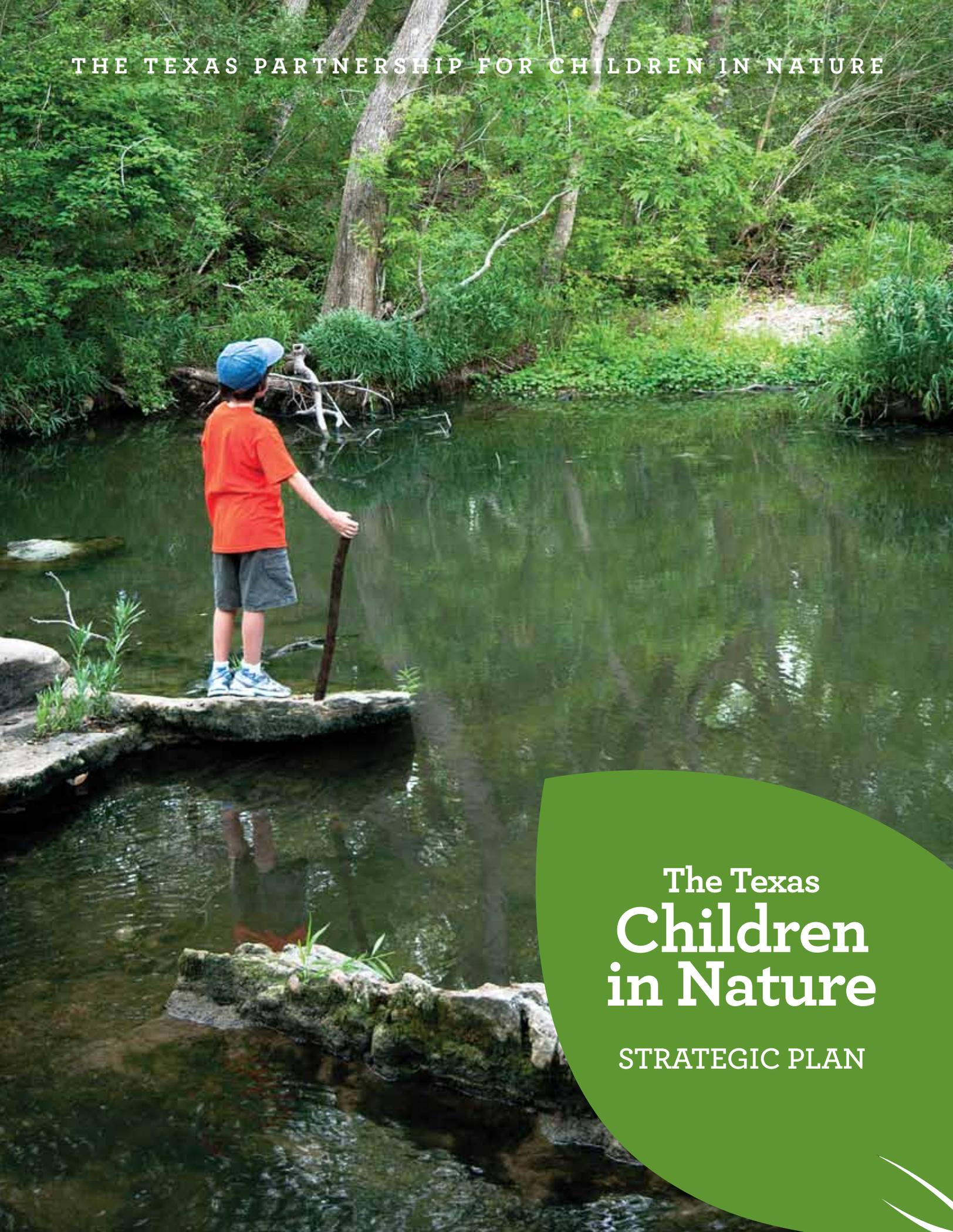


THE TEXAS PARTNERSHIP FOR CHILDREN IN NATURE



The Texas
**Children
in Nature**

STRATEGIC PLAN

Dear fellow Texans,

Many of us have fond childhood memories of a special place where play, imagination and wonder reigned. For most, that place was outdoors. Through these experiences, we gained understanding, appreciation and a personal relationship with the natural world.

Sadly, today's children are allowed **less time for unstructured, creative play in nature** than ever before. As the trend away from outdoor play and learning deepens, we are witnessing sobering consequences for children's health and well-being. Additionally, this youngest generation is missing out on critical experiences that lay the foundation for future stewardship of our natural resources.

We can reverse this trend. One achievable solution is to restore active play and learning in nature. This issue has brought together an unprecedented coalition of partners from all walks of life who formed the Texas Partnership for Children in Nature. These 80+ experts examined the issues and outlined their recommendations in this strategic plan.

Their wisdom, sincerity and integrity is reflected throughout the plan. By design, the plan is concise, optimizes partnerships and focuses on implementation across multiple public and private sectors.

Please consider the recommendations in this plan and join us in restoring our children's well-being and their relationship with Texas's rich natural and cultural heritage. The trend is real, the problem is solvable and **the time to act is now.**



Carter Smith
Executive Director
Texas Parks and Wildlife Department



The Texas Children in Nature Strategic Plan

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Executive Summary

During the 81st legislative session, organizations including the Texas Wildlife Association, the National Wildlife Federation, Texas PTA, the Texas Pediatric Society, and many other conservation, education and public health organizations advocated for the well-being of children through the creation of a formal state plan to enable children to spend more time out-of-doors and to better understand Texas' natural resources.

In fall 2009, a bipartisan group of Texas legislators requested that the Texas Parks and Wildlife Department, along with the Texas Education Agency, the Texas Department of State Health Services and the Texas Department of Agriculture form a public-private partnership to develop that strategic plan. Over 80 professionals including representatives from state and federal agencies, NGOs, health, education, natural resources, community organizations and businesses, answered the call and formed the Texas Partnership for Children in Nature.

Their discoveries included some sobering statistics:

Children ages 8 - 18 spend an average of 7.5 hours a day, over 50 hours per week, connected to a television, computer, video games and other electronic media.¹

A child is six times more likely to play a video game than ride a bike.²

Texas is home to three of the five cities with the highest obesity rates in the nation.³

In the 2009-2010 Fitnessgram school year report, only a little over 8% of 12th grade-girls and boys were deemed physically fit.⁴

Today's children may be the first generation at risk of having a shorter lifespan than their parents.⁵



Children who play and learn in nature are:

Healthier.

Active nature play improves physical conditioning, and has a positive effect on emotional wellbeing and child development. Outdoor play has been linked to reduced risk of myopia and vitamin D deficiency.

Happier.

Nature play increases self-esteem and reduces stress. Children learn self-discipline and are more cooperative with others. Children feel more capable, confident and connected to nature.

Smarter.

Nature play stimulates creativity and improves problem solving. Schools using environmental themes report improved academic performance. And, children who play in nature are more likely to become tomorrow's conservation leaders.

This executive summary highlights the major recommendations of the Texas Partnership for Children in Nature. It focuses on the role of **Health, Education, Access and Community** in furthering engagement with nature and increasing understanding of Texas' natural resources. Stakeholder teams of content experts examined relevant issues, reviewed current research and developed recommendations for each focus area. The plan optimizes partnerships and relies on implementation across multiple public and private sectors. The full report includes their analyses of the problem, objectives and suggested action items. The plan will be the focus of a state implementation conference held in Austin on December 3-4, 2010. A report on the conference and implementation strategies will be posted online at www.texaschildreninnature.org.



www.texaschildreninnature.org



Team Recommendations

We envision that all Texas children and their families will spend more time outdoors, engaged in nature for a happy and healthy life.



Health

A growing body of evidence points to the benefits of physical activity and play in nature to children’s physical and mental health and development. More research is needed, but we know enough to act. We envision healthier children and families as a result of increased time spent in nature and more outdoor physical activity.



Utilize healthcare and related professionals to educate families about the benefits of nature to children’s physical health, emotional well-being and cognitive functioning; the importance of nature and outdoor activities for healthy child development; and safety precautions.

Encourage Texas-specific research to describe the causal relationship between nature and children’s health and development, including the therapeutic benefits of nature.

As appropriate, encourage integration of nature opportunities as a health strategy in existing health and childcare guidelines.

Promote health considerations in urban and community planning.

Education

Natural resource literacy is the ability to understand, analyze and address major natural resource opportunities and challenges. The goals to achieve natural resource literacy through education includes educating school administrators, educators and future educators; tracking students’ outcomes and experiences; integrating local informal resources; involving parents; and assessing these processes and outcomes. Our vision is that every child in Texas will be engaged in meaningful outdoor learning experiences and achieve natural resource literacy.



Increase the understanding, appreciation and use of experiential learning outdoors within the formal education system.

Develop quality outdoor classrooms, wildlife habitats and natural play areas on every Texas schoolyard.

Develop integrated and collaborative partnerships between the formal education and informal systems and resources to benefit Texas youth.

Assess the effectiveness of natural resource literacy education in Texas.

Access

Safety, convenience and multi-purpose design are essential to developing a connection with nature and a sense of place, the building blocks to conservation stewardship. We envision a Texas where children and their families have safe, convenient, sustainable and desirable access to the outdoors, where they can develop respect and appreciation for the natural environment.



Optimize access to natural areas to make them safe and convenient.

Partner with government agencies, nonprofits and the private sector, in coordination with youth, to provide increased access to Texas lands and waters.

