A REPORT ON LT. GOVERNOR BARBARA O'BRIEN'S



January, 2010



ACKNOWLEDGEMENTS

Lt. Governor Barbara O'Brien's *Colorado Kids Outdoors Initiative* is a collaborative effort between numerous partners throughout the state. Lt. Governor Barbara O'Brien would like to thank the more than 600 forum participants who helped inform this report and the hundreds of kids who contributed their ideas to create the Colorado Kids' Outdoor Bill of Rights.

Many thanks to Marc Heirshbergand Traci Weiland whose masters theses were useful in creating this report. Peter Kinser graciously donated his time and artistic talent to the design and layout of the Colorado Kids' Outdoor Bill of Rights.

The tour and report were developed by The Office of Lt. Governor Barbara O'Brien and Wendy Newman, independent contractor (wendy.newman@yahoo.com).

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January 20, 2010

Dear Community Partners:

Last summer, I traveled around the state and listened to a variety of individuals talk about a growing issue that is near and dear to Colorado's heart. Our kids, the next generation of environmental stewards and educators, are growing up without a connection to the outdoors. Now is the time to encourage our children to unplug and go outside.

They don't have to scale Longs Peak or plan an elaborate camping trip. The first step can start in a backyard, a park or a walk around the neighborhood. But the importance of reconnecting our children to the outdoors should not be trivialized. Getting regular doses of the outdoors is an important contributor to better learning, behavior and health. We don't

have to take away all our children's high-tech toys, but balance in their daily lives is important.

Colorado has a culture of fitness and year-round outdoor activity. Our climate is conducive to playing outdoors whether it is winter or summer. Our economy thrives on the outdoors, with an estimated \$10-15 billion a year from recreational activities.

Since 1990, the Centers for Disease Control have ranked Colorado as the least obese state in the nation. In fact, we are now the only state with an obesity rate below 20%. Yet, while we start from a better place than the rest of the country, our trend is upward, at a steep incline.

There are many reasons why our children are not spending as much time outside these days. Not all children have equal access to the outdoors. As parents, it is difficult to make time because our days are busier than ever. Some parent never experienced the outdoors themselves, so they may not know how to start. And electronic toys can provide entertainment for hours. As a mother of two sons, I know that safety is always a paramount concern, although statistically, more children are injured indoors than outdoors.

The good news is that Colorado has a myriad of organizations dedicated to keeping our kids healthy, safe and connected to the outdoors. Not only did I learn a lot about what is going on around the state during my tour, I know a lot of you learned about what is going on in your own communities.

Thanks to the tour's success, you have set an example for the country in how to pass a love of the outdoors on to the next generation.

Sincerely,

Barbara O'Brien Lt. Governor, Colorado

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THE OUTDOORS

Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative Report

EXECUTIVE SUMMARY

Across the country, and throughout Colorado, youth are spending more time seated in front of televisions, computers, and video games and less time enjoying the outdoors. As a result, youth are "plugged into" televisions, video games, computers, and other electronic devices and disconnected from the natural world. This divide threatens children's education, physical, and mental health, and hinders tomorrow's leaders' ability to understand and protect Colorado's resources.

The whole spectrum of outdoor experiences is beneficial, too. Whether catching snowflakes in the front yard, learning archery at a range in a national forest, or visiting a working ranch on the plains, outdoor time is essential for kids (and adults, too). Any activity, in every setting, in all kinds of weather, at every age - kids *need* to get outside regularly.

What is the Colorado Kids Outdoors Initiative?

In May 2009, Lt. Governor Barbara O'Brien launched the *Colorado Kids Outdoors Initiative* to raise awareness and learn more about the alarming disconnect between youth and the outdoors. Between May and September 2009, over 600 stakeholders convened at eleven sites throughout the state. Representatives from a variety of sectors including public health, businesses, conservation organizations, youth groups, land management agencies, local governments, and education attended the public forums. Grandparents, parents, and even kids participated, too.

The purpose of the tour was to learn more about the issue, share what communities were already doing, identify the most significant challenges in getting kids outdoors, and discuss how the movement could successfully build on prior planning efforts and current opportunities to strategically address the issue.

Why is the Colorado Kids Outdoors Initiative important?

A generation of youth growing up without positive outdoors experiences will have profound consequences on public health, state and local economies, and environmental stewardship. To be effective and healthy leaders in the future, youth need to get outside and connect to the natural world now.

Consider this:

- Children spend half as much time outside as they did 20 years ago while childhood obesity has more than *doubled* and adolescent obesity has *tripled*.¹ This relationship is probably not coincidental since kids are more likely to be physically active when they are outdoors.²
- A survey conducted by Colorado State University revealed that 99% of parents in Denver and Ft. Collins strongly agreed their child would rather play with technological devices than spend time in nature.³

- The average age of outdoor enthusiasts in the U.S. is 55,4 which illustrates the lack of youngsters on the trails and in the woods.
- Youth spend over forty hours a week watching television, playing video games, or connected to other electronic devices, the equivalent of a full-time job.⁵
- This sedentary lifestyle is a major factor in the prevalence of childhood obesity in the U.S., which accounts for \$100 billion annually in healthcare expenses.⁶

While the price tag of childhood obesity is staggering, there are other significant costs being incurred, too. Repercussions of a generation disconnected from the outdoors are farreaching.

- Spending time outside is more than just a part of Colorado's heritage and culture; it's directly connected to our economy. Outdoor recreation contributes between \$10 \$15 billion annually to state and local coffers.
- The state's unparalleled natural beauty provides for limitless outdoor experiences, which stimulates retail sales, fuels travel and tourism revenues, and influences property values. Colorado's "active outdoor recreation industry" alone supports over 107,00 jobs statewide.9

Outdoor pursuits do more than combat obesity and benefit the economy; spending time outside benefits overall wellness and academic achievement.

- Playing outside improves concentration, motor development, coordination, mental acuity, and mood.
- Time outdoors also reduces attention deficit disorder (ADD) symptoms, lowers blood pressure, and alleviates stress and anxiety. 10
- Spending time in the open air and learning outside increases students' ability to think creatively and improves problem-solving skills.¹¹
- Students who play and learn in outdoor settings perform better on tests, have higher grade point averages (GPAs), and cause fewer classroom disruptions.¹²

Outdoor experiences are not only great for kids, they're important for the future of the Colorado. If children grow up interacting with nature, they are more likely to:

- Develop a conservation ethic
- Volunteer
- Recycle
- Participate in outdoor recreation as an adult.
- Work in natural resources-related professions. 13

If young people are not immersed in natural experiences, who will be our future stewards?

Findings from the Trail

Stakeholders identified the most considerable challenges they face to get kids off the couch and out the door:

- Inadequate funding for programs
- Disparities among underserved youth
- Misconceptions about the safety of being outdoors, particularly the fear of strangers
- Intensive schedules and competing interests
- A lack of knowledge about opportunities
- The need for more awareness about the benefits of being outside

Participants envisioned a future where these obstacles were overcome and the following goal was achieved:

All Colorado kids spend time outdoors regularly and connect to the natural world.

A Shared Call to Action

Achieving this goal can be accomplished through collaborative, strategic, long-term action. Forum participants and stakeholders agreed that transformation will require shared responsibility and commitment on all levels including individual, community, cultural, and institutional.

To get more youth engaged and invested in the outdoors, forum participants and stakeholders identified the following priorities:

Build Sustainable Partnerships and Leverage Resources

- Strengthen regional networks and solidify a statewide coalition focused on youth and the outdoors.
- Partner with youth to advise stakeholders about enacting strategies and priorities.
- © Collaborate beyond municipal, county, and state borders and leverage national opportunities.

Reduce Barriers

- Identify alternative funding mechanisms to supplement non-profit, local government, and agency budgets.
- © Educate the public and stakeholders about the importance of the issue and benefits of spending time outdoors.
- Address misconceptions and fears about outdoor experiences through media campaigns, existing messaging, and provider programs.

Develop Sustainable Policies and Infrastructure

- Provide technical assistance to communities to help access existing resources, collaborate across municipal and county boundaries, and share best practices.
- © Create a framework to address disparities and connect traditionally underserved youth to existing programs and other outdoor experiences.
- © Develop a Colorado Environmental Literacy Plan that instills an understanding and appreciation of Colorado's great outdoors among young people and ensures every child experiences environmental education.
- © Centralize information for opportunities to experience and appreciate the outdoors.

Evaluate Progress

Determine a metric to establish a baseline measurement of how much time Colorado youth currently spend outdoors and work to increase that time; evaluate routinely.

See You Outside!

While the focus of this effort may be Colorado youth, the issue is obviously much broader, encompassing every individual and family in the state - including *you*! To reverse this epidemic, we must influence social, cultural, and systemic change on all levels.

We all have a shared responsibility to serve as role models, companions, and mentors and must work collaboratively to reverse this trend to ensure the health and vitality of Colorado's future generations and precious natural resources.

See you outside, Colorado!

