and the Significance of Childhood Experience. *Environment and Behavior* 40:111.
- Wechsler, H., R. Devereaux, M. Davis, and J. Collins. 2003. Using the School Environment to Promote Physical Activity and Healthy Eating. *Preventive Medicine* 31 Page: (2):121-137.
- Wells, M., and W. Evans. 2003. Nearby nature: A buffer of life stress among rural children. *Environment and Behavior* 35 (3):311-330.
- Wells, N., and K. Lekies. 2006. Nature and the Life Course: Pathways from Childhood Nature Experiences to Adult Environmentalism. *Children, Youth and Environments* 16 (1):1-24.
- Wells, Nancy. 2000. At home with nature. Effects of "Greenness" on children's cognitive functioning. *Environment and Behavior* 32 (6):775-795.
- Zask, A., E. van Beurden, L. Barnett, L. Brooks, and U. Dietrich. 2001. Active school playgrounds—Myth or reality? results of the "Move it or Groove it" Project. *Preventive Medicine* 33:402-408.

NC STATE UNIVERSITY

February 23, 2011
Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

Office of the Dean / 919.515.8302
External Relations / 919.515.8313
Student Affairs / 919.515.8306
Research and Extension / 919.515.8352

Architecture / 919.515.8350
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Industrial Design / 919.515.8322
Landscape Architecture / 919.515.8340

Fundamentals / Design Studios / 919.515.8310
Graduate and PhD. Studies / 919.515.8308
Fax: 919.515.7721
www.design.ncsu.edu

To Whom It May Concern:

On behalf of the Natural Learning Initiative, College of Design, NC State University, I am sending the following letter of partnership to demonstrate commitment to the National Wildlife Federation (NWF) application and funding request to the USFS for its Natural Play and Learning Areas National Guidelines Project. As partners on this effort, we will be receiving a portion of the federal award, as shown in the application budget and narrative at the rate of \$60,000 in year one and \$55,000 in year two.

This letter demonstrates the Natural Learning Initiative intent to work in close partnership with NWF over the course of this grant. As part of this partnership, and with the federal funds listed above, in year one we will focus on collaborating with NWF in the development of guidelines for natural play learning areas for broad national distribution and use. In year two, we will focus on providing key technical support to the other partners on this effort that are building these play areas using the guidelines developed in year one. As part of this, we also understand we will be revising the guidelines as these pilot sites are tested on the ground by our partners, as well as evaluating the overall effort of this grant.

I firmly believe this project is an effective and cost-efficient way to set the necessary foundation for using urban forestry and natural resources to improve children's physical and emotional well-being. I hope that USFS favorably considers a full proposal from National Wildlife Federation and our project, as I very much look forward to being a part of this innovative effort.

Thank you in advance.

Sincerely,



Robin Moore, DiplArch, MCP
The Natural Learning Initiative, Director

Kalamazoo Nature Center



November 19, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (I- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

This letter of partnership demonstrates the Kalamazoo Nature Center's commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

This letter demonstrates the Kalamazoo Nature Center's intent to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This park will be built to serve the community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that the Kalamazoo Nature Center is willing to commit the necessary resources to build such a park—at an estimated cost of \$150,000. If USFS awards this grant, and the guidelines are thus developed, we intend design and construct such a project during the grant period.

I believe this project offers an innovative approach for utilizing urban and community forests improve children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Willard M. Rose".

Willard M. Rose, Ph.D.
President & CEO
Kalamazoo Nature Center

Phone 269-381-1574
Fax 269-381-2557
www.NatureCenter.org

7000 N. Westnedge Avenue
Kalamazoo, Michigan 49009-6309



November 15, 2010

A-4214 56th Street

Holland, MI 49423

616-393-WILD

FAX: 616-395-0952

www.outdoordiscoverycenter.org

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

This letter of partnership demonstrates the Outdoor Discovery Center Macatawa Greenway's commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project. The Outdoor Discovery Center Macatawa Greenway intends to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. The park will be built to serve the community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that the Outdoor Discovery Center Macatawa Greenway is willing to commit the necessary resources to build such a park at an estimated cost of \$80,000. If USFS awards this grant and the guidelines are thus developed, we intend to design and construct such a project during the grant period.

I believe this project offers an innovative approach for utilizing urban and community forests to improve children's health. I hope that USFS funds this project as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

A handwritten signature in dark ink, appearing to read "Travis Williams". The signature is written in a cursive, flowing style.

Travis Williams, Executive Director
Outdoor Discovery Center Macatawa Greenway



FOUNDATION

November 10, 2010

Ms. Nancy Stremple
USDA Forest Service
Sidney Yates Building (1- Central)
201 14th Street S.W., MS-1151
Washington, DC 20250-1151

To Whom It May Concern:

This letter of partnership demonstrates Mississippi Museum of Natural Sciences' commitment to the National Wildlife Federation's application to the United States Forest Service (USFS) for its Natural Play and Learning Areas Guidelines Project.

This letter also demonstrates the intent of the Mississippi Museum of Natural Science to design and build a pilot natural play learning area utilizing the guidelines that National Wildlife Federation and its partners propose to develop through its application to USFS. This natural play space will be built somewhere on the 300 acre native plant garden and natural area surrounding the Museum to serve our state-wide community as intended by this USFS opportunity, but will also serve to test the guidelines being created and refine them further for additional benefits in other regions.