Encourage creation and expansion of natural areas that provide varied and recurring nature-based experiences.

Plan, develop or expand built environments to include natural areas with interpretive elements.

Community

Connecting with nature must be relevant and welcoming to all, including unifying messages, partnerships and efforts that are respectful to Texas's diverse peoples, cultures and economic needs. We envision that the message "Happier, Healthier, Smarter" Children in Nature is widely and mutually communicated and that communities inspire children to maintain a lifelong connection to nature.



Raise awareness and action among adults and children through consistent and unified communication.

Create community-based regional partnerships throughout Texas to increase "children in nature" activities.

Promote the cultural and economic gateways and benefits through nature-based opportunities.

Implementation Strategies

Private and public entities must work together to implement this plan, relying on the leadership of regional collaborations and a state coalition. Implementation strategies developed from a December 2010 state conference of stakeholders should guide actions. The following additional efforts are underway to advance the implementation of the Texas Children in Nature Strategic Plan.

Marketing

A unifying message and brand, with audience-specific tool kits, will help communicate and promote this important initiative. Research is needed to establish baselines for the plan's goals. The Marketing Team will further identify the marketing implications associated with the plan's strategic goals.

Policy and Legislative

Policy priorities include acquisition of natural areas close to population centers, funding for the state parks system and local park grants programs, and support for outdoor and natural resource education at public schools. The Policy and Legislative Team will be working with partner organizations and legislative staff to identify policy responses that will advance the Texas Children in Nature Strategic Plan.



About the Texas Partnership for Children in Nature

Inspired by the benefits nature holds for children, and concerned by the alarming downward trend in children’s fitness, Sen. Eliot Shapleigh and Rep. Donna Howard called for a Texas Partnership for Children in Nature during the 81st legislative session. Senate Bill 205 was championed by the Texas Wildlife Association, the National Wildlife Federation, Texas PTA, the Texas Pediatric Society, and many other conservation, education, and public health organizations. These groups advocated for the well-being of children through the creation of a formal state plan to enable children to spend more active time outdoors in nature and to better understand Texas’ rich natural and cultural legacy.

Although S.B. 205 passed the Senate unanimously and cleared House committees, it did not make the final House deadline for a vote. To keep momentum on this issue between sessions, a bipartisan group of legislators tasked the Texas Parks and Wildlife Department, Texas Education Agency, Texas Department of Agriculture and Texas Department of State Health Services to join with private-sector organizations and together form a Texas Partnership for Children in Nature (TPCIN).

The partnership was charged initially with developing a statewide plan to promote “healthy children in a healthy world” by integrating health and school initiatives with increased opportunities for understanding Texas’ natural resources and developing outdoor skills, scientific study and outdoor play opportunities for children.

Carter Smith, executive director of the Texas Parks and Wildlife Department, chaired the effort. In January 2010, a 17-member Texas Steering Committee representing four state agencies, NGOs, health, education and business, convened to establish a work plan and stakeholder teams. The focus areas were Education, Health, Access and Community, and later, Marketing and Policy/Legislative.

Stakeholder teams formed for each focus area brought in a diversity of expertise and perspectives. Altogether, over 80 professionals from state and federal agencies, NGOs, health, education, natural resources, community organizations and business worked on this plan over the course of 10 months. The teams examined relevant issues, reviewed current research and explored the strengths, weaknesses, challenges and opportunities for the plan. From this they drafted recommendations for each area. The plan will be presented to the TPW Commission and then to legislators and their staff in November 2010. The plan will be the focus of a state implementation conference held in Austin on December 3-4, 2010.



Team Reports and Recommendations

Stakeholder Team Report: HEALTH

Children are spending less time outdoors in nature, which could be detrimental to their health. There is a growing body of research that clearly supports a positive relationship between contact with nature and physical health, emotional well-being and child development. Some of the strongest research to date indicates that children who spend time playing outdoors are more physically active than those in other settings. ^{6 7 8 9 10}

In 2008, the U.S. Department of Health and Human Services published the *Physical Activity Guidelines for Americans*.¹¹ These guidelines call for children and adolescents to be physically active for 60 minutes or more every day, most of which should be either moderate- or vigorous-intensity aerobic physical activity. On at least three days per week, they should do vigorous-intensity activity as well as muscle-strengthening and bone-strengthening activity.



Increased time spent indoors on video or computer games and in front of the TV is considered to be a major contributor to both reduced exposure to nature and physical inactivity, which is an underlying factor in obesity. According to a survey of Texas high-school students conducted in 2009, 25.1 percent reported that they spent three or more hours per day playing video or computer games or using a computer for something that was not schoolwork. In

this same survey, 36.3 percent said they spent three or more hours per day watching TV. When asked about the amount of physical activity they received, less than half (46.6 percent) said they were physically active for a total of at least 60 minutes per day on five or more of the past seven days.¹²

A survey of Texas schoolchildren's weight status conducted in 2004 and 2005 indicated that 42 percent

of fourth-graders, 39 percent of eighth-graders and 36 percent of 11th-graders were either overweight or obese.¹³ The Texas Education Agency released data from the 2009-2010 school year that shows disappointing physical fitness overall and declining physical fitness at the high-school level. Fitnessgram scores of over 2.9 million third- through 12th-grade students in 92 percent of all school districts were assessed. Children were found most fit at the younger grades and showed a steady decline at older grades. Yet, there is especially alarming lack of fitness even of 3rd graders, with only 37.27 percent for girls and 30.98 percent for boys deemed fit—significantly lower than one would expect for active 8-year old children. Only 8.07 percent of 12th-grade girls and 8.54 percent of 12th-grade boys participating in the fitness tests were deemed physically fit. Fitness levels of minority children were on average worse than their white/non-Hispanic counterparts.¹⁴

Nationally, it is estimated that 61 percent of obese children and adolescents have at least one additional risk factor for heart disease, such as high cholesterol or high blood pressure.¹⁵ In addition, obese children are at greater risk than healthy weight children for bone and joint problems, asthma, sleep apnea and social and psychological problems such as stigmatization and poor self-esteem.^{16 17} This increases the risk for associated health problems including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis. In addition, overweight and obese children are more likely to become overweight and obese adults.¹⁸ Although many variables can affect weight status over the life cycle, retrospective studies show that 50 to 80 percent of overweight children remain overweight as adults

HEALTH

and that if children are overweight before the age of 8, obesity in adulthood is likely to be more severe.^{19 20 21}

Research shows that children who play outdoors are more likely to be vigorously active, and children who spend more time in vigorous activity are less likely to have weight and health problems. In addition to increased physical activity, outdoor play and exposure to nature have been linked to the reduced risk of myopia (nearsightedness),^{22 23} asthma²⁴ and vitamin D deficiency.²⁵ Vitamin D deficiency, which is evident in approximately 9 percent of children in the U.S., can lead to bone disease, cardiovascular disease, diabetes, high blood pressure and other health problems.^{26 27 28}

Exposure to nature has been found to have a positive association with enhanced mental health and cognitive functioning. The amount of nature in the day-to-day living environment is associated with lower levels of depression and anxiety, and higher levels of perceived self-worth in children.^{29 30} Further, exposure to nature may also serve as a protective factor for children experiencing stressful life events, buffering them against such stressors. Unstructured free play in the outdoors has been linked to various social benefits including cooperation, self-awareness and increased feeling of self-efficacy and confidence.^{31 32} The benefits of simply observing nature have also shown value in terms of pain control during medical procedures and recuperation time after surgery among both adults and youth.^{33 34} Nature may also have restorative value in fatigue associated with directing and focusing attention and inhibiting other stimuli, thus holding some promise for improving attention in children. The amount of nature in a child's play environment has been reported by parents to be associated with improved attention span.³⁵ Further, physical activity in a natural setting may improve symptoms of Attention-Deficit Hyperactivity Disorder (ADHD), in comparison to physical activity in other settings.^{36 37 38} Further research including randomized clinical trials is needed to elucidate the benefit of nature in treating ADHD.

Additional research is needed to determine the extent to which nature and outdoor time reduce the risks of health problems as well as their role in the treatment of health problems. Meta-analysis of existing research and causal research are also needed to distinguish between

the multiple benefits of the *environment* (nature) and the *activities* engaged in—play, work, meditation, reflection, etc. However, as Dr. Howard Frumkin of the Centers for Disease Control (also a supporter of land conservation as a way to promote public health) states, “We know enough to act.”³⁹

We envision healthier children and families as a result of increased time spent in nature and more outdoor physical activity.

Target audiences

- Health-care professionals
- Health-related organizations and coalitions
- K-12 schools and colleges
- Youth organizations
- Community-based services for families with young children

Key focus areas

- Nature-based activities as a health strategy
- Outreach and professional development
- Research

Strengths and weaknesses:

Strengths

- Local and state parks provide opportunities for exposure to nature and increased physical activity and, therefore, improve the health of children and families in Texas.
- There are existing statewide networks, programs and services that can be used to educate families and practitioners about the link between health and nature.
- Nature is accessible and often free or low-cost for most Texas youth.
- This is an emerging area of research which creates new and exciting opportunities for academic institutions in Texas and also for research foundations.
- Partnerships are already working to improve safety and accessibility to the outdoors.
- There is a great deal of public awareness of the obesity problem among children and the relationship between physical inactivity and obesity.