More resources, including the complete report on Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative, The Colorado Kids' Outdoor Bill of Rights, and a presentation on trends related to Youth and the outdoors, are available at:

WWW.COLORADO.GOV/LTGOVERNOR

ABOUT THE COLORADO KIDS OUTDOORS INITIATIVE

A long-time advocate for children's health issues, Lt. Governor Barbara O'Brien became aware that along with more obvious threats like obesity and poverty, deprivation of outdoor experiences was also negatively impacting the well-being of youth in Colorado. She felt strongly that taking significant steps to reverse "nature deficit disorder" would benefit Colorado now and in the future. To respond to this need, she launched the *Colorado Kids Outdoors Initiative*, which involved an 11-stop tour across the state, numerous media events, and the development of the Colorado Kids' Outdoor Bill of Rights.

Two other key components of the effort include this report, which summarizes the findings and conclusions from the public forums and *A Toolkit for Colorado Communities, Families, and Youth* which highlights resources, ideas, and technical assistance for action on a local level.

In partnership with leaders from the education sector, conservation advocates, public health agencies, parent groups, youth organizations, and many more stakeholders, Lt. Governor Barbara O'Brien is committed to reconnecting Colorado's kids to our natural world in a healthy, meaningful, and safe manner.

"Science is validating what moms have known for generations: Being outside is good for your health. I've never known a ranch kid on Ritalin."

--Rick Potts, Chief of Conservation & Outdoor Programs, National Park Service

Quoted in *The Washington Post*

The goals of the *Colorado Kids Outdoors Initiative* are to:

- Raise awareness about the issue
- Promote discussion in regions around the State of Colorado about resolving the issue
- Develop a Kids' Outdoor Bill of Rights
- Compile information on effective and innovative programs and collaborations
- Develop a toolkit for communities and organizations to provide technical assistance
- Foster collaboration
- Build on local, regional, state, and national opportunities
- Publish a report of successes, challenges, and needs
- Make the State of Colorado a leader in the movement

While the focus of this effort may be Colorado youth, the issue is obviously much broader, encompassing every individual and family in the state - including *you*! We all have a shared responsibility to serve as role models, companions, and mentors and must

work collaboratively to reverse this trend to ensure the health and vitality of Colorado's future residents and natural resources.

OVERVIEW OF THE COLORADO KIDS OUTDOORS TOUR

At 11 different sites across Colorado, more than 600 people participated in the Colorado Kids Outdoors Initiative public forums to learn more about the issue, share what communities were already doing, identify the most significant challenges in getting kids outdoors, and to discuss how the movement could successfully build on previous planning efforts, current opportunities, and move forward.

Between May and September 2009, stakeholders from a multitude of sectors including public health, outdoor businesses, conservation organizations, land management agencies, decision makers, and education gathered and voiced their concern about the disconnect between Colorado's children and our outdoor resources. Grandparents, parents, and even kids participated, too.

Public forums were held in the following cities:

- Grand Junction
- Durango
- Loveland
- Boulder
- Pueblo
- Colorado Springs

- Salida
- Eades
- Silverthorne
- Steamboat Springs
- Golden

Forums were designed to share research about declining participation in outdoor pursuits and related impacts on kids' health and well-being. Participants then divided into small groups of 8-10 persons to answer the following questions:

- 1. What are some innovative methods, programs, or multi-sector collaborations successfully getting kids outdoors locally?
- 2. In an ideal world, how would you get more kids outdoors on a regular basis?
- 3. Outline the most significant barriers to this ideal world, particularly any issues not already discussed.
- 4. What neighborhood, school, community, and/or statewide-level recommendations and strategies would you implement to overcome these barriers and enable your vision to become a reality?

The process resulted in many beneficial outcomes, including collaboration and networks, and the following products:

- A Toolkit for Communities, Families, & Youth
- The Colorado Kids' Outdoor Bill of Rights (Appendix A & B)
- A Presentation about trends related to kids and the outdoors for your use

• A Report on the Colorado Kids Outdoors Initiative

All of these products are available at: www.colorado.gov/LtGovernor.

THE COLORADO KIDS' OUTDOOR BILL OF RIGHTS

An important group of stakeholders and a big part of the *Colorado Kids' Outdoors Initiative* are - *youth!* To better understand what kids thought were essential outdoor experiences and to foster a dialogue with them and between them, Lt. Governor Barbara O'Brien asked kids to develop a bill of outdoor "rights" proclaiming what every kid should have the opportunity to experience before they grow up.

With the help of educators, parents, and youth groups, hundreds of kids provided their opinions to create the *Colorado Kids' Outdoor Bill of Rights*. They concluded kids should be able to:

- Camp out under the stars.
- Follow a trail, ride it or walk it, and be respectful of everyone's right to use the trail.
- Play in a creek or river: fish, wade, paddle, or skip a stone.
- Experience the wonders of Colorado's four seasons: wildflowers, abundant sunshine, the changing aspen leaves, and fresh powder snow.
- Visit a working farm or ranch.
- Enjoy the view from the top of a mountain.
- Identify Colorado's official state wildlife and plants in their natural habitat.
- Explore one of the dozens of local, state, and national parks in Colorado.
- Play in the dirt and learn about the world from the ground up.
- Plant a seed for other Colorado kids to enjoy in the future.

English and Spanish versions of the *Colorado Kids' Outdoor Bill of Rights* are posted at: www.colorado.gov/LtGovernor They are also on The Colorado Tourism Office's kids' page: www.colorado.com/ColoradoForKids.aspx

A REPORT ON LT. GOVERNOR BARBARA O'BRIEN'S COLORADO KIDS OUTDOORS INITIATIVE

Along with the Colorado Kids' Outdoor Bill of Rights and eleven public forums, next steps and priorities for the initiative needed to be determined based on findings from the statewide tour. The result is this publication, *A Report on Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative*.

The purpose of the report is to summarize highlights from the forums, provide information about the issue, and to unify stakeholders around priorities to mitigate the epidemic.

This document is intended for not only the stakeholders who participated in the forums, but also community leaders, decision makers, educators, and other partners across Colorado.

Components of the report include:

- A summary of research about the issue
- Details about the myriad of benefits of spending time outdoors
- Challenges and barriers to getting more youth outside regularly
- Highlights of some initiatives from across the country and in Colorado which are addressing the issue
- A "Shared Call to Action"
- Conclusion

AN OVERVIEW OF THE ISSUE: THE CURRENT "LANDSCAPE"

Many grown-ups fondly reminisce about playing outside when they were young with few rules and lots of freedom. "Go play outside and don't come home until the street lights come on!" was commonly heard as moms, dads, and grandparents widely opened the front door. Summer vacations, snow days, and hours after school were often filled with fishing, playing in creeks, or following wending trails. For generations, kids frequently came home exhausted and covered in dirt and mud, souvenirs from memorable adventures.

Time in nature improves:

- Academic performance
- Concentration & attention span
- Balance & coordination
- Self-esteem & coping
- Motor development

And reduces:

- Symptoms of Attention Deficit Disorder (ADD) & Attention Deficit Hyperactivity Disorder (ADHD)
- Stress & anxiety
- Blood pressure

Source: NWF, 2008.

Unfortunately, many kids today aren't growing up with the same carefree playtime or outdoor experiences.

Richard Louv, in his book *Last Child in the Woods*, aptly described this phenomenon as "nature deficit disorder (NDD)." More than just a catchy phrase, "nature deficit disorder" describes a generation of youth unfamiliar with the soil, air, and water that comprise our environment.

Today's youth are also less active than prior generations.

 Between 1997 and 2003, children's participation in outdoor activities like walking, hiking, fishing, gardening, declined 50%.¹⁴

visiting a

working ranch

- In fact, only one-third of students in the U.S. currently walk or bike to school, a 50% decline from their parents' generation.
- And, kids are even gaining weight during summer vacation.¹⁶

Many influences like more "screen-time," busy schedules, and changes in family structure¹⁷ have contributed to a sedentary lifestyle and an alarming increase in childhood obesity, related health problems, and behavioral issues. The whole spectrum of outdoor experiences is beneficial, too. Whether catching snowflakes in the front yard, learning archery at a range in a national forest, or

What's the big deal about obesity?

Physical inactivity is a significant contributor to childhood obesity, which can lead to:

- ☑ heart disease
- ☑ high blood pressure
- □ poor self-esteem
- ☑ sleep disorders
- ☑ liver disease
- ✓ metabolic syndrome
- ☑ high cholesterol
- ☑ asthma
- ✓ orthopedic and joint complications
- ☑ mental health problems
- ☑ eating disorders
- ☑ type 2 diabetes
- ☑ And more...

The Centers for Disease Control recommends the following physical activity guidelines:

- Youth and adolescents = 60 minutes daily
- Adults = 30 minutes a day, most days of the week

Do you meet these goals? Take
Lt. Governor Barbara O'Brien's
Fitness Challenge and encourage
yourself, your friends, colleagues,
and family to do it with you!
www.ltgovernorschallenge.us

on the plains, outdoor time is essential for kids (and adults, too).

Spending time outside is critical to kids' physical, mental, and emotional well-being and development.¹⁸



BENEFITS: WHY IT'S GOOD TO GET OUT!