In addition, this letter demonstrates that the Mississippi Museum of Natural Science Foundation is willing to commit the necessary resources to build such a park—at an estimated cost of \$150,000. If USFS awards this grant, and the guidelines are thus developed, we intend to design and construct such a project during the grant period.

I believe this project offers an innovative approach for utilizing urban and community forests while improving children's health. I hope that USFS funds this project, as I very much look forward to being a part of this effort.

Thank you for considering this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Elizabeth Hartfield".

Elizabeth Hartfield
Director
Mississippi Museum of Natural Science

Preserving Natural Mississippi

CCR Search Results

Not to be used as certifications and representations. See [ORCA](#) for official certification.

Registration Status: Active in CCR; Registration valid until 04/26/2012.

DUNS: 055189070

DUNS PLUS4:

CAGE/NCAGE: 32KF4

Legal Business Name: NATIONAL WILDLIFE FEDERATION

Doing Business As (DBA):

Division Name:

Division Number:

Company URL: <http://www.nwf.org>

Physical Street Address 1: 11100 WILDLIFE CENTER DR

Physical Street Address 2:

Physical City: RESTON

Physical State: VA

Physical Foreign Province:

Physical Zip/Postal Code: 20190-5361

Physical Country: USA

Mailing Name: NATIONAL WILDLIFE FEDERATION

Mailing Street Address 1: 11100 WILDLIFE CENTER DR

Mailing Street Address 2:

Mailing City: RESTON

Mailing State: VA

Mailing Foreign Province:

Mailing Zip/Postal Code: 20190-5361

Mailing Country: USA

Business Start Date: 02/10/1939

Delinquent Federal Debt: No

CORPORATE INFORMATION**Type of Organization**

Corporate Entity, Federal Tax Exempt
(State of Incorporation is VA)

Business Types/Grants

A8 - Nonprofit Organization

V2 - Grants

DISASTER RESPONSE INFORMATION**Bonding Levels**

**Construction Bonding
Level, Per Contract
(dollars):**

**Construction Bonding
Level, Aggregate
(dollars):**

**Service Bonding Level,
Per Contract (dollars):**

**Service Bonding Level,
Aggregate (dollars):**

Geographic Areas Served

No geographic areas specified

GOODS / SERVICES

North American Industry Classification System (NAICS)

813312 - Environment, Conservation and Wildlife Organizations

Product Service Codes (PSC)

Federal Supply Classification (FSC)

SMALL BUSINESS TYPES

SDB, 8A and HubZone certifications come from the Small Business Administration and are not editable by CCR vendors.

Business Types Expiration Date

North American Industry Classification System (NAICS)

The small business size status is derived from the receipts, number of employees, assets, barrels of oil, and/or megawatt hours entered by the vendor during the registration process.

NAICS Code	Description	Small Business	Emerging Small Business
813312	Environment, Conservation and Wildlife Organizations	No	No

CCR POINTS OF CONTACT

Government Business Primary POC

Name: DULCE GOMEZ-ZORMELO

Address Line 1: 11100 WILDLIFE CENTER DRIVE

Address Line 2:

City: RESTON

State: VA

Foreign Province:

Zip/Postal Code: 20190-5361

Country: USA

U.S. Phone: 703-438-6479

Non-U.S. Phone:

Fax: 703-438-6060

Government Business Alternate POC

Name: THOMAS KEARNEY

Address Line 1: 11100 WILDLIFE CENTER DRIVE

Address Line 2:

City: RESTON

State: VA

Foreign Province:

Zip/Postal Code: 20190-5361

Country: USA

U.S. Phone: 703-438-6347

Non-U.S. Phone:

Fax: 703-438-6060

Past Performance Primary POC

Name:
Address Line 1:
Address Line 2:
City:
State:
Foreign Province:
Zip/Postal Code:
Country:
U.S. Phone:
Non-U.S. Phone:
Fax:

Past Performance Alternate POC

Name:
Address Line 1:
Address Line 2:
City:
State:
Foreign Province:
Zip/Postal Code:
Country:
U.S. Phone:
Non-U.S. Phone:
Fax:

Electronic Business Primary POC

Name: PATRICK RAITT
Address Line 1: 11100 WILDLIFE CENTER DRIVE
Address Line 2:
City: RESTON
State: VA
Foreign Province:
Zip/Postal Code: 20190-5361
Country: USA
U.S. Phone: 703-438-6024
Non-U.S. Phone:
Fax: 703-438-6045

Electronic Business Alternate POC

Name: JOHN LEONARD
Address Line 1: 11100 WILDLIFE CENTER DRIVE
Address Line 2:
City: RESTON
State: VA
Foreign Province:
Zip/Postal Code: 20190-5361
Country: USA
U.S. Phone: 703-438-6012
Non-U.S. Phone:
Fax: 703-438-6045

EPLS

Excluded Parties List System

Search Results Excluded By
Firm, Entity, or Vessel : Natinal Wildlife Federation
DUNS : 055189070
as of 07-Dec-2011 8:14 AM EST

Your search returned no results.