- There is political will to address physical inactivity because of its impact on obesity and health-care costs.
- Increasing time spent outdoors in nature will most likely not be a polarizing issue among stakeholder groups.
- This is an opportunity for the development of non-traditional partnerships to improve health as exemplified by the Texas Partnership for Children in Nature.

Weaknesses

- For many, the research linking nature and health is new, so much education will need to be done.
- Further research needs to be done, including longitudinal studies and randomized trials to clarify causal/predictive mechanisms and inform intervention.
- Nature may not be easily accessible, and outdoor time may not be viewed as safe for some children living in certain areas.
- Marketing budgets for “nature/outdoor time” can not compete with the large marketing budgets for TV, video and computer games.
- Opportunities for children and families to use local and state parks are subject to budget cuts during economic downturns and are further challenged by lack of funding for land acquisition to accommodate the projected increase in the state’s population.

GOAL 1: Utilize health-care and related professionals to educate families about the benefits of nature to children’s physical health, emotional well-being and cognitive functioning; the importance of nature and outdoor activities for healthy child development; and safety precautions.

Objective 1: Engage professional organizations to increase awareness and disseminate information about nature and health through professional development opportunities.

Action 1: Hold presentations at professional conferences and seminars.

Action 2: Develop journal articles and other resources.

Action 3: Target organizations such as the Texas Pediatric Society; Texas Medical Association; local

medical societies, Texas Society of Psychiatric Physicians; Texas Psychological Association; Texas Counseling Association; Texas School Nurses Organization; Texas Parent Teachers Association; Texas Association for the Education of Young Children; and the Texas Association for Health, Physical Education, Recreation and Dance.

Objective 2: Work with existing statewide networks, universities and state governmental agencies to incorporate information about health and nature into existing curricula and resources for children, students, families and teachers.

Action 1: Work with state agencies such as the Texas Women, Infants and Children (WIC) program and Texas AgriLife Extension Service to incorporate nature and wellness messages in their materials.

Action 2: Work with community organizations such as Boys and Girls Clubs, Girl and Boy Scouts, HeadStart and Education Service Centers to incorporate nature and wellness messages in their materials.

Action 3: Work with day cares, schools and universities to encourage and educate students, parents and communities to enjoy the outdoors and nature.

Objective 3: Work with academic institutions to incorporate training on nature and health into undergraduate and graduate coursework in education, child development, social work, counseling, kinesiology, health education, public health, medicine, nursing and other related fields.

GOAL 2: Encourage Texas-specific research to describe the causal relationship between nature and children’s health and development, including the therapeutic benefits of nature.

Objective 1: Work with the national children in nature initiative and academic community to identify research needs.

Objective 2: Promote research through academic and professional organizations.

Objective 3: Support increased funding for research.

GOAL 3: As appropriate, encourage integration of nature opportunities into existing health and child-care guidelines as a strategy for improving children’s health.

Objective 1: Work with TEA to identify strategies and opportunities to incorporate nature and health messages into coordinated school health programs.

Objective 2: Incorporate the goals and objectives of the Texas Partnership for Children in Nature into state plans and advisory group recommendations such as the Strategic Plan for the Prevention of Obesity in Texas, Active Texas 2020 Plan, the Early Childhood Health and Nutrition Interagency Council and the Interagency Obesity Council.

Objective 3: Work with the Department of Family and Protective Services to incorporate “nature guidelines” into standards and regulations for daycare and residential childcare facilities.

Objective 4: Add the Texas Parks and Wildlife Department as a member agency on the Interagency Obesity Council.

GOAL 4: Promote health considerations in urban and community planning.

Objective 1: Increase the number of safe and accessible parks and playgrounds, particularly in underserved and low-income communities as a health strategy.

Objective 2: Improve the walk-ability and bike-ability of communities to promote and support programs that increase active transportation to and from schools.

Objective 3: Identify exemplary models of urban design and land use that encourage both nature-based physical activity and wise use of the natural environment.

“What’s important is the opportunity for children to get outside and play. Get out there, climb a tree, look at the birds. It’s also an opportunity for the family to do something together.”

- Dr. D. Michael Foulds
Professor Emeritus, Dept. of Pediatrics
University of Texas Health Science
Center at San Antonio



Stakeholder Team Report: EDUCATION

Educators and researchers recognize a growing body of evidence indicating that children who have outdoor experiences are more successful in school than those who do not. However, the amount of time children spend outdoors is much less than that experienced by their parents and grandparents. This may have a negative impact on knowledge and skill conveyed in the classroom.



The Kaiser Family Foundation found that the average American child (ages 8-18) now spends over 7.5 hours a day connected to electronic entertainment media, leaving little room for quality time outdoors.

The disparity of time spent indoors is thought to have ramifications on physical and mental health,⁴⁰ classroom performance and behavior, and a connection to nature later in life.⁴¹

Multiple studies support the notion that time spent outdoors increases academic achievement. The American Institutes for Research compared students involved in an outdoor education program to a control group lacking the same program. Twenty-seven percent of the program participants increased in measures of mastering scientific concepts, enhanced cooperation and conflict resolution skill, and problem-solving.⁴² Similarly, according to the State Education and Environment Roundtable, students involved in environment-based instructional programs scored as well as or better than their peers in standardized tests for reading, math, language and spelling.⁴³ Fourth-grade students from the Houston Independent School District who participated in the National Wildlife Federation's Schoolyard Habitats Program had significantly increased math scores when compared to peers in schools that were taught using a more traditional curriculum. Students from two schools participating in the Texas Healthy Habitats service-learning environmental projects had significantly increased science test scores.

The Texas Essential Knowledge and Skills (TEKS) specifically reference outdoor and field experiences, yet these activities are sometimes viewed negatively by school district administrators and teachers in Texas. Restricting learning to indoor classrooms gives the impression that the formal education system fails to recognize, understand and appreciate the importance of experiential learning outdoors to student achievement. The benefits of nature-based learning and unstructured play have been documented to improve learning among children.

Current TEKS would lend themselves well to experiential learning outdoors. For example:

High school physical education TEKS §116.53. High School Adventure/Outdoor Education (One-Half Credit). (1) In Physical Education, students acquire knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically-active lifestyle. The student exhibits a physically-active lifestyle and understands the relationship between physical activity and health throughout the lifespan (2) Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment that can be enjoyed for a lifetime.

§112.4. Science, Grade 2. (9) The student knows that living organisms have basic needs that must be met for them to survive within their environment. The student is expected to: (C) compare and give examples of the ways living organisms depend on each other and on their environments such as food chains within a garden, park, beach, lake and wooded area.

EDUCATION

Additionally, there are many opportunities for experiential learning through informal education providers. A solid connection between formal education networks and informal education providers is lacking, however. Fostering this collaboration would greatly benefit Texas youth and both formal and informal educators.

Our vision is that every child in Texas will be engaged in meaningful outdoor learning experiences and achieve natural resource literacy.

Our mission is to (1) provide opportunities for every Texas child and family to engage with nature; and (2) increase understanding of Texas natural resources.

Target Audiences

- K-12 educators, including teachers, administrators, central office personnel and school board members
- Informal educators including representatives from nature centers, parks, museums and agencies
- Parents of school-age children
- Policy-makers

Key Focus Areas

- Integration of campus natural areas to strengthen and enhance K-12 education
- Collaborations between formal and informal educators
- Natural resource literacy

Strengths and Weakness

Strengths

- Texas has many successful, well-trained, practicing teachers.
- Texas schools have strong campus leadership.
- High quality training and training opportunities are available for in-service and pre-service educators.
- Schoolyards have potential outdoor learning areas.
- Schoolyards with existing integrated built/natural play environments can be expanded and naturalized.
- There are examples of successful schools with a nature focus.
- Existing curriculum and requirements can be taught in new ways in the outdoors.
- Educational resources that support learning standards can be used outdoors.
- Texas has rich educational resources in informal settings.
- Science TEKS for Grades 6-8 and for all high school science courses state that “The student, for at least 40

percent of instructional time, conducts laboratory and field investigations...”

- We have the opportunity to draw from the already existing organizations of outdoor, formal and informal educators and resources.
- Outdoor learning can occur on any schoolyard or natural area.

Weaknesses

- There is a lack of integration between indoor instruction and experiential outdoor learning.
- Some teachers have not received consistent TEKS or outdoor/experiential instruction themselves.
- For some districts, there is a lack of administrative support for experiential learning.
- Some teachers are not comfortable teaching outdoors, or lack content knowledge.
- Educators may lack access to professional development.
- Not all architects are aware of the state requirement to use native plants on state facilities.
- There are schoolyards without native plants.
- There can be a lack of connection between informal and formal settings.
- Schools offer fewer field trips.
- At the elementary level there is no requirement for lab and field investigations; however, the Science TEKS for Grades K-5 state that “Districts are encouraged to facilitate classroom and outdoor investigations” for at least 50-80 percent of instructional time, depending on grade level.

Goals and Objectives

Natural resource literacy is the ability to understand, analyze and address major natural resource opportunities and challenges. The goals to achieve natural resource literacy through education include educating school administrators, educators and future educators; tracking students’ outcomes and experiences; integrating local informal resources; and assessing these processes and outcomes.

“Experiences that bond children to the natural world sharpen their senses, inspire a sense of beauty and build emerging concepts of biology, geology, physics and language.”

- Dr. Joe Frost
Professor Emeritus, College of Education
University of Texas at Austin

GOAL 1: Increase the understanding, appreciation and use of experiential learning outdoors within the formal education system.