Repercussions of a generation disconnected from the outdoors are far-reaching. Outdoor time influences healthy behaviors and contributes to academic, professional, and personal success. Playing outside improves academic performance, concentration, motor development, coordination, and emotional stability. Kids are also more likely to be physically active outside than inside. ¹⁹ More benefits of getting outdoors are detailed in this section.

PHYSICAL HEALTH Obesity

Pediatric health and conditions associated with childhood obesity are complex. While physical inactivity and a decrease in outdoor experiences are not the sole contributors to obesity, diabetes, and heart disease, etc., they are major factors.²⁰ Other contributors include steadily increasing portion sizes and declining access to and availability of nutritious food.

The correlation between rising childhood obesity rates and decreased time outside is probably not coincidental because being outdoors promotes physical activity.²¹ The research is overwhelming:

- Studies indicate the amount of time children spend playing outdoors has been reduced by half over the last 20 years, while childhood obesity has more than doubled and adolescent obesity has tripled.²²
- Today's children could be the first generation to lead shorter and less healthy lives than those of their parents. The life expectancy for the current generation of youth is estimated to be three to five years less than their parents. ²³
- Youth who lack adequate facilities to recreate and play have higher rates of obesity and related conditions like heart disease, diabetes, and asthma.²⁴

What's the big deal about obesity?

Physical inactivity is a significant contributor to childhood obesity, which can lead to:

- ☑ heart disease
- ☑ high blood pressure
- ☑ poor self-esteem
- ☑ sleep disorders
- ☑ liver disease
- ☑ high cholesterol
- **☑** asthma
- ☑ orthopedic and joint complications
- ☑ mental health problems
- **I** eating disorders
- ☑ type 2 diabetes
- ☑ And more...
- The higher the concentration of parks, ballfields, and ball courts per block, the more likely middle school and high school students are to meet Centers for Disease Control (CDC) physical activity recommendations and the less likely they were to be overweight.²⁵ Look at the box on the prior page to learn about the CDC guidelines.

In Colorado, 13% of children and 10% of adolescents are obese, according to The Colorado Health Foundation.²⁶ And, only half of children and just one-third of

adolescents in the state meet recommended physical activity guidelines.²⁷

While Colorado may currently be the leanest state in the nation²⁸, we may not be able to claim this title much longer unless we take significant steps to counteract this trend because obesity in the state is increasing at the same rate as the rest of the country.²⁹ And, 37% of Coloradans are considered overweight, the same percentage as Americans.³⁰ ³¹

Our public lands, parks, open spaces, and backyards could be one of the most effective types of preventive medicine. Many healthcare professionals are incorporating "green prescriptions" into their practice to reduce stress, blood pressure, and help patients achieve healthy weight goals. Instead of prescribing regimented physical activity programs, they're encouraging patients, including kids, to garden, walk to work or school, or to bike when doing errands, also known as "incidental exercise."

Go Take a Hike and Call Me in the Morning

- "...I have started to make formal "park prescriptions." The prescribing instructions are considerably more detailed than ones you might get with a medication; they include the location of a local green space, the name of a specific trail and, when possible, exact mileage."
- --Dr. Daphne Miller, family physician and associate clinical professor at the University of California at San Francisco. Quoted in *The Washington Post*.

This approach seems effective and less overwhelming than a typical exercise regimen. Meeting CDC physical activity guidelines can be easy in active living communities where developments include mixed uses, sidewalks, bike lanes, and greenways. Even short walks to school or work make a difference. The CDC estimates that if people expended another 100 calories daily, the equivalent of a 20-minute walk, the nation's obesity epidemic could be eliminated.³²

For more on active living design, refer to the *Toolkit for Communities, Families, and Youth.*

MENTAL HEALTH & WELL-BEING

Physical health is important but being truly healthy also includes mental and emotional health and well-being. Outdoor pursuits don't just combat obesity, time outside benefits overall health.

- Outdoor play can restore attention, promote mental acuity, and reduce stress.
- Skipping stones, playing in a creek, and getting dirty reduces attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD) symptoms. In fact, there is a correlation between how natural and green the surroundings are and the amount of benefit. The more green, the fewer the symptoms.³³

- Playtime outside also alleviates depression and emotional disorders, too.
- Contact with nature restores attention, promotes recovery from mental fatigue and restores restoration of mental focus.
- Outdoor activities also contribute to better coping skills, higher self-esteem, and self-discipline.³⁴

Unfortunately, kids who live in neighborhoods without plentiful, well-maintained places to play are more likely to engage in criminal activities than youth who live in areas with plentiful open spaces and parks.

However, crime is not inevitable. When a community works together to create more places to play like planting a garden or building a playground, studies show that adults and youth become more invested in their neighborhood. As a result, crime diminishes, vandalism and graffiti lessen, and juvenile delinquency is reduced. Schools and residents also benefit from improved academic achievement and lower rates of teen pregnancy.³⁵

To find resources to develop more places for kids to play, read the *Toolkit for Colorado Communities*, *Families*, *and Youth*.

ACADEMIC PERFORMANCE

Not only does time spent outside benefit children by improving attention and concentration in school, research also shows that environmental education and outdoor-based learning significantly enhances student achievement. Colorado's high school graduation rate is 75%,³⁶ demonstrating the need for additional focus on improving academic achievement among students.

At a time when youth in America are generally showing less interest in science and science-based careers, environment-based learning can motivate and engage learners by making learning more relevant and utilizing learner's natural interest in the outdoors. In studies conducted in 1997 and 2002, the State Environmental Education Roundtable reported that 100% of students engaged in environmental-based programs increased scores on standardized tests in science, students demonstrated significant increases in interest in science, and 89% of educators perceived improvements in students' understanding of complex scientific systems.³⁷ These opportunities are critical in developing a workforce capable of meeting the needs of Colorado's new energy economy.

But improved science scores are not the only benefits of learning outdoors.

• In fact, 93% of educators using environment-based education observed improved reading and writing skills.³⁸

- Teachers also reported that their students demonstrated increased ability to think creatively, improved problem solving skills, and enhanced application of systems thinking.³⁹
- Environmental education and outdoor-based learning improves academic achievement, performance, and learning, regardless of socioeconomic status or cultural factors.⁴⁰

STEWARDSHIP VALUES

The benefits of enjoying time outdoors extend beyond academic performance and improved health and well-being. As the child grows up, he or she is more likely to recognize the importance of preserving Colorado's natural environment because kids who have positive outdoor experiences are more likely to become conservationminded adults.⁴¹

Playing outdoors as a child is associated with:

- ☑ Volunteering
- ☑ Recycling
- ☑ Voting for conservation initiatives
- ☑ Recreating outdoors as an adult
- ☑ Working in natural resources fields

-- Wells, Nature and the Life Course, 2006.

If children don't grow up spending time outside regularly, they are less likely to develop a stewardship ethic, volunteer, recycle, participate in outdoor activities as an adult, and are unlikely to work in natural resources-related professions. They're also less likely to vote for conservation measures. 42

If this trend continues, who will be our future stewards?

ECONOMIC BENEFITS

Finally, spending time outside is more than just a part of our heritage and culture; it's directly connected to Colorado's economy. The state's unparalleled landscapes and natural resources provide limitless outdoor fun, which stimulate retail sales, support outdoor recreation and tourism jobs, drive retail sales, and influence property values. Fostering future generations of outdoor enthusiasts is integral to the financial health of Colorado.

In total, outdoor recreation contributes between \$10 - \$15 billion annually to state and local coffers, according to the *Colorado Statewide Comprehensive Outdoor Recreation Plan* (SCORP).⁴³ Colorado's "active outdoor recreation industry" alone (which includes bicycling, camping, fishing, hunting, paddling sports, snow sports, wildlife viewing, trail-running, hiking, and climbing) supports over 107,00 jobs statewide.

The "active outdoor industry" also:

- Contributes over \$10 billion annually to Colorado's economy
- Supports 107,000 jobs across Colorado
- Generates nearly \$500 million in annual state tax revenue

• Produces \$7.6 billion annually in retail sales and services across Colorado, 4% of the gross state product⁴⁴

People who value natural environments are also willing to invest in those surroundings close to home. Houses near parks and open spaces consistently have higher property and resale values, which equate to higher property taxes, which support local economies.⁴⁵

Colorado clearly benefits economically from the many residents who embrace and value the outdoors. If the average age of outdoor enthusiasts in the U.S. is 55, how will this

Research Resources

Need more information? Check out these sites for more details on the health impacts and environmental implications of the disconnect between youth and nature:

Children & Nature Network:

www.childrenandnature.org

University of Colorado Denver Children, Youth and Environments Center for Research and Design (CYE): www.cudenver.edu/Academics/Colleges/ArchitecturePlan www.cudenver.edu/Academics/Colleges/ArchitecturePlan www.cudenver.edu/Academics/Colleges/ArchitecturePlan www.cudenver.edu/Academics/CyE/Pages/index.aspx

outdoor tradition and subsequent outdoor economy in Colorado survive? Will the current generation of youth fill those hiking boots?⁴⁶

Lt. Governor Barbara O'Brien learns about a Rocky Mountain Youth Corps trail-building project in Steamboat Springs.