Objective 1: Provide professional development training for formal education administrators.

Action 1: Provide professional development to administrators about the benefits of outdoor learning; the importance of training educators to use outdoor learning; and how outdoor learning supports structured learning in the classroom.

Action 2: Work with partners such as Texas Association of School Administrators (TASA), Texas Association of School Boards (TASB) and Local Educational Agencies (LEAs) to host, plan, implement and evaluate opportunities for school administrators.

Action 3: Provide professional training for administrators about the value and enhancement of free, outdoor spontaneous play and its benefits for fitness, health, brain development and learning.

Objective 2: Provide professional development training for teachers that encourages continuing education and a community of learners, and provides training opportunities over time.

Action 1: Develop methods that encourage experienced teachers to engage student learning outdoors.

Action 2: Provide professional development to in-service teachers showing the importance of outdoor learning in enhancing structured learning in the classroom and as an opportunity for interdisciplinary teaching.

Action 3: Identify and encourage professional development opportunities for teachers that are consistent with best practices in natural resource literacy education with, for example, a minimum of 36 contact hours.

Action 4: Identify and encourage existing professional development opportunities for outdoor skills education.

Action 5: Provide professional training for teachers about the value and enhancement of free, outdoor spontaneous play and its benefits for fitness, health, brain development and learning.

Objective 3: Provide professional development training opportunities to pre-service teachers.

Action 1: Incorporate environmental education within existing teacher preparation programs.

Action 2: Provide outdoor learning immersion experiences for teachers to help them become comfortable teaching in the outdoors.

Action 3: Identify 5 to 10 Texas colleges or universities that will embed natural resource literacy and outdoor skills education into existing pre-service teacher preparation program course offerings.

Action 4: Provide instruction in current technologies, such as GIS and probes.

Action 5: Provide professional training for pre-service teachers about the value and enhancement of free, outdoor spontaneous play and its benefits for fitness, health, brain development and learning.

Objective 4: Provide students outdoor learning opportunities aligned with TEKS standards for natural resource literacy.

Action 1: Convene an education summit to identify and review curriculum needs for developing literacy in natural resources.

Action 2: Identify and solicit existing curricula for assessment.

Action 3: Determine whether experiential curricula will meet TEKS requirements.

Action 4: Identify model outdoor field and service-learning experiences that can be integrated into the regular school curriculum.

Action 5: Distribute qualifying curricula to formal education outlets and into the hands of teachers trained in outdoor learning, and encourage its use.

Action 6: Share with students information about nature-based careers.

Objective 5: Engage families in the understanding and appreciation for outdoor learning experiences.

Action 1: Provide information in multiple languages to families on the benefits of outdoor learning experiences.

Action 2: Provide information two times per year to families regarding resources and activities they can use easily at their homes to engage children in outdoor experiential learning.

Action 3: Assess the impact of information regarding outdoor experiential learning on parent knowledge and behaviors.

GOAL 2: Develop quality outdoor classrooms, wildlife habitats and integrated natural play/learning environments on every Texas schoolyard.

Objective 1: Encourage design and planning of natural areas on school grounds.

Action 1: Identify design guidelines for outdoor classrooms, wildlife habitats and integrated natural play/learning environments.

Action 2: Encourage local school districts to provide structure for recess that includes outdoor activities.

Action 3: Identify ways to encourage natural areas in new school construction and renovation through educational materials, development of a model school board policy, and incorporation into voluntary certification standards (for example, Leadership in Energy & Environmental Design (LEED) for Schools certification).

Objective 2: Partner with existing programs promoting school habitats and outdoor classrooms.

Action 1: Assess existing schoolyard habitat programs and recommend a way that existing programs can work together to achieve the objective of increasing natural landscaping on schoolyards.

Action 2: Build and train a cadre of volunteers to help with implementation and maintenance of the outdoor classrooms.

Action 3: Encourage outdoor play as part of physical education classes.

Action 4: Provide daily recess and challenging natural/built play environments for all preschool and elementary schools.

GOAL 3: Develop integrated and collaborative partnerships between the formal education and informal systems and resources to benefit Texas youth.

Objective 1: Assess informal education providers for relevant programming to meet the needs of formal education.

Action 1: Identify and establish communication with at least 50 existing informal education providers.

Action 2: Engage existing informal education providers of nature-based programming to create a plan of action.

Objective 2: Identify at least five strategies to link formal and informal educators in order to increase communication and clarity of alignment with the TEKS.

Action 1: Create Web-based resources as a common point of communication.

Action 2: Create video programming to educate students and teachers about nature and natural resources.

Action 3: Identify successful formal-informal partnerships.

Objective 3: Identify partners to provide professional development opportunities for informal educators.

Action 1: Endorse and promote existing training that meets the needs of informal educators.

Action 2: Implement outdoor, nature-based education via well-trained volunteers and parents.

Objective 4: Encourage non-public education such as private schools, home schools and after-school programs to address natural resource literacy.

Action 1: Identify and share resources and best practices tools through related networks and organizations.

Action 2: Share opportunities for experiential learning and educator training.

Objective 5: Develop partnerships between schools, park departments and parents to provide training for playleaders or playworkers to staff park and/or school play and learning environments after school and during holidays.

GOAL 4: Assess the effectiveness of natural resource literacy education in Texas.

Objective 1: Assess the quality of experience and knowledge of Texas students on natural resource topics.

Action 1: Assess changes in use of outdoor space for learning in formal and informal sites.

Action 2: Identify related State of Texas Assessments of Academic Readiness (STAR) objectives and methods to measure and report progress of public school students toward becoming literate in natural resources.

Objective 2: Assess the effectiveness of the overall literacy strategy.

Action 1: Develop a process for revising or updating the natural resource literacy plan every five years or as needed.

Action 2: Convene a task force to examine the effectiveness of partnerships between the formal and informal education systems.



Stakeholder Team Report: ACCESS

As the state’s population becomes more urban and disconnected from natural resources—our lands and waters—it becomes increasingly important to provide accessible, safe and enjoyable outdoor recreation opportunities and to effectively inform and educate the public about them.

For youth, like all Americans, close-to-home opportunities for outdoor recreation are essential. The Outdoor Foundation noted in their 2010 report on youth that the participation rate in outdoor recreation of youth who live in communities with designated walking and biking trails is significantly higher than youth without these designated areas. Youth with nearby walking routes had a 21 percent higher participation rate, and youth with nearby biking routes had a nearly 25 percent higher participation rate. Youth with local outdoor infrastructure average more outings than do those without – about 20 percent higher, on average.⁴⁴

We envision a Texas where children and their families have safe, convenient, sustainable and desirable access to the outdoors, where they can develop respect and appreciation for the natural environment.

Target Audiences

- State and local governments
- Urban designers and planners
- Related nonprofit organizations
- Landowners and land managers
- Community and neighborhood associations
- Constituent volunteer groups

Key Focus Areas

- Expanded access to and inventory of natural areas
- Safety
- Improved existing access
- Partnerships
- Multiple and recurring experiences
- Natural areas in built environments

Strengths and Weaknesses

Strengths

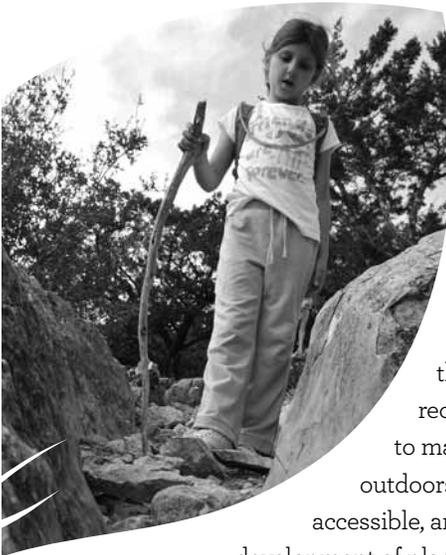
- Partnerships are already working to improve safety and accessibility to the outdoors.
- Volunteer and user groups are generally eager to maintain and expand access.
- There is public desire and political will to address physical inactivity because of its impact on obesity and health-care costs.
- Schoolyards with existing integrated built/natural play environments can be expanded and naturalized.
- There are examples of successful schools with outdoor classrooms and nature-based programming.
- There are examples of built environments that successfully incorporate natural areas.

To be successful, governments, nonprofits and the private sector must unite to develop, promote and invest in opportunities for Texans to access outdoor experiences.

This aspect of the plan provides recommendations to make access to the outdoors convenient, safe and accessible, and to facilitate further

development of places where children and their families can develop a sense of respect and appreciation for the natural environment.

It will take the commitment and involvement of all who care about Texas to ensure ample access to opportunities for outdoor experiences and to pass on values that sustain and conserve this state’s great natural, cultural and outdoor recreation resources.



ACCESS

- Trail grants and local park grants to improve and expand access are available from the state.
- Funding from private sources is increasingly available for improving and expanding access to natural areas.
- More government-control lands and waters could be made available to the public.
- There are examples of private landowners providing public access and field experiences for youth.