A "Tug of War": Barriers & Challenges

So, we know it's important to get away from the TV and out the door, so why aren't more kids (and adults) doing it? This section overviews some of the most significant barriers, both valid and perceived, which prevent kids from spending more time in the open air.

Disparities, fear of strangers, competing interests and busy schedules, increased development, traffic, inadequate funding for programs, and a lack of awareness about opportunities are just a few of the considerable challenges youth, families, educators, and program providers report they confront in the U.S., and in Colorado, in getting kids outdoors.

DISPARITIES

Disparities between ethnicities and income levels influence the well-being of youth everywhere, including in Colorado. How much time a child spends outdoors, and the infrastructure he or she has access to, can correlate to household income, where they reside, and their ethnicity.⁴⁷

- Spending time outside playing with their kids becomes a lesser priority for families struggling financially, single-parent households, and for homes where both parents work.⁴⁸
- The Latino population is the fastest growing minority in the United States, but the least likely to visit national parks and natural areas.⁴⁹
- Children without outdoor places to play are less likely to exercise regularly and may face elevated risks for diabetes, obesity, and asthma.⁵⁰
- Communities with higher poverty rates are less likely to have the same amount of places to play as higher-income areas. A study examining over 400 communities across the U.S. determined that neighborhoods with a 1% poverty rate, nearly 60% of those areas had a bike path. However, in communities where the poverty rate was 10%, only 9% of the neighborhoods contained a bike path.⁵¹
- In Colorado, youth living in poverty are three times more likely to be overweight.⁵²
- Neighborhoods that lack parks, trails, and other recreation facilities are more likely to have higher crime rates because youth who have nowhere to play are more likely to turn to crime.⁵³

FEAR FACTORS

The perception that playing outside is potentially dangerous is omnipresent across America and in Colorado. In reality, children and adolescents are more likely to be seriously injured indoors than outdoors.⁵⁴

A survey of over 400 parents residing in Denver and Ft. Collins, conducted by Colorado State University revealed that parents' greatest fears about their children spending time in nature are:

- (1) Safety;
- (2) Concerns with the host organization; and
- (3) Time constraints.

More suburban (59%) than urban (43%) parents conveyed concerns about safety. When queried about what specific safety concerns they had, parents responded that strangers, wild animals, sunburns, pollution, and lightening were of greatest concern.

These fears were also prevalently mentioned during the public forums as significant barriers to more kids enjoying outdoor experiences.⁵⁵

"Stranger Danger"

One of the major fears parents report about youth being outside, whether in the neighborhood, at the local park, or in the schoolyard, is fear of strangers. Also referred to as "stranger danger," parents and guardians are fearful of kidnapping and other crimes.

In reality, "stranger danger" incidents outdoors have actually decreased over the last 20 years. However, while seated indoors in front of a computer, one-fifth of kids receive unwanted sexual solicitations while surfing online.⁵⁶

Bullying

During several forums along the tour, parents remarked that fear of strangers was a definite concern, however, so was violence committed by their children's peers. Bullying worried both parents and their kids, especially among middle school and high school students.⁵⁷

DECLINING OPEN SPACES & PLACES TO PLAY

Shrinking open spaces where kids once roamed freely is yet another contributing factor. Since 1970, open lands have decreased by nearly 90%, with agricultural lands, woods, and grasslands replaced by subdivisions, retail centers, and

sprawl.⁵⁸ Many areas where parents and grandparents farmed, hunted, built forts, and explored are now developed.

COMPETING INTERESTS

A shift in societal norms has created a culture of Americans who admit they are over-stressed, over-scheduled, and over-tired., leaving little time for activities outside, even in an outdoor centric culture like Colorado.

As youth grow older, they participate in fewer outdoor activities like biking, running, and hiking. For example, only 25% of young adults (18-24 yr. olds) engage in outdoor activities at least twice a week, a 30% decrease from when they were youth (6-17 yr. olds). This decrease is more significant for girls than boys, and even more dramatic among African Americans and Hispanics than Caucasians.⁵⁹

While unstructured playtime and outdoor recreation have decreased, involvement in organized sports like soccer, football, and softball have increased. During the last few decades team sports have grown dramatically in popularity, while concurrently, childhood obesity has became more prevalent. Certainly organized sports are not the cause of overweight children; intensive schedules and a lack of free time are the culprits. Team sports are a beneficial to childhood development, relationship-building, and problem-solving. These activities can also help youth meet the recommended the recommended 60 minutes of daily physical activity, depending on how much time they are actually active on the field or court.

However, organized sports may not encourage the same appreciation for the natural world as other outdoor activities. Whether kids are getting dirty in mucky ponds, biking to school, or skipping stones on a stream, spending time outdoors off the field is important, too. Youth who engage in these experiences are more likely to participate in "traditional" outdoor activities like camping, hiking, and fishing as adults.⁶²

- "...I wish I had more free time to play outside with my sister..."
- --Youth participant in Grand Junction
- "I'm not really allowed to roam around and play..."
- --Youth participant in Durango
- "I don't have anyone to play outside with me."
- --Youth participant in Salida

BARRIERS & CHALLENGES IDENTIFIED BY FORUM PARTICIPANTS

The "word cloud" below was created using <u>www.wordle.net</u> and summarizes the barriers and challenges forum participants identified.



ADDRESSING THE ISSUE

How are agencies, communities, policy makers, and organizations reacting to this foreboding trend, and how are they affecting change to reverse it?

The good news: there are many initiatives addressing the epidemic on the national level, in other states, and in Colorado. A summary of some of these campaigns are highlighted below but is not a comprehensive list of all of the important work being conducted to get more kids out and about.

FEDERAL AGENCY EFFORTS

<u>U.S. Department of the Interior (DOI) Office of Youth and Natural Resources Affairs</u>

The Office of Youth and Natural Resources Affairs was developed by Secretary of the Interior Ken Salazar in April 2009 to provide departmental leadership for programs to educate, engage, and employ youth. Goals of the Office include developing programs, expanding opportunities, teaching hunting and fishing skills, and coordinating efforts between federal agencies.

www.doi.gov

U.S. Fish and Wildlife Service "Let's Go Outside!"

The "Let's Go Outside" initiative, sponsored by the U.S. Fish and Wildlife Service, advocates for families, youth, and educators and parents to get out and experience nature and share their experiences. The website has a special section for kids to explore nearby nature and to join the Neighborhood Explorers Club. www.fws.gov/letsgooutside/

U.S. Forest Service (USFS) More Kids in the Woods

In 2007, the U.S. Forest Service (USFS) committed \$1.5 million to launch the More Kids in the Woods program, which offers grants to local organizations and communities in partnership with national forests. The goal of the initiative is to get more youth to experience and connect to forest service lands. Applications for innovative, collaborative approaches that focus on underserved and urban youth and hands-on recreation and conservation education are currently being sought.

www.fs.fed.us/recreation/programs/woods/index.shtml

Information on these grants is also included in the *Toolkit for Communities*, *Families*, *and Youth*.

NATIONAL INITIATIVES

No Child Left Inside (NCLI) Act

The purpose of the No Child Left Inside (NCLI) Act is to support and enhance environmental education in our nation's elementary and secondary schools to improve student achievement in science and other subjects.

The bill has been introduced in both the House of Representatives and the Senate. The bipartisan bills would provide \$100 million annually for five years to implement state environmental literacy plans. A state must have adopted a statewide environmental literacy plan to be eligible to compete for grants.

For more details, visit: www.nclicoalition.org. Or join the Coalition to Advance Environmental Literacy in Colorado, which is advocating for passage of the NCLI Act, visit: www.caee.org

Children & Nature Network (C&NN)

The Children & Nature Network was developed in 2006 by Richard Louv and several other partners to support organizations working to reconnect youth with the environment. The network provides research, information, and tools to support a movement to combat "nature deficit disorder." www.childrenandnature.org

EFFORTS IN OTHER STATES

Americans are becoming more aware of the serious implications of the disconnect between youth and families and the outdoors, as evidenced by the multitude of programs undertaken in many states. Within many states, there are several regional groups working collaboratively on the issue, as well.

Refer to *Appendix C: Regional and Statewide Efforts in the U.S. to Connect Youth to the Outdoors* for information on current initiatives.

EFFORTS IN COLORADO

Several of the components of Lt. Governor Barbara O'Brien's initiative were modeled after successful programs in other states and adapted with consideration of Colorado's unique needs, attitudes, and landscapes.

Colorado's agencies are working to encourage more time outdoors, even if they are not directly dedicated to the goal, they are indirectly achieving this result through various missions and programs.