Weaknesses

- Nature may not be easily accessible, and outdoor time may not be viewed as safe for some children living in certain areas.
- There is no available current inventory of natural areas and their relative accessibility.
- Opportunities for children and families to use local and state parks are subject to budget cuts during economic downturns.
- Lack of funding for land acquisition to accommodate the projected increase in the state's population presents a challenge.
- Schools offer fewer field trips to natural areas.
- In times of tight budgets, opening or improving access to public lands may be a challenge.
- Because of budget constraints, school districts may be reluctant to reconfigure schoolyards and playgrounds to provide increased access.
- Retrofitting existing landscapes to enhance access may be costly.
- Barriers, real and perceived, exist that inhibit use of natural areas.
- Liability concerns for landowners and other private partners inhibit access.
- Some areas are inaccessible to those with disabilities.
- Developing a sense of place or a relationship with natural areas depends on multiple visits and is enhanced by quality interpretive elements.

Goals and Objectives

GOAL 1: Optimize access to natural areas to make them safe and convenient.

Objective 1: Facilitate safe and convenient public access.

Action 1: Encourage federal, state and local agencies to provide easily identifiable, accessible, public transportation routes to natural areas. Examples include bus stops, train stops and bicycle stands.

Action 2: Expand and encourage proactive law enforcement to protect public lands and waterways and the people of Texas.

Action 3: Develop partnerships between schools, park departments and parents to provide training for playleaders or playworkers to staff park and/or school play and learning environments after school and during holidays. (See Education.)

Action 4: Encourage universal design facilities and signage to ensure access to those with all abilities.

Action 5: Encourage grant incentives for federal, state and county designers to partner with other agencies, cities and communities to cost-share development of universal design facilities and signage.

Objective 2: Create hiking, biking, walking and paddling trails with points of access for multiple and diverse users in natural areas, including those with disabilities.

Action 1: Improve the quality and distribution of boat ramps statewide.

Action 2: Reach out to nonprofit organizations and volunteers to assist in creating, operating and managing hiking, biking, walking and paddling trails and other natural areas.

Action 3: Encourage alternate pathways within natural areas that are short and easily accessible to accommodate people who use mobility devices such as walkers, wheelchairs, canes, etc.

Action 4: Create natural rest stops along trails, and provide the public with signage that indicates the length of the trail and the location of additional stops.

Objective 3: Inventory and identify areas that provide experiences in nature.

Action 1: Work with the Texas Department of Transportation (TxDOT) and other regulatory agencies to evaluate the feasibility of public access to waters at TxDOT-owned bridges and other public locations.

Action 2: Encourage federal, state and local agencies with established trails and natural areas to work with nonprofit organizations to provide internet and GPS-accessible information such as location and coordinates, maps, and points of access, including ADA access icons, at no cost to the entities.

Action 3: Within state trail grants, where applicable, enable applicants to identify other entities/neighbors with adjacent trails or recreation areas and provide incentives to interconnect and manage those trails as cooperative units.

GOAL 2: Partner with government agencies, nonprofits and the private sector, in coordination with youth, to provide increased access to Texas lands and waters.

Objective 1: Encourage the creation of more natural areas in schools, neighborhoods, communities and park systems.

Action 1: Support the establishment of “outdoor classrooms” on school campuses.

- i. Promote the development of outdoor classrooms along trails to serve as learning laboratories.
- ii. Promote the formation of school groups or campus “nature clubs,” and encourage the involvement of local natural resource professionals.
- iii. Encourage after-school care programs that focus on nature/outdoor play.
- iv. Encourage the linkage of PTAs, the Master Naturalists program and other community outdoor enthusiasts with schools and outdoor classrooms.

Action 2: Encourage and incentivize the creation of pocket parks in communities.

Action 3: Increase the number of safe and accessible parks and playgrounds, particularly in underserved and low-income communities.

Action 4: Develop and consult with a youth advisory board to create natural areas appealing to youth.

Objective 2: Provide additional recreational access to private lands and waters.

Action 1: Encourage wildlife cooperatives to organize recreational activities and events.

Action 2: Collaborate with private landowners to increase public hunting, fishing and other outdoor opportunities.

Action 3: Develop programming and incentives and acquire grant funding for landowners to offer programming, establish youth camps, and provide experiential learning opportunities for underserved children.

Objective 3: Encourage collaboration among adjacent landowners, public and private, to link recreational venues.

Action 1: Encourage the formation of “educational cooperatives” among willing landowners and nearby public natural areas to promote “educational tourism.”

Action 2: Encourage increased collaboration and communication between state and federal land management agencies and the educational community. Develop MOUs between all interested parties pledging future support toward outdoor/natural resource education.

Objective 4: Support funding for the state park system and local park grants program.

Objective 5: Address liability concerns that limit access to nature on school grounds, parks, public lands and private lands.

Action 1: Seek clarity of liability laws and share findings.

Action 2: Determine recommendations based on findings.

GOAL 3: Encourage creation and expansion of natural areas that provide varied and recurring nature-based experiences.

Objective 1: Encourage the creation and expansion of natural areas that facilitate multiple uses and users.

Action 1: Provide universal design facilities for multi-generational families and people with disabilities to better enjoy the outdoors.

Action 2: Encourage program development that incorporates multiple opportunities for outdoor experiences and considers multiple levels of fitness and abilities. For example, a site might be conducive to fishing, hiking and restoration work available at the same location for novices and/or enthusiasts.

Objective 2: Encourage the creation and expansion of natural areas that foster recurring or frequent participation.

Action 1: Promote enhanced use through public awareness campaigns for sites near population centers.

Action 2: Highlight and promote the unique aesthetic qualities of natural areas.

Action 3: Support stable funding for land acquisition for publicly-accessible natural areas in close proximity to population centers.

Action 4: Identify and promote unique or underrepresented habitats available for public access that are near population centers.

GOAL 4: Plan, develop or expand built environments to include natural areas with interpretive elements.

Objective 1: Encourage the creation or expansion of natural play areas and wildscapes at schools.

Action 1: Identify model interpretive projects across the state, and disseminate project plans and potential contacts for support in interpretive product design.

Action 2: Encourage the installation of accessible playscapes and equipment to accommodate children who use mobility devices such as wheelchair-accessible train rides and platform swings for wheelchairs.

Action 3: Create cost-share programs for school developers to leave native vegetation on the premises when building new schools.

Objective 2: Encourage and identify incentives for the creation of natural areas in residential developments.

Action 1: Identify and disseminate model policies such as open space ordinances for urban design and land use that preserve the natural environment and provide examples of Texas communities that have successfully implemented such policies.

Action 2: Educate reviewing agencies such as city planning departments and planning and zoning boards about the benefits of natural play. Partner with them to develop incentive criteria for those developers that preserve accessible natural space, including sample open-space ordinances.

Action 3: Mobilize the Texas Recreation and Parks Society (TRAPS) and Texas Municipal League membership to educate local decision-makers such as city councils, realtor associations, planning and zoning boards, about the need for more open space and accessibility using documentation prepared by the TPCIN.

Action 4: Create and encourage grant programs similar to the TPWD recreational trails grant

program to provide funding for projects that add natural areas to residential developments.

Objective 3: Encourage and identify incentives for the creation of natural areas in commercial developments.

Action 1: Educate reviewing agencies (city planning departments and planning and zoning boards) about the benefits of natural play, and partner with them to develop incentive criteria for those developers that preserve accessible natural space.

Action 2: Promote and document the positive economic benefits of natural areas to statewide organizations representing the real-estate, development and building communities.

Action 3: Mobilize TRAPS and Texas Municipal League membership to educate local decision-makers such as city councils, realtor associations, planning and zoning boards about the need for more commercially-centered natural areas and accessibility using documentation prepared by the Texas Partnership for Children in Nature.

Objective 4: Include interpretive elements in natural areas.

Action 1: Ensure that interpretive elements are included on public lands and waters.

Action 2: Encourage and provide incentives and/or avenues for interpretive elements on private lands.

Action 3: Encourage interpretive elements that incorporate multiple learning styles, experiential learning and alternative access.

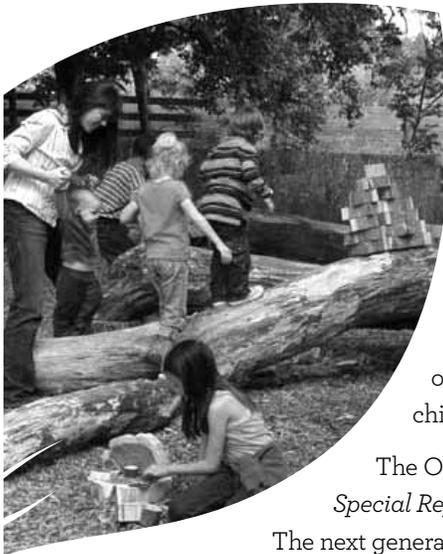
Action 4: Provide materials that model interpretive design.

It will take the commitment and involvement of all who care about Texas to ensure ample access to opportunities for outdoor experiences and to pass on values that sustain and conserve this state's great natural, cultural and outdoor recreation resources.



Stakeholder Team Report: COMMUNITY

It is necessary to create an effective, diverse and connected network of community organizations to deliver a consistent and unified “children in nature” message. Time and resources often challenge the networks and organizations that provide this valuable service to children and adults in a community.



Individuals in any community—suburban, urban or rural—are increasingly becoming disconnected from nature because they perceive that nature is not near their homes or that the safety of children is at risk.

The Outdoor Foundation’s *Special Report on Youth:*

The next generation of outdoor champions (2010) states, “Reconnecting youth with the outdoors has become critical to the health of future generations and the health of our natural landscapes.” Their research indicates that the top two barriers are (1) lack of interest and (2) lack of time. The report also indicates that minority populations are underrepresented in outdoor recreation. Parents, friends and family are the most influential among youth outdoor participants, and the top motivator to participate in outdoor recreation is simple fun.

At the 2010 White House Conference on America’s Great Outdoors, Ernesto Pepito, youth program director at the Golden Gate National Park Conservancy, quoted a youth he had spoken to who said: “How can you expect our young or anyone to care about the natural environment when they don’t care about their own community?” Pepito continued his eloquent address with the decree that one must meet the young where they are and reminded us that youth can be ambassadors and teachers.

Barriers, both perceived and real, must be overcome so that youth and families can connect with nature. To solve this problem, communities need to embrace a consistent and unified message to increase awareness, encourage collaboration and interaction between community groups, and highlight the everyday connections to nature.

It is important for a community to come together to effectively inspire everyone, especially our children, to a lifelong connection to nature so that the whole community is “Happier, Healthier, Smarter.”

We envision that the message of “Happier, Healthier, Smarter” children in nature is mutually communicated and that communities will inspire children to a lifelong connection for career and recreation opportunities.

Target Audiences

- Youth and family-oriented organizations and businesses
- Local civic and philanthropic organizations and community agencies
- Culturally diverse youth and families
- Multi-generational mentors and volunteers

Key Focus Areas

- Delivering a consistent and unified message
- Connecting across generations
- Fostering regional children in nature collaboratives
- User-friendly campaign toolkit including presentations and marketing information
- Sharing best practices
- Economic opportunities for communities and youth career paths

Strengths and Weaknesses

Strengths

- The idea of reconnecting children with nature resonates across cultures, geographic regions, economic levels and professions.
- The children in nature mission is consistent with the mission of many community organizations with a focus on quality of life, health, family, etc.
- This is a solvable problem and can be achieved at varying levels of cost, starting at “free.”
- Existing toolkits to aid grassroots efforts are currently available from the national C&NN Web site such Family Nature Clubs, Natural Leaders and Community Action Guide.
- C&NN created a family campaign and Web site, Nature Rocks, which was customized for Austin, Nature Rocks Austin, and now serves as a model for other communities.
- Numerous community-wide organizations have requested a consistent and unified message to share with their constituents.
- Popular, successful collaboratives in Texas such as LiveSmart can serve as a model for a sustainable children in nature state effort.
- Readily available technology is available to generate interest and momentum, and to facilitate collaboration among organizations.
- Opportunities for economic development through eco-friendly activity or tourism benefits communities.

Weaknesses

- People often feel that nature is someplace far away and fail to realize and/or value nature nearby.
- The effort lacks a consistent, unified message.
- Defining community is challenging and can be looked at in multiple ways, such as geographic, physical or natural features, political or administrative boundaries, social, economic or cultural classifications.
- Each town, city, township or community is unique and has its own set of challenges and opportunities.
- Communities are dynamic and constantly evolving as people move in and move out.
- Texas is a large state with a diverse population.
- In today’s economic climate, an organization’s resources are stretched to their maximum limit, and they may be reluctant to commit or take action.

- To effectively collaborate, organizations must be willing to “play with others.”
- Fostering collaboration at the regional and state level will take effort, time and resources.
- Economically disadvantaged groups may not be aware of the opportunities for connecting with nature.
- Perceived or real lack of safety is a barrier to participation.
- Promoting interest and involvement in nature through careers suffers from traditional high-profile career path messages and aspirations such as being a doctor, lawyer, etc.
- Many people have not developed a sense of personal responsibility, instead believing someone else will or is paid to take care of the environment.
- Busy schedules and other activities compete for people’s limited time.
- Short-term economic development strategies often overlook ecotourism potential and the long-term benefits of retaining green spaces.

GOAL 1: Raise awareness and action among adults and children through consistent and unified communication.

Objective 1: Promote the brand marketing campaign so it is well recognized by parent and youth networks.

Action 1: Gather input from the community in creating and implementing a brand marketing campaign.

Action 2: Facilitate youth- and family-oriented organizations and businesses to adopt and communicate the unified message, “*Children who play in nature are Healthier, Happier and Smarter*” to their constituents.

Action 3: Provide and encourage youth and family oriented organizations and businesses to regularly use a campaign toolkit that includes monthly themes and suggested activities, including entry-level opportunities, backyard activities, and free resources, Web banners, exhibit materials, presentations, brochures, posters and flyers.

Action 4: Promote local coverage of children in nature monthly themes, activities and events to media outlets.

Objective 2: Support local networks in promoting children in nature activities, exchanging information and sharing best practices.

Action 1: Assist six communities each year in establishing their own Nature Rocks website.

Action 2: Recruit 100 schools annually for the Green Ribbon School program.

Action 3: Launch the Green Ribbon Communities program and recruit 50 organizations annually as members.

GOAL 2: Create community-based regional partnerships throughout Texas to increase children in nature activities.

Objective 1: Engage, recruit and educate new and diverse partnerships to support children in nature activities in communities. Create opportunities for new connections with community groups not formerly engaged.

Action 1: Invite a diversity of civic and citizen organizations (for example, Rotary Clubs, Lions Clubs, Kiwanis Clubs, community service agencies (police, sheriff, fire, EMS), local environmental interest groups, outdoor recreation organizations, land-trust organizations, condominium or homeowner associations, neighborhood groups, faith-based organizations, school clubs and organizations, historical and cultural societies); businesses (such as chambers of commerce, tourism boards, insurance companies, outdoor retailers, outdoor education/recreation groups, health and fitness groups, relevant local, state, tribal or federal government officials); philanthropic organizations; and health providers to join the state and/or local children in nature group.

Action 2: Recruit local leaders/partners in six priority communities that will identify and communicate with these diverse organizations within their region.

Action 3: Create a high-energy, informational and user-friendly presentation for outreach events and meetings that clearly states the need for a focus on children in nature to promote “Happier, Healthier and Smarter” children and incorporates health, education and nature issues.

Objective 2: Connect groups that are engaged in children in nature activities to one another, and leverage and share resources, ideas and strategies.

Action 1: Host 20 regional children in nature outreach events or town hall meetings with local partners to communicate the plan. Communities identify specific needs and fill gaps to provide nature opportunities and access.

Action 2: Utilize a local naturerocks.org to make available toolkits/resource guide for establishing a local children in nature collaborative. Where applicable, integrate the tools that have been developed by C&NN.

Action 3: Support local organizations and businesses in establishing local collaboratives to share resources and increase program participation.

Action 4: Share and utilize tools and strategies from national organizations such as C&NN’s Natural Leaders and Natural Teachers; and U.S. Department of Interior’s Let’s Move Outside!

GOAL 3: Promote the cultural and economic gateways and benefits through nature-based opportunities.

Objective 1: Raise awareness and concept of “nature is everywhere for everyone,” in your backyard, in your local park or abroad.

Action 1: Provide simple ideas for people to play outside and explore nature in their backyard, schoolyard, neighborhood or local park.

Action 2: Suggest easy-to-use resources or local programs to connect families to the outdoors. Encourage multi-generational participation and culturally relevant activities.

Action 3: Share information that many parks and natural areas have staff and/or volunteers to assist visitors.

Objective 2: Communicate that nature and open space provide economic value to local communities in the form of educational resources, recreational opportunities, protection of water resources, providing habitat for recreation and commercial fisheries, and ecotourism opportunities.

COMMUNITY

Action 1: Develop a series of case studies that identify the value of nature and of connecting children and nature in Texas; and promote conservation as an economic benefit to communities.

Action 2: Develop awareness of and educational opportunities for connecting local governments and conservation agencies to offer community, classroom and after-school educational programs about the value of local natural resources, watersheds, creeks, rivers and native flora and fauna.

Action 3: Offer incentives such as grants, tax breaks, technology upgrades, etc. for traditional after-school programs to design curriculum and activities around local natural resources.

Action 4: Encourage and promote awareness programs for county, city, neighborhood groups, homeowner associations, schools and businesses to use native plants and landscaping for wildlife in private and public spaces.

Objective 3: Encourage nature-based career path opportunities.

Action 1: Encourage public and private organizations to sponsor conservation and outdoor recreation job-readiness training and internship opportunities, targeting at-risk and underserved youth.

Action 2: Raise student awareness of natural-resource and outdoor-recreation vocational opportunities or college degree programs.

Action 3: Develop programs that reinforce youth peer acceptance of the outdoors.

Objective 4: Promote and encourage nature-based community economic opportunities.

Action 1: Encourage communities and businesses to collaborate to establish ecotourism opportunities at introductory and intermediate skill levels and/or provide incentives for people to spend time outdoors.

Action 2: Connect youth camps and human-powered activity organizations with the local children in nature collaborative.

Action 3: Invite new partners to become involved, and encourage organizations to take ownership.

Objective 5: Promote and encourage youth and families to participate in environmental stewardship opportunities.

Action 1: Encourage at-risk youth to participate in conservation and stewardship opportunities. Examples of sources for these activities include REI community service projects, Texas Master Naturalist and Junior Master Naturalist, Student Conservation Association, student internships and AmeriCorps.

Action 2: Connect land-managing organizations and agencies with youth engagement organizations such as Boy and Girl Scouts, 4-H, Campfire Kids, Boys and Girls Clubs, summer camps, church youth groups and others.

Action 3: Encourage environmental stewardship organizations to provide more volunteer opportunities for young children and families.

Communities need to embrace a consistent and unified message to increase awareness, encourage collaboration and interaction between community groups, and highlight the everyday connections to nature.