The Colorado Lottery

Since 1982, the Colorado Lottery has invested over \$2 billion in the state via its beneficiaries by:

- Protecting 718,171 acres —ensuring preservation of open spaces for future generations
- Creating, restoring, or enhancing nearly 48,000 acres of wetlands and over 200 miles of stream through the Colorado Wetlands Program
- Acquiring 21,947 acres for future state parks or for buffers and in-holdings at existing state parks.
- Building or maintaining 700 miles of trails through the State Trails Program
- Creating or improving over 1,000 community parks and outdoor recreation sites through Great Outdoors Colorado (GOCO)
- Establishing 200 wildlife-viewing areas⁶³

"Don't forget to play!"
www.coloradolottery.com

Great Outdoors Colorado (GOCO)

GOCO has helped fund the quality of life infrastructure which enables Coloradans to venture out. Since its inception in 1994, GOCO has awarded almost \$650 million for nearly 3,100 projects across the state. These funds have protected over 850,000 acres of open space, built or improved over 760 miles of trail, and developed or enhanced more than 1,000 community parks and outdoor recreation sites.

GOCO grants have also enabled 7,650 young people to be involved in youth corps throughout Colorado.⁶⁴

Grants are allocated to the Colorado Division of Wildlife, Colorado State Parks, and local governments.⁶⁵

In 2010, GOCO will celebrate 15 years of grantmaking and will also be launching a new strategic plan which will include a youth and family component. www.goco.org

COLORADO DEPARTMENT OF NATURAL RESOURCES (DNR) Colorado Division of Wildlife (CDOW)

CDOW is dedicated to introducing youth to outdoor experiences through many approaches, some of which include:

- Teacher Resources workshops for Projects WILD, Water Education, Learning Tree, Wildlife Watch, Teaching Environmental Science Naturally (TENS) and more
- Schoolyard Habitat Grants Program and Fishing is Fun grants
- Free fishing days, youth big game, waterfowl, and pheasant hunts
- Wildlife watching workshops and festivals
- Youth Hunter Education Challenge (YHEC)

www.wildlife.state.co.us

Colorado State Parks

Aside from managing 42 state parks to play and explore, and protecting over 178,000 acres of land and 46,000 acres of water, Colorado State Parks also offers:

- Environmental education and interpretation activities
- Passport to Parks Program
- Interpretive and environmental opportunities at parks
- Nature programs
- Junior Ranger Program

The Colorado State Trails Program, housed within Colorado State Parks, provides assistance through grants and expertise for the development of trails throughout Colorado. The Program is responsible for distributing between \$2 and \$3 million in trail grants every year for motorized and non-motorized recreation. The Program also encourages youth participation throughout trail planning and development processes.

www.parks.state.co.us

COLORADO DEPARTMENT OF LOCAL AFFAIRS (DOLA)

The Conservation Trust Fund (CTF) is one of three funds established to accomplish these goals. CTF receives 40% of all net lottery proceeds. DOLA distributes Conservation Trust Fund dollars, derived from 40% of Colorado Lottery proceeds, to over 450 eligible local governments: counties, cities, towns, and special districts that provide park and recreation services. Funding can be used for acquisition, development, and maintenance of new conservation sites or for capital improvements or maintenance for recreational purposes on any public site.

Communities also benefit from Colorado's Office of Smart Growth which is housed within the DOLA. The Office of Smart Growth provides expertise to local governments in the areas of land use planning, developing a master plan, and growth management. Workshops and direct technical and financial assistance are available.

www.dola.state.co.us

COLORADO DEPARTMENT OF PUBLIC HEALTH AND THE ENVIRONMENT (CDPHE)

The Colorado Physical Activity and Nutrition Coalition (COPAN), within CDPHE, was formed in 2001 to prevent obesity and related chronic diseases and to promote healthy lifestyles for all Coloradans. COPAN is a group of more than 450 public and private partners that working together to improve Coloradan's dietary habits and increase their physical activity.

COPAN's Active Community Environment (ACE) Task Force represents collaborations and partnerships with public health, transportation, and community planning and design agencies in support of planning for and modifying existing environments to promote physical activity and healthy living.

www.cdphe.state.co.us/pp/COPAN/COPAN.html

COLORADO DEPARTMENT OF TRANSPORTATION (CDOT)

Colorado Safe Routes to School (SRTS) program, administered by CDOT, uses a comprehensive approach to make school routes safe for children when walking and bicycling to school. In Colorado, many communities, parents and schools are fostering a safe environment for their students by using SRTS programs to not only fund education and safe infrastructure, but also to encourage healthy options for our children that are safe for both walking and bicycling.

CDOT's Bicycle and Pedestrian program also helps encourage and empower walking and biking by providing maps, technical assistance, and sponsors Colorado Bike Month every June.

www.coloradodot.info/programs/bikeped

LiveWell Colorado

LiveWell Colorado's mission is to inspire and advance policy and environmental and lifestyle changes that promote health through the prevention and reduction of obesity. These communities have created gardens, trails, bike lanes, and Safe Routes to School programs which are all successfully getting kids off the couch and out the door.

Offering free webinars, data, and toolkits related to obesity issues, LiveWell Colorado is the most comprehensive resource for healthy eating, active living, and obesity efforts in the state.⁶⁶

Check out www.livewellcolorado.org!

"On the Ground" in Colorado: Innovative Statewide & Regional Partnerships

Several large-scale collaborative efforts devoted to getting kids outdoors in Colorado are highlighted in this section. Every region, county, and town in the state is uniquely Colorado. Understandably, approaches that are effective in one community may not be translatable in another because of cultural differences, resource limitations, or varying demographics.

Participants at each forum identified successful and unique collaborative approaches in their region. A multitude of exceptional and innovative approaches were discovered. However, because of space limitations, this list is not exhaustive and does not adequately represent the hard work of so many partners dedicated to the health and well-being of youth in the state.

The need for a clearinghouse of initiatives and opportunities was recognized as a major priority during the tour and could effectively showcase the many other programs, collaborations, and partnerships working diligently on this issue which are not listed in this section.

Colorado Alliance for Environmental Education (CAEE)

CAEE serves all sectors of the Colorado community by increasing the effectiveness of environmental education (EE) through professional development, a certification program for environmental educators, and other tools to improve the quality of EE experiences in Colorado.

www.caee.org

The Coalition to Support Environmental Literacy in Colorado

Formerly the No Child Left Inside- Colorado Coalition, the Coalition to Support Environmental Literacy in Colorado is working to prepare citizens to understand and address the major environmental, social and economic challenges facing the state by focusing on a coordinated strategy to improve environmental literacy. The group, organized by CAEE, hopes to pass state legislation to provide access to environmental education opportunities for all learners. One of the major goals of the coalition includes the development of a Colorado Environmental Literacy (EL) Plan. An EL Plan will help ensure every student in every school in the state can benefit from high-quality environmental education.⁶⁷

WWW.caee.org

Colorado Kids Outdoors (CKO) Coalition

The Colorado Kids Outdoors (CKO) coalition aspires to support the efforts of many diverse organizations in providing opportunities, environments, and infrastructure for children to spend significant quality time outdoors.⁶⁸ The purpose of this collaboration is to create a comprehensive framework within Colorado to support organizations to provide opportunities, environments, and infrastructure so children across the state can spend significant quality time outdoors.⁶⁹

www.coloradokidsoutdoors.org

<u>Children & Nature Connection, Northern</u> Colorado

Since working to bring Richard Louv, author of *Last Child* in the Woods, to Ft. Collins in Fall 2006, this collaboration of 20 local agencies and organizations has focused on community outreach to raise awareness and encourage parents to take kids outside. Public presentations, book study classes for teachers, and booth at local events have been used to spread the word. Agencies and organizations are modifying their youth

To share your organization or model, consider joining the Colorado Kids Outdoors (CKO) group on Google™ and start a discussion topic.⁷⁰

outreach programs to include unstructured play time. Future goals include researching barriers and implementing efforts to overcome them, with monitoring for success, and finding opportunities to coach parents on the "how to's" of taking kids outside.⁷¹

For more information, contact Benjamin Hale, Project Manager: bhale.cnc@gmail.com

A SHARED CALL TO ACTION

Along with successful initiatives, attendees at each of the eleven forums discussed major challenges to an ideal world where Colorado youth were immersed in outdoor experiences regularly. Participants strategized about how to overcome these barriers and institute change on local, regional, and statewide-levels.

These suggestions were the primary basis for determining a shared call to action for decision makers, community leaders, educators, and other stakeholders.

Recommendations and research from previous planning efforts were also considered including LiveWell Colorado, the CDOW Conservation Summit, the 2008 Earth Day Forum, and the *Colorado Statewide Comprehensive Plan (SCORP)*.

GOAL

Stakeholders envisioned an ideal world where:

All Colorado kids spend time outdoors regularly and connect to the natural world.

Achieving this goal can be accomplished through collaborative, strategic, long-term action. Forum participants and stakeholders agreed that transformation will require shared responsibility and action on all levels including individual, community, cultural, and institutional.

PRIORITIES

To get more youth engaged and invested in the outdoors, forum participants and stakeholders identified the following priorities:

Build Effective Partnerships and Leverage Resources

- Strengthen regional networks and solidify a statewide coalition focused on youth and the outdoors.
- Partner with youth to advise stakeholders about enacting strategies and priorities.
- © Collaborate beyond municipal, county, and state borders and leverage national opportunities.