Stakeholder Team Report: **MARKETING**

The Marketing Team examined the issue and objectives of this plan from a marketing perspective. There are many organizations that focus on motivating families to spend more time in nature, including the Texas Parks and Wildlife Department, the U.S. Fish & Wildlife Service, the Texas Forest Service, various nature preserves, county and local parks, and especially members of the Texas Children in Nature Coalition. The Texas Children in Nature Coalition was formed as an offshoot of the national Children & Nature Network that was inspired by the book *Last Child in the Woods*.



Whereas many of these organizations are doing excellent work to provide programs and ad campaigns targeting unengaged families, the overarching messages are divergent, missing out on the impact of a unified, branded campaign, and could possibly confuse the consumer.

For example, Texas Parks and Wildlife Department has used “Life’s better outside[®]” for ad campaigns, U.S. Fish and Wildlife uses “Let’s Go Outside[®]” and the Children & Nature Network has “Nature Rocks.” There is not a strong identified brand that unifies the initiative. Nor is there a marketing plan to effectively reach and engage targeted health-care professionals, educators, community leaders, families and access providers.

Most of these organizations are currently participating in and/or have knowledge of and support for the work being done by the Texas Partnership for Children in Nature (TPCIN). These organizations offer a wide reach and a powerful voice if they can join together to distribute one common message. A central point of communication to provide consistency and effectively leverage those resources would strengthen that potential.

An inclusive brand enables supporting agencies and private industries to “rally” around a common mission. For example, the brand and marketing efforts of the “Let’s Move” national initiative enables stakeholders to promote sound nutrition and exercise to their own target markets and distribution channels under the umbrella of a consistent and unifying brand. This approach in developing a branding and marketing campaign for Texas children in nature would leverage the full extent of infrastructures, resources and community partnerships, and unify Texans under an inclusive message about nature. For example, “Nature Rocks” is one of the potential brands that could be considered for this statewide initiative. Whether a new brand or existing one is used for communication efforts, it will need to be tested to ensure that the brand will not only resonate with families, but with the educators, health-care professionals, community and access audiences that the TPCIN stakeholder committees are targeting.

Target Audiences

- Parents
- Youth
- Minorities
- Educators
- Health-care professionals
- Community leaders
- Access providers

Key Focus Areas

- Research of stakeholder targets to determine attitudes about and knowledge of the benefits of outdoor play and learning

MARKETING

- Inventory and baseline to define success metrics
- Structure and organization
- Branding and marketing campaign development
- Fundraising efforts

Strengths and Weaknesses

Strengths

- Multiple grassroots efforts are working toward a common goal.
- The Children & Nature Network (C&NN) supports an international movement driven by strong grassroots support.
- Texas created a state network, the Texas Children in Nature Coalition, and regional groups in Central Texas and Houston.
- C&NN created the Nature Rocks campaign to reach families; Nature Rocks Austin is a successful model developed to feature local opportunities and collaboration.
- Last Child in the Woods author Richard Louv was enthusiastically received as keynote speaker at the American Academy of Pediatrics conference in October 2010.
- In a recent study commissioned by C&NN, Texans indicated a strong interest in supporting children in nature; and the study provides indicators that could be used in future assessments.⁴⁵
- Concern about environmental issues sustain the thought of building tomorrow's conservation leaders.⁴⁶
- Marketing momentum regarding childhood obesity prevention offers opportunities to leverage message to move exercise activities outdoors.
- Social media offers a new, affordable platform for reaching youth.

Weaknesses

- Groups targeting unengaged families and stakeholder targets are not organized or connected in a consistent manner. Multiple grassroots efforts are creating fragmented messaging to the stakeholder target groups.
- There is no established marketing plan from a children in nature perspective to capitalize on existing efforts to address childhood obesity.

- Nature play is not a priority for families. Families with children aged 6-12 cite that barriers to playing outside include homework, preference for playing video games/electronics, and lack of time.⁴⁷
- Research is needed for Texas to establish a firm baseline on: (1) awareness of access opportunities and the benefits of nature play and (2) the existing access and resources available and what the usage is of those resources.
- Research is needed to determine the messaging and materials that would resonate best with various stakeholder targets.
- The campaign will need to account for the complexity and diversity of reaching the Texas market, to include Hispanic marketing strategies, the expense of marketing in two of the largest media markets in the U.S.A. (Houston and Dallas), and the overall fragmentation of media usage.
- Minority groups are underrepresented in outdoor recreation. Participation in outdoor activities is significantly higher among Caucasians than any other ethnicity for all age groups. Conversely, participation is lowest among African Americans for nearly all age groups.⁴⁸
- Recreation participation is not reflecting Texas' changing demographics. By 2020, Hispanics will make up the majority of Texas' population.⁴⁹
- Hispanics cite lack of access to nearby places to participate in outdoor activities as a barrier to participation more often than do other ethnicities.⁵⁰

Goals and Objectives

GOAL 1: Formalize a structure for the state to facilitate development and implementation of a state marketing campaign. (Structural Phase)

Objective 1: Form an entity or employ an existing entity such as a 501(c)(3) or foundation to serve as an umbrella organization that will be responsible for coordinating the effort, fundraising and developing an overarching brand and message.

Action 1: Raise approximately \$200,000 to cover start-up costs and operational funding for the umbrella organization.

Action 2: Raise approximately \$100,000 as seed money for the brand and marketing campaign plan development.

Objective 2: Hire a marketing or advertising firm to research and estimate costs of a brand and marketing campaign.

GOAL 2: Conduct specific research to better understand the awareness, perceptions, barriers, cultural considerations and motivations of the stakeholder targets in Texas. (Discovery Phase)

Objective 1: Determine target audiences and priorities.

Objective 2: Conduct research to determine knowledge (pre-awareness) and attitudes of nature benefits.

Objective 3: Seek Texas-specific research evidence about the benefits of nature for health and education.

Objective 4: Establish baseline data using research results.

Action: Consider measurable data for baseline and future evaluation such as the number of certified wildscapes or school habitats, the number of schools using outdoor education curriculum, or the number of state, municipal, county parks and nature preserves by acreage available in the state of Texas.

Objective 5: Inventory existing resources/ organizations that will adopt the brand and marketing campaign.

GOAL 3: Develop the brand and marketing plan. (Development Phase)

Objective 1: Develop a phased brand and marketing plan through the ad agency under the guidance of the structural entity.

Action 1: Test existing or new brands among target audiences.

Action 2: Test creative design and development of messages with target audiences.

Action 3: Identify effective media, materials and efforts.

Action 4: Leverage existing resources.

Action 5: Determine a phased timeline for implementation.

Objective 2: Develop a fundraising, sponsorship and grant development plan to underwrite the marketing campaign strategy.

GOAL 4: Launch a two-year integrated marketing campaign strategy. (Implementation Phase)

Objective 1: Consider multiple deliverables such as:

- Public relations efforts
- Traditional media: print, TV, radio
- Non-traditional media: online, social media
- Tools and resources for schools, state agencies, park and recreation departments
- Youth marketing tactics
- Experiential marketing tactics
- Events, trade shows and promotion
- User-generated content
- Evaluation, analytics, reporting

GOAL 5: Evaluate effectiveness. (Evaluation Phase)

Objective 1: Conduct a post-survey to targeted groups to determine if attitudes, perceptions or awareness levels have changed.

Objective 2: Determine what success metrics have been achieved and what work remains to be done to accomplish the goals.

Marketing Implications

Specific marketing implications by stakeholder group, based on currently defined success metrics and background knowledge, include:

Health

- Survey and/or conduct focus group research to determine research needs and what resonates with the health-care professionals as easy to communicate to patients.
- Engage health-care professionals as advocates for the message and call to action, through speaking engagements at professional conferences and journal articles.
- Provide materials for health-care professionals to use with patients that promote the medical benefits of nature and support “doctor subscribed” messaging.

Education

- Encourage the use of a central brand on school habitat kits.
- Include workforce development and career awareness in nature-based curricula.
- Create video programming to educate students and teachers about nature and natural resources through the new PBS in-school system.
- Utilize promotional materials and outreach to increase awareness of the educational benefits of nature.

Access

- Study targeted groups of private landowners, state and local government, designers and planners, nonprofits, community and neighborhood associations, and volunteer groups to better reach these audiences.
- Create a template for “facility field kits” to drive repeat traffic to facilities. The kits would help facilities reach and motivate their target area and to encourage repeat visits from users.

Community

- A brand and ad campaign targeting consumers is at the core of the Community Stakeholder Team’s most critical implementation goal, with recommended steps closely resembling the outline provided under the Development Phase of the Marketing Recommendations.
- Facilitate regional partnerships through the Texas structural entity, and determine a target list of organizations in each community that will best reach children and families.
- Create materials specifically targeting local leaders and communicating economic impact and ease of adoption. Topics might include nature tourism, career opportunities and fun, easy ideas for playing and exploring in nature in backyards, schoolyards, neighborhoods or local parks.

An inclusive brand enables supporting agencies and private industries to “rally” around a common mission.



Stakeholder Team Report: POLICY AND LEGISLATION

The Texas Children in Nature Strategic Plan identifies goals and objectives that can be advanced through policy measures undertaken at every level of government: state, county, municipal and school districts.

Although recognizing the importance of engaging the private sector and every level of government to implement the plan, the Policy and Legislation team chose to identify a list of policy recommendations that were relevant to the 82nd Texas Legislature in order to be responsive to the interests of the legislators who requested the creation of the plan. The recommendations are intended to support outdoor learning and Texas natural resource education.