Reduce Barriers

- Identify alternative funding mechanisms to supplement non-profit, local government, and agency budgets.
- © Educate the public and stakeholders about the importance of the issue and benefits of spending time outdoors.
- Address misconceptions and fears about outdoor experiences through media campaigns, existing messaging, and provider programs.

Develop Sustainable Policies and Infrastructure

- Provide technical assistance to communities to help access existing resources, collaborate across municipal and county boundaries, and share best practices.
- © Create a framework to address disparities and connect traditionally underserved youth to existing programs and other outdoor experiences.
- Develop a Colorado Environmental Literacy Plan that instills an understanding and appreciation of Colorado's great outdoors among young people and ensures every child experiences environmental education.

© Centralize information for opportunities to experience and appreciate the outdoors.

Evaluate Progress

Determine a metric to establish a baseline measurement of how much time Colorado youth currently spend outdoors and work to increase that time; evaluate routinely.

CONCLUSION

Fulfilling these needs will require commitment and innovation to ensure "all Colorado youth spend time outdoors regularly and connect to the natural world."

Transformation can not be driven solely by state agencies, school districts, or local governments, but will require shared responsibility and action on all levels including individual, community, and institutional. Systemic change and cultural shifts are also critical and will take substantial time. Strained budgets and competing priorities must also be acknowledged. Despite these considerations, reconnecting Colorado's youth to the outdoors is imperative and can be achieved.

Hands-on learning and outdoor experiences are critically important to the intellectual development and physical health of young people, and to the future of our society.⁷² Working together, we can ensure future Coloradans are healthy, successful adults who are committed to enjoying and safeguarding our precious natural resources.

Any activity, in every setting, in all kinds of weather, at every age - kids *need* to get outside regularly.

REFERENCES

- 1 "Connecting Today's Kids with Nature." National Wildlife Federation, 2008. 18 May 2009.
- 2 Children & Nature Network (C&NN). 2 Sept. 2009. http://www.childrenandnature.org>.
- 3 Stafford, N., B. Bruyere, M. Davis, C. Ehlinger, S. Easterby, and A. Pitchford. Parents' Perceived Benefits and Fears about Experiences in Nature for Children. Colorado State University. 2009.
- 4 WAEI: Discover What's Waiting in the Great Outdoors! Wildland Awareness and Educational Institute. Web. 15 Nov. 2009. http://www.wildlandinstitute.org/.
- 5 Brandeis White, Esq., Heather. National Wildlife Federation. No Child Left Inside: Reconnecting Children to Nature. 2008.
- 6 "Connecting Today's Kids with Nature." National Wildlife Federation, 2008. Web. 18 May 2009.
- 7 2008-2013 Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP). Rep. Colorado State Parks, 2008. Web. 13 Oct. 2009. www.coloradoscorp.org.
- 8 "Active" outdoor recreation includes bicycling, camping, fishing, hunting, paddling sports, snow sports, wildlife viewing, trail-running, hiking, and climbing.
- 9 Active Outdoor Recreation Economy Report. Prepared by Southwick Associates for the Outdoor Industry Foundation. 2006.
- 10 "Connecting Today's Kids with Nature." 2008. National Wildlife Federation. 18 May 2009
- 11 Lieberman, Gerald A.; and Linda L. Hoody. "Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning." SEER: Poway, CA, 1998.
- 12 Chawla, Louise, and Myriam Escalante. Student Gains From Place-Based Education. University of Colorado at Denver and Health Sciences Center. 2007.
- 13 Ibid.
- 14 Study population was youth ages 9-12. University of Maryland Study cited in The Washington Post, 2007.
- 15 OIF Next Generation Report 2005-06, 2007
- 16 Children & Nature Network (C&NN). Web. 2 Sept. 2009. http://www.childrenandnature.org.
- 17 American Academy of Pediatrics. 17 Oct. 2009. http://www.aap.org>.
- 18 Chawla, L., and D. Flanders Cushing. Benefits of Nature for Children's Health. Issue brief. Denver: University of Colorado at Denver Health Sciences Center, 2007.
- 19 Children & Nature Network (C&NN). Web. 2 Sept. 2009. http://www.childrenandnature.org.
- 20 Childhood Obesity in Colorado: A Growing Problem. Rep. Denver: Colorado Children's Campaign, 2007.
- 21 Children & Nature Network (C&NN). Web. 2 Sept. 2009. http://www.childrenandnature.org.
- 22 "Connecting Today's Kids with Nature." 2008. National Wildlife Federation. 18 May 2009.
- 23 Childhood Obesity in Colorado: A Growing Problem. Rep. Denver: Colorado Children's Campaign, 2007.
- 24 Gies, Erica. The Health Benefits of Parks. Rep. The Trust for Public Land. Web. <www.tpl.org>.
- 25 Children & Nature Network (C&NN). Web. 2 Sept. 2009. http://www.childrenandnature.org...
- 26 Children are defined as ages 1-14 while adolescents include ages 15-18.
- 27 Income, Education, and Obesity: Colorado Health Report Card Supplement. Report by the Colorado Health Foundation, 2008.
- 28 Childhood Obesity in Colorado: A Growing Problem. Rep. Denver: Colorado Children's Campaign, 2007.
- 29 Lt Governor's Challenge. <www.colorado.gov/ltgovernor.> 14 Nov. 2009
- 30 Childhood Obesity in Colorado: A Growing Problem. Rep. Denver: Colorado Children's Campaign, 2007.
- 31 Overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index"
- (BMI). BMI is used because, for most people, it correlates with their amount of body fat. Someone with a BMI between 25 and 29.9 is considered overweight. A person with a BMI of 30 or higher is considered obese.
- 32 Gies, Erica. The Health Benefits of Parks. Rep. The Trust for Public Land. Web. <www.tpl.org>.
- 33 Faber Taylor, A., Kuo, F. & Sullivan, W. (2001) "Coping with ADD: The surprising connection to green play settings." Environment and Behavior 33 (I): 54-77.
- 34 Gies, Erica. The Health Benefits of Parks. Rep. The Trust for Public Land. Web. <www.tpl.org>.

- 35 Ibid.
- 36 Mitchell, N. "Colorado's Graduation Rate Edges Up Slightly." 14 Jan. 2010. www.ednewscolorado.org. 15 Jan. 2010.
- 37 Coyle, K. (2005). Environmental literacy in America: What ten years of NEETF/Roper research and related studies say about environmental literacy in the U.S. The National Environmental Education & Training Foundation.
- 38 Ibid.
- 39 Lieberman, Gerald A.; and Linda L. Hoody. "Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning." SEER: Poway, CA, 1998.
- 40 Coyle, K. (2005). Environmental literacy in America: What ten years of NEETF/Roper research and related studies say about environmental literacy in the U.S. The National Environmental Education & Training Foundation.
- 41 Chawla, L. "Life paths into effective environmental action." Journal of Environmental Education 31.1 (1999): 15-26. Print.
- 42 "Connecting Today's Kids with Nature." 2008. National Wildlife Federation. 18 May 2009.
- 43 2008-2013 Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP). Rep. Colorado State Parks, 2008. Web. 13 Oct. 2009. www.coloradoscorp.org.
- 44 Active Outdoor Recreation Economy Report. Prepared by Southwick Associates for the Outdoor Industry Foundation. 2006.
- 45 Sherer, P. The Benefits of Parks: Why America Needs More City Parks & Open Space. Rep. Trust for Public Land. Web. www.tpl.org.
- 46 WAEI: Discover What's Waiting in the Great Outdoors! Wildland Awareness and Educational Institute. Web. 15 Nov. 2009. http://www.wildlandinstitute.org/.
- 47 Sherer, P. The Benefits of Parks: Why America Needs More City Parks & Open Space. Rep. Trust for Public Land. Web. www.tpl.org.
- 48 Charles, C., R. Louv, L. Bodner, B. Guns, and D. Stahl. Children and Nature 2009: A Report on the Movement to Reconnect Children to the Natural World. Rep. Children & Nature Network and ecoAmerica.
- 49 Connecting Cultures Project Study. www.birdday.org/connectingcultures/connecting-cultures-study. 121209.
- 50 Gies, Erica. The Health Benefits of Parks. Rep. The Trust for Public Land. Web. <www.tpl.org>.
- 51 No Place to Play: A Comparative Analysis of Park Access in Seven Major Cities. Rep. Trust for Public Land, 2004.
- 52 Childhood Obesity in Colorado: A Growing Problem. Rep. Denver: Colorado Children's Campaign, 2007.
- 53 Gies, Erica. The Health Benefits of Parks. Rep. The Trust for Public Land. Web. <www.tpl.org>.
- 54 Louise Chawla, Presentation at NWF and EPA Earth Day Forum, 2008.
- 55 Stafford, N., B. Bruyere, M. Davis, C. Ehlinger, S. Easterby, and A. Pitchford. Parents' Perceived Benefits and Fears about Experiences in Nature for Children. Colorado State University. 2009.
- 56 Louise Chawla, Presentation at NWF and EPA Earth Day Forum, 2008.
- 57 Pueblo forum, Summit County forum. Colorado Kids Outdoors Initiative.
- 58 No Place to Play: A Comparative Analysis of Park Access in Seven Major Cities. Rep. Trust for Public Land, 2004.
- 59 The Next Generation of Outdoor Participants. Rep. Boulder: Outdoor Industry Foundation, 2007.
- 60 Cordell, K. et al., National Survey on Recreation and the Environment (NSRE). Rep. USFS, 2007. Web. 7 May 2009. http://www.srs.fs.usda.gov/trends/.
- 61 Louv Last Child in the Woods
- 62 The Next Generation of Outdoor Participants. Rep. Boulder: Outdoor Industry Foundation, 2007.
- 63 The Colorado Lottery. Web. 2 May 2009. http://www.coloradolottery.com>.
- 64 GOCO Fact Book, 2 May 2009. <www.goco.org>.
- 65 GOCO Annual Report FY 2007. Great Outdoors Colorado (GOCO). Denver, 2008.
- 66LiveWell Colorado. Web. 13 Nov. 2009. <www.livewellcolorado.org>.
- 67 Colorado Alliance for Environmental Education. Web. 18 Nov. 2009. <www.caee.org>.
- 68 CKO is not affiliated with the Lt. Governor's Office or the State of Colorado. It is an independent coalition of various partners working to connect Colorado youth with nature.

69 Colorado Kids Outdoors Coalition (CKO). www.coloradokidsoutdoors.org. 21 Nov. 2009

70 CKO is not affiliated with the Lt. Governor's Office or the State of Colorado. It is an independent coalition of various partners working to connect Colorado youth with nature.

71 Children & Nature Network (C&NN). Web. 20 Nov. 2009.

 $<\!\!\!\text{http://www.childrenandnature.org/movement/ent/detail/cnn_northern_colorado}\!\!>.$

72 Sweeney, A. "Environmental education and outdoor recreation." 11 May 2008.



Before they grow up ALL Colorado kids should have the opportunity to:

- **Camp out under the stars.**
- Follow a trail, ride it or walk it, and be respectful of everyone's right to use the trail.
- Play in a creek or river: fish, wade, paddle, or skip a stone.
- **Experience the wonders of Colorado's four seasons: wildflowers, abundant sunshine,** 4 the changing aspen leaves, and fresh powder snow.
- Visit a working farm or ranch.
- **Enjoy** the view from the top of a mountain.
- Identify Colorado's official state wildlife and plants in their natural habitat.
- **Explore one of the dozens of local, state, and national parks in Colorado.**
- Play in the dirt and learn about the world from the ground up.
- Plant a seed for other Colorado kids to enjoy in the future.



COLORADO AL AIRE LIBRE PARA NIÑOS



Antes de ser adultos

TODOS los niños de Colorado deben tener la oportunidad de:

- Acampar al aire libre bajo las estrellas.
- Andar por una vereda, a pie, a caballo o en bicicleta, y respetar el derecho de todos de usarla.
- **3** Jugar en un arroyo o un río: pescar, caminar en él, chapotear o aventar piedritas.
- Presenciar las maravillas de las cuatro estaciones en Colorado: las flores silvestres, el abundante sol, las hojas cambiantes de los álamos, y la nieve acabada de caer.
- **S** Visitar una granja o un rancho productores.
- **6** Disfrutar la vista desde lo alto de una montaña.
- Identificar la mascota y flor oficial del estado en su hábitat natural.
- Explorar alguno de las docenas de parques locales, estatales o nacionales en Colorado.
- Jugar en la tierra y aprender sobre el mundo del suelo hacia arriba.
- 🚺 🔘 Plantar una semilla para que otros niños en el futuro disfruten también.



APPENDIX C: REGIONAL AND STATEWIDE EFFORTS IN THE U.S. TO CONNECT YOUTH TO THE OUTDOORS¹

Americans are becoming more aware of the serious implications of the disconnect between youth and families and the outdoors, as evidenced by the multitude of programs undertaken in many states (Table 1). Within multiple states, there are several regional groups working collaboratively on the issue, as well. Every campaign has been designed with consideration of the unique needs, attitudes, and landscapes of each state.

Several of the components of *Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative* were adapted from successful programs in other states.

Table 1: Regional and Statewide Efforts to Connect Youth to the Outdoors

STATE	CITY/AREA	CAMPAIGN NAME	CAMPAIGN DESCRIPTION	CONTACT/WEBSITE
Alaska	Anchorage	Get Outdoors Anchorage	Get Outdoors Anchorage" is a collaborative effort of agencies, organizations, and individuals who seek to reconnect Alaskans' with forests, parks and other public lands.	WedemeierAM@muni.org
Arizona	Phoenix	Be Outdoors Az		williamson@thephxzoo.com
Arkansas	Little Rock	Regional Campaign		Kyla_Hastie@fws.gov
California	Sacramento	California Children's Outdoor Bill of Rights	That every child in California, by the completion of their 14th year, have the opportunity to experience each of the activities listed within the California Children's Outdoor Bill of Rights.	www.calroundtable.org/cobor.htm
California	Northern	Children in Nature Collaborative	The Children in Nature Collaborative was initiated in 2007 with the goal of engaging individuals and organizations from all sectors in this issue. The Collaborative is made up of regional and national partners — teachers, parents, farmers, health professionals, environmentalists, businesses, faithbased groups and community leaders.	www.cincbayarea.org

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¹ Heirshberg, Marc S. "Connecting Colorado's Kids with Nature." Thesis. Regis University, 2009. Print.

STATE	CITY/AREA	CAMPAIGN NAME	CAMPAIGN DESCRIPTION	CONTACT/WEBSITE
California	Santa Barbara	Leave No Child Inside Santa Barbara	LNCI Santa Barbara is sponsoring a collaborative web site offering resources, information, and programs to encourage parents to unplug their kids and go outside.	www.santabarbarawild.org
California	Los Angeles	Regional Campaign		bill.vanderberg@ca.rr.com
California	San Diego	San Diego Canyon lands	San Diego Canyon lands are working to protect and restore San Diego area canyons to make them available to grade-school educational programs and high-school volunteers.	http://sdcanyonlands.org
California	Santa Barbara	Santa Barbara Wild: A Leave No Child Inside Coalition	A regional collaboration of organizations, institutions and individuals dedicated to reconnecting children to nature.	hmoffat@SBNATURE2.ORG
Colorado	Statewide	Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative	A statewide initiative with several components to raise awareness about the issue and address the epidemic. Includes the development of a Kids' Outdoor Bill of Rights, 11-stop statewide tour, report on the public forums, and a toolkit for communities.	www.colorado.gov/LtGovernor
Colorado	Statewide/ Denver Metro	Colorado Kids Outdoors Coalition	Colorado Kids Outdoors is a collaboration among organizations in the public, private and nonprofit sectors for whom the shared goal is increasing outdoor activity for children.	www.coloradokidsoutdoors.org

STATE	CITY/AREA	CAMPAIGN NAME	CAMPAIGN DESCRIPTION	CONTACT/WEBSITE
Colorado	Fort Collins and surrounding areas	Children and Nature Connection - Northern Colorado	This collaborative effort of 20 local agencies and organizations has focused on community outreach to raise awareness and encourage parents to take kids outside. Public presentations, book study classes for teachers, and booth at local events have been used to spread the word. Agencies and organizations are modifying their youth outreach programs to include unstructured play time.	bhale.cnc@gmail.com
Connecticut	Hartford	No Child Left Inside	Introduced in 2005 by Governor M. Jodi Rell, and coordinated by the CT Department of Environmental Protection, No Child Left Inside, a major state initiative, is designed to reconnect families with the outdoors, build the next generation of environmental stewards and showcase Connecticut state parks and forests.	www.nochildleftinside.org
Florida	Tallahassee	Get Outdoors Florida!	Our mission is: "Engaging communities, families and individuals in outdoor experiences to achieve healthier lifestyles and sustain Florida's natural resources." We include government, university, notfor-profit, and commercial partners in this grass roots initiative.	www.getoutdoorsflorida.com
Florida	Sarasota	Regional Campaign		Canopymeg@aol.com
Georgia	Atlanta	Get Outdoors Georgia	The DNR-PRHSD developed the Get Outdoors Georgia (GO Georgia) program to promote youth and family-friendly nature-based and health-focused activities throughout the state.	www.GeorgiaStateParks.org
Idaho	Boise	"Be Outside" - Idaho Children and Nature Network	The Idaho Children and Nature Network is a group of Idaho city, state and federal agencies, nongovernmental organizations, private business owners and citizens united in the common cause of empowering all Idahoans to lead healthy lives by developing a sense of place in Idaho's outdoors.	www.beoutsideidaho.org