The team identified the following criteria for inclusion on this list of policy recommendations:

- Revenue-neutral fiscal impact on state budget for the biennium, given that the state is facing a record fiscal deficit
- Aligns with goals of communities, partners and state agencies
- Advances Texas Children in Nature Strategic Plan
- Achievable during the 82nd Texas Legislature, or lays the groundwork for long-term impact

Strengths and Weaknesses

Strengths

A number of existing state initiatives and programs are relevant to the goal of increasing the time that Texas children spend outdoors, including initiatives in children’s health, physical activity, obesity prevention and outdoor learning.

Weaknesses

A dire fiscal prognosis affecting all levels of government precludes new or increased expenditures.

Recommendations

1. Support outdoor and natural resource education programs in Texas schools. Encourage the continuation of existing outdoor learning and Texas natural resources education, and encourage new use by willing teachers and school systems. It will be important to preserve existing programs and services related to field investigations and outdoor learning experiences, and as fiscal conditions improve it will be important

to invest in these areas. If funding opportunities from federal or other sources are established to advance natural resource literacy, they should be pursued.

2. Encourage state agencies to incorporate strategies identified in the Texas Children in Nature Strategic Plan in the development and implementation of programs. This could be accomplished through the adoption of a non-binding resolution or other measures encouraging outdoor learning and Texas natural resources education without mandating it.
3. Address the perception that liability concerns are an obstacle to accessing nature by raising public awareness about tort liability immunity available under Texas’ recreational use statute. While risk of tort liability is perceived to be an obstacle preventing access to natural areas, Texas currently has a recreational use statute that grants broad immunity for public lands and private lands suitable for agriculture including forestry, farming, ranching, horticulture, etc. Efforts to increase awareness and understanding of these protections should be undertaken.
4. Support efforts to establish a stable funding source for land acquisition for natural areas in close proximity to population centers. As Texas continues to urbanize, the need for natural areas close to urban population centers will increase. While it may not be possible to establish a stable funding source for this purpose in this legislative session, efforts to lay groundwork to that end should be supported.
5. Support measures to fund the state park system and local park grants program. As funding reductions are sought in state agencies, it will be important to preserve existing effective programs and services.
6. Recognize and encourage model programs and initiatives. Counties, municipalities and school districts are in a position to develop model programs and initiatives. A state recognition program would bring outstanding examples to the attention of others in the state.



Glossary

Brand/Branding

The immediate image, emotion or message people experience when they think of a company or a product.

Community

People linked by geography, self-identification and/or purpose. For the plan, this may include where people live and work, self-identification, schools, faith-based or interest-based organizations.

Culture

Shared system of values, beliefs, attitudes and traditions that influence perception and behavior; unique features helping to define a community.

Ecotourism

Responsible travel to natural areas that conserves the environment and improves the well-being of local people, uniting conservation, communities and sustainable travel.

Educational cooperatives

Partnerships providing formal and informal education opportunities.

Educational tourism

Field trips and visits to areas focused on learning opportunities.

Encourage

Introduce, contribute, give tools, educate, promote, support, lead, mentor, influence and provide opportunities.

Environmental education

Creating the opportunity to learn how the world and its ecosystems work together and how people interact with, affect and participate in the sustainability of those systems.

Formal education

Learning experiences with a defined curriculum, learning objectives and outcomes, generally occurring within a structured system such as a school.

Informal education

Learning experiences outside of the formal education system.

Interpretation

A communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource, typically occurring as a voluntary experience.

Interpretive elements

Those elements that help site users connect to natural resources in ways that help them better understand their relationship to the resource and how resources work together. These elements may be in the form of signage, exhibits, interpretive trails, interactive displays, brochures, programs and other mediums which help to connect the person to the resource.

Marketing

The activity and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners and society at large.

Natural areas

Those areas that include natural features and natural components as a majority.

Natural play

Free and structured play occurring in areas with predominantly natural features and/or components.

Natural play areas/playgrounds

Those playgrounds complementing built components with natural features such as gardens, wildlife habitats, elevated landforms, sand, water, and natural and built portable materials (“loose parts”) for imaginative/constructive play and nature study.

Natural resource literacy

The ability to understand, analyze and address major natural-resource opportunities and challenges.

Nature-based activities

Activities immersed in the resource, engaging in nature, discovering and observing, including structured and unstructured play.

Nature-based experiences

Those experiences occurring and embedded in nature.

Nature tourism

Tourism based on an area's natural attractions, such as wildlife viewing, hunting, fishing, photography and visiting parks.

Outdoor classroom

An outdoor natural area where gaining knowledge and building skills in most subject areas can take place.

Outdoor education

Education that occurs in or relative to the outdoors and may include such activities as leadership skills, outdoor living skills and survival in the outdoors.

Pocket parks

Small parks created by governments or developers; “button parks” is a new term being coined to denote community-created areas that “people can sew on themselves.”

Points of access

Entrance and exit points for trails and natural areas, viewing areas, etc. that can be easily and safely accessed by the public.

Pre-service teachers

Students in a teacher education program, at a college or university, preparing for professional-level teaching positions.

Stewardship

Informed, responsible action and/or behavior on behalf of natural and cultural heritage, the environment and future generations.

Universal design

A broad-spectrum solution that produces buildings, products and environments that are usable and effective for everyone regardless of physical ability.

Value

Understand, hold dear, give priority to, appreciate.

Wildlife cooperatives

Landowners joined together with common objectives and goals to manage wildlife habitat on a much larger scale than they could independently; especially helpful on smaller properties where many management practices are not feasible or on properties where landowners do not have enough land to manage for certain species of wildlife.

Wildscape

Altering and maintaining the habitat to provide all three basics for wildlife—food, shelter and water—arranged in a way that is easily accessible to wildlife, sustainable and consistent with the natural landscape.



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The Legislature
State of Texas

September 28, 2009

Mr. Carter Smith
Executive Director
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, TX 78744

Mr. Robert Scott
Commissioner of Education
Texas Education Agency
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VIA INTERAGENCY MAIL

RE: Partnership for Children in Nature

Dear Director Smith and Commissioner Scott:

Today's children spend less time in nature than any other generation in human history. Over the past 20 years, the time children spend outside has fallen by 50 percent, while the time spent in front of electronic media has grown to more than six hours daily. During the same time period, the rate of obesity among children has more than doubled, and the rate of childhood diabetes has increased. Children are also losing many of the documented benefits of learning and playing in nature, such as improved academic achievement, more vigorous and cooperative play, and reduction of attention deficit symptoms.

On a national level, this generation change has meant steadily declining park visitation numbers and hunting and fishing license sales; fortunately, Texas has not yet experienced those same trends. However, as Texas continues to urbanize, demands on Texas natural resources will increase, and it will become even more important that the next generation of Texans understands how to utilize and conserve Texas natural resources.

As you're aware, S.B. 205 (Texas Partnership for Children in Nature) was filed during the 81st Legislative Session to begin addressing some of these issues. While S.B. 205 had bipartisan support and passed the full Senate (31-0), it died on the House General Calendar along with a few hundred other Senate bills at the end of this session. The Legislative Budget Board concluded that S.B. 205 would have had no significant fiscal impact to the state or local government. In addition, if the No Child Left Inside Act currently pending before Congress is passed in its current form, S.B. 205 would have helped Texas bring in federal dollars with no state match requirement.

We write to you today to request that Texas Parks and Wildlife Department, in partnership with the Texas Education Agency, implement the Texas Partnership for Children in Nature administratively. Similar to S.B. 205, the proposed Texas Partnership for Children in

P.O. Box 12068 • Austin, Texas 78711

Director Smith & Commissioner Scott
September 28, 2009
Page 2

Nature would be a public-private partnership to promote the well-being of Texas children by developing a plan to provide children with opportunities to spend more time outdoors and better understand Texas natural resources. The Partnership would consist of a committee comprised of representatives from private sector organizations and state agencies, including Texas Parks and Wildlife Department, Texas Education Agency, Texas Department of Agriculture, and the Texas Department of State Health Services. The Partnership would be charged with developing a plan to promote "healthy children in a healthy world" by integrating coordinated school health initiatives with increased opportunities for developing outdoor skills, scientific study, and outdoor play for children, and increasing understanding of Texas natural resources.

The Partnership concept is supported by a number of private sector organizations including the Texas Wildlife Association, the National Wildlife Federation, Texas PTA, American Diabetes Association, Texas Pediatric Society, Texans Care for Children, American Heart Association, the Partnership for a Healthy Texas, SPJST, Cast for Kids Foundation, Texas Impact, Austin Children in Nature Collaborative, and the Sustainable Food Center.

As you can see from the signatures below, the Partnership continues to have bipartisan support. Please let us know how we can best assist you. We look forward to working with you.

Very truly yours,

Eliot Shapleigh

Kip Averitt

Craig Estes

Kel Seliger

Donna Howard

Rob Eissler

Harvey Hilderbran

Mark Homer

Edmund Kuempel

ES/sj

cc: Gov. Rick Perry, Lt. Gov. David Dewhurst, Speaker Joe Straus, TDA Commissioner Todd Staples, DSHS Commissioner David Lakey, TPW Commission Chairman Peter Holt, SBOE Chairwoman Gail Lowe

SGParks and Wildlife Department, Texas/SmithC Partnership for Children in Nature.doc



Life's better outside.®



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