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Illinois	Chicago	Leave No Child Inside: Explore Chicago Wilderness	The Chicago Wilderness Leave No Child Inside initiative is an effort to promote children's health and foster generations of kids who care about nature enough to care about it in the future.	www.kidsoutside.info/
Illinois	Deer Park	LNCI for the Greater Barrington, Deer Park and Lake Zurich Area	The LNCI Consortium, a large group of representatives from major community sectors of the greater Barrington, Deer Park and Lake Zurich area have started a local LNCI initiative. Involved are representatives of these communities' education, health care, government, business, faith-based, conservation, and non-profit sectors.	http://funoutside.org
Indiana	Indianapolis	Regional Campaign		wgartner@dnr.IN.go
Kansas	Wichita	g2g Outside	g2g Outside is a developing program of Sedgwick County Extension in partnership with other community partners in the Wichita, KS area. We are developing this program to encourage children and families to spend more time doing outdoor activities, particularly unstructured activities.	http://g2goutside.wordpress.com/
Kentucky	Murray	Regional Campaign		Joe.baust@coe.murraystate.edu
Maine	Revere	Take it Outside	Take it Outside is an initiative led by Governor John E. Baldacci to encourage Maine's children and families to reconnect with nature. Take it Outside! is your one-stop shopping information source for year-round outdoor recreation opportunities in Maine. Here you will find everything you need to Take it Outside! and have fun in the great Maine outdoors	www.take-it-outside.com
Maryland	Baltimore	Leave No Child Inside	The Greater Baltimore Children & Nature Collaborative (GBCAN) encourages partnerships and provides information to foster caring connections with nature.	www.gbcan.org

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Maryland	Statewide	Maryland Partnership for Children in Nature	On April 21, 2009 Governor O'Malley received the draft Maryland Partnership for Children in Nature Plan. The plan outlines Maryland initiatives that will take place within the school curriculum as well as enhancing opportunities for getting families and children connected with nature	www.dnr.state.md.us/education/chi ldren_nature/
Massachusetts	Boston	Regional Campaign		gvcardoza@massaudubon.org
Michigan	Holland	Connecting Children & Nature		twilliam@oaisd.org
Michigan	Harbor Springs	Getting Kids Outdoors: Emmet County	To build a community that embraces and promotes getting kids outdoors as part of a healthy lifestyle.	www.gettingkidsoutdoors.org
Michigan	Kalamazoo and Southwest	Leave No Child Inside		JWright@naturecenter.org
Michigan	Ann Arbor	Michigan No Child Left Inside Coalition	It is our belief that all children in Michigan should have access and opportunity to safely enjoy Michigan's outdoor heritage. The members of the Michigan No Child Left Inside Coalition are committed to working in partnership to rekindle the connection between our children and nature by promoting activities and policies for outdoor play, recreational opportunities, hands-on environmental education, and increased knowledge about nature.	http://online.nwf.org/site/PageServ er?pagename=glnrc_education_MI _NCLI_main&JServSessionIdr011 =419nelf101.app27a
Minnesota	Minneapolis	Minnesota Children & Nature Connection		cyfc@umn.edu
Nebraska	Lincoln	Healthy Families Play Outside	To educate families about the importance of outdoor physical exercise and the benefits inherent in this kind of activity; To introduce Lincoln 's parks and outside spaces to low-income and immigrant families; To provide an incentive for families to get outside and play in Lincoln 's parks and outside spaces; To focus media attention on the need for active, physical, outdoor play and the resources available in Lincoln	http://healthyfamiliesplayoutside.org/

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New Hampshire	Concord	Children in Nature Initiative	The New Hampshire Children In Nature Coalition is dedicated to fostering experiences in nature that improve physical and emotional health and wellbeing, increase understanding of and care for the natural world, promote stronger connections to community and landscape, and to providing a forum for continued collaboration	http://wildnh.com/ChildrenInNature/
New Mexico	Albuquerque	No Child Left Inside Coalition	New Mexico wants to lead the way to a different future with programs and legislation that reconnect children with the outdoors. In 2007, the New Mexico Legislature approved the Outdoor Classrooms Initiative that increased outdoor education in the state.	www.sierraclub.org/youth/newmex ico/coalition.aspx
New York	Adirondack	Children in Nature, New York	Children in Nature, New York, is a partnership between the NFI, the New York state Department of Environmental Conservation; Great Play! Lake Placid Sport Summit; Come Out and Play! Children in Nature, Saratoga; and The Wild Center.	pbhai@esf.edu
New York	Albany	Leave No Child Inside		gbjack@gw.dec.state.ny.us
North Carolina	Durham	Discover the World Outside	The N.C. Office of Environmental Education's "Discover the World Outside" education campaign is designed for specific audiences such as parents. This campaign helps people find outdoor events and programs near them and provides information on the benefits of spending time outside.	www.eenorthcarolina.org/discover. html
North Carolina	Statewide	NC CAN!	The mission of N.C. CAN! (the North Carolina Children and Nature Coalition)is to establish a relationship between the children of North Carolina and the natural world by bringing together people and organizations to strengthen, broaden, and support efforts that build these connections.	www.eenorthcarolina.org/

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North Carolina	Raleigh	Take A Child Outside	Designed to help break down obstacles that keep children from discovering the natural world. By arming parents, teachers and other caregivers with resources on outdoor activities, the goal is to help children across the country develop a better understanding and appreciation of the environment in which they live, and a burgeoning enthusiasm for its exploration.	http://takeachildoutside.org/
North Carolina	Burnsville	WNC Kids in Nature Lovers	Networking fellow minded citizens of Western North Carolina to encourage all families and children in the area to get outside!	http://groups.google.com/group/wn c-kids-in-nature-lovers
Ohio	Cincinnati	Leave No Child Inside— Greater Cincinnati	Leave No Child Inside of Greater Cincinnati is a collaboration of organizations and individuals educating the community that time spent in nature is essential for the physical, mental and emotional health of all children.	www.lncigc.org/
Ohio	Regional	NW OH LNCI Collaborative		mary.warren@dnr.state.oh.us
Ohio	Columbus	The Leave No Child Inside Central Ohio Collaborative	In October of 2007, a group of individuals and community organizations around Columbus came together to form The Leave No Child INSIDE Central Ohio Collaborative. The group connects existing natural parks and playspaces with youth and parents, plus child-care facilities and schools, and works to educate the community about the importance of nature to healthy childhood development.	http://kidsandnature.org/blog/

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Oklahoma	Oklahoma City	Kirkpatrick Foundation Conservation Education Initiative	The Kirkpatrick Foundation Conservation Education Initiative is a partnership of the Foundation, The Nature Conservancy - Oklahoma Chapter and the Oklahoma Environmental Education Coordinating Committee. The Initiative includes a series of meetings where some 15 organizations and agencies share strategies to promote environmental and conservation education and development of a web site, hosted by The Nature Conservancy.	www.nature.org/wherewework/nor thamerica/states/oklahoma/
Oregon	Statewide	No Oregon Child Left Inside	The No Oregon Child Left Inside (NOCLI) Coalition is working to pass state legislation in Oregon. NOCLI will establish a state environmental literacy plan, an environmental education grant program and an Environmental Education Advisory Council to guide Oregon in a common strategic vision for environmental education.	www.nocli.org
Pennsylvania	Statewide	Get Outdoors PA	Statewide initiative to get people outdoors	www.dcnr.state.pa.us/getoutdoorsp a/index.html
Pennsylvania	Plumsteadville	No Child Left Inside- Bucks County Coalition	Our mission is to reconnect children with nature thereby improving upon the health and well-being of our children, our environment, and our community as a whole.	www.bringingamericatogether- bucks.com
South Carolina	Regional	No Child Left Inside	To inspire children's attitude and passion towards nature and to foster their ability to access and reconnect to the outdoors.	http://scnaturekids.ning.com/
South Dakota	Pierre	No Child Left Inside	The purpose of Game, Fish & Parks' <i>No Child Left Inside</i> program is to encourage kids - and adults, too! - to go outside and explore the natural world which surrounds them.	www.sdgfp.info/Wildlife/Educatio n/NoChild.htm
Tennessee	Nashville	Tennessee No Child Left Inside Coalition	Stakeholders from across Tennessee are organizing to "get the word out," connecting children with nature through existing programs, family nature clubs, community forums, and a public media campaign.	vera.vollbrecht@nashville.gov

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Texas	Austin	Statewide Campaign	The Texas Children in Nature Community brings together groups and individuals who are interested in connecting children with nature. We share resources and are working on: a parents' campaign, Green Ribbon Schools, nearby nature guide for pediatricians and health care providers, nature-based play areas and more.	http://groups.google.com/group/tex as-children-in-nature
Utah	Salt Lake City	Regional Campaign		jackisgreene@yahoo.com
Vermont	Bennington	No Child Left Inside	Statewide organizations and agencies collaborating to help reconnect children and others to the outdoors in natural environments through a wide variety of outdoor recreation opportunities, education, physical, cultural and socio-environmental activities	sherry.winnie@state.vt.us
Virginia	Martinsville	Martinsville Henry County Community Nature Initiative	The MHC CNI will serve as a clearinghouse for environmental information, use nature as a way to stimulate learning, develop opportunities for quality family time in the outdoors, and position VMNH as a leader in environmental education.	tamara.poles@vmnh.virginia.gov
Washington	Regional	Regional Campaign		
Wisconsin	Regional	Leave No Child Inside	A regional effort to mobilize community partners, families and educational institutions to leave no child inside through healthy outdoor play, instruction and exploration.	www.naturenet.com
Wyoming	Jackson	No Child Left Inside		jack.shea@tetonscience.org