



# Plug in to Nature

Finding Connections to the Outdoors  
for Youth and Families in Larimer County

## Replication Guide



*June 14, 2012*



## Reasons for Communities to Address Connections to Nature

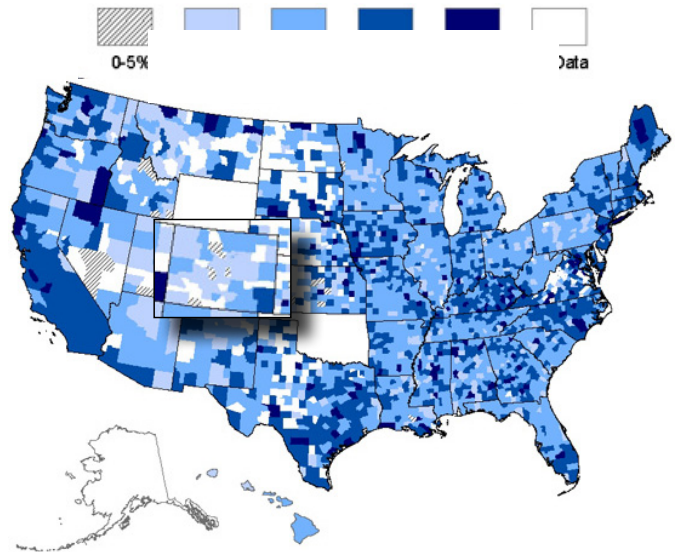
Nationwide, citizens and organizations are concerned about the growing disconnect between youth and the outdoors. Current research confirms this disconnect and demonstrates that children who interact regularly in the outdoors are more mentally acute, physically healthy and socially adept as well as more likely to maintain a positive disposition toward the environment and natural resources as adults. Additional studies suggest that societal trends including obesity, chronic disease and behavioral issues can be addressed by fostering healthy emotional, social and intellectual interactions with nature.

Local governments, recreation districts, non-profits, land trusts, state agencies and other entities have all made large investments in protecting and providing places with natural features. Increasingly, there is interest from these groups not only to ensure natural places and outdoor programs exist, but also that all people have access to experience them.

Providing an integrated and comprehensive approach which addresses the topic of nature connections on a city, county or regional scale has many benefits. Communities have unique challenges and opportunities engaging with nature; a generalized, one-size-fits-all approach is often not sufficient to create practical and effective strategies and initiatives. Understanding the particular values, opinions and behaviors of community members, in the context of the physical environment and demographic indicators, leads to identifying challenges and opportunities unique to a geographic area. The recommendations from a targeted study can have implications for policies, programs and the built environment that are grounded in the realities of each community and result in altered behaviors and attitudes.

*“For a lot of folks, it’s easy to go days without stepping on a single blade of grass. At times like these, we have to ask ourselves: What can we do to break free from the routine and reconnect with the world around us?”*  
*- Remarks by the President on America’s Great Outdoors Initiative. February 16, 2011*

### 2007–2009 County Obesity Prevalence Among Low-Income Children Aged 2 to 4 Years



*Physical inactivity is one of the factors impacting obesity levels in young children. Approximately 17% of children and adolescents aged 2-19 are obese. One of the strategies the Center for Disease Control recommends to states and communities is to create and maintain safe neighborhoods for physical activity and improve access to parks and playgrounds. (Source: Center for Disease Control)*



backyard



nature playground



outdoor classroom



wilderness

*Youth can enjoy the benefits that nature provides in an array of places ranging from their backyard to wilderness. The pilot study sought to include the full array of places and gateways for youth to connect to the natural world like playgrounds, school yards, and informal settings such as drainage areas and ponds.*

## Purpose of the Guidebook

This guidebook is designed to help communities, agencies, regional interest groups and recreation districts undertake studies to formulate ways to increase connections between youth and families to nature. The full Larimer County *Plug in to Nature* report and appendices provide a detailed methodology and examples for similar projects with strategies that can be modified to accommodate other communities. Each step and product created from the *Plug in to Nature* project is documented and available for review on the website <http://www.larimer.org/plugintonature>. The following is not intended to be a step-by-step recipe for replication, but rather a compilation of important lessons learned from the pilot project that can aid in the execution and success of similar projects in different areas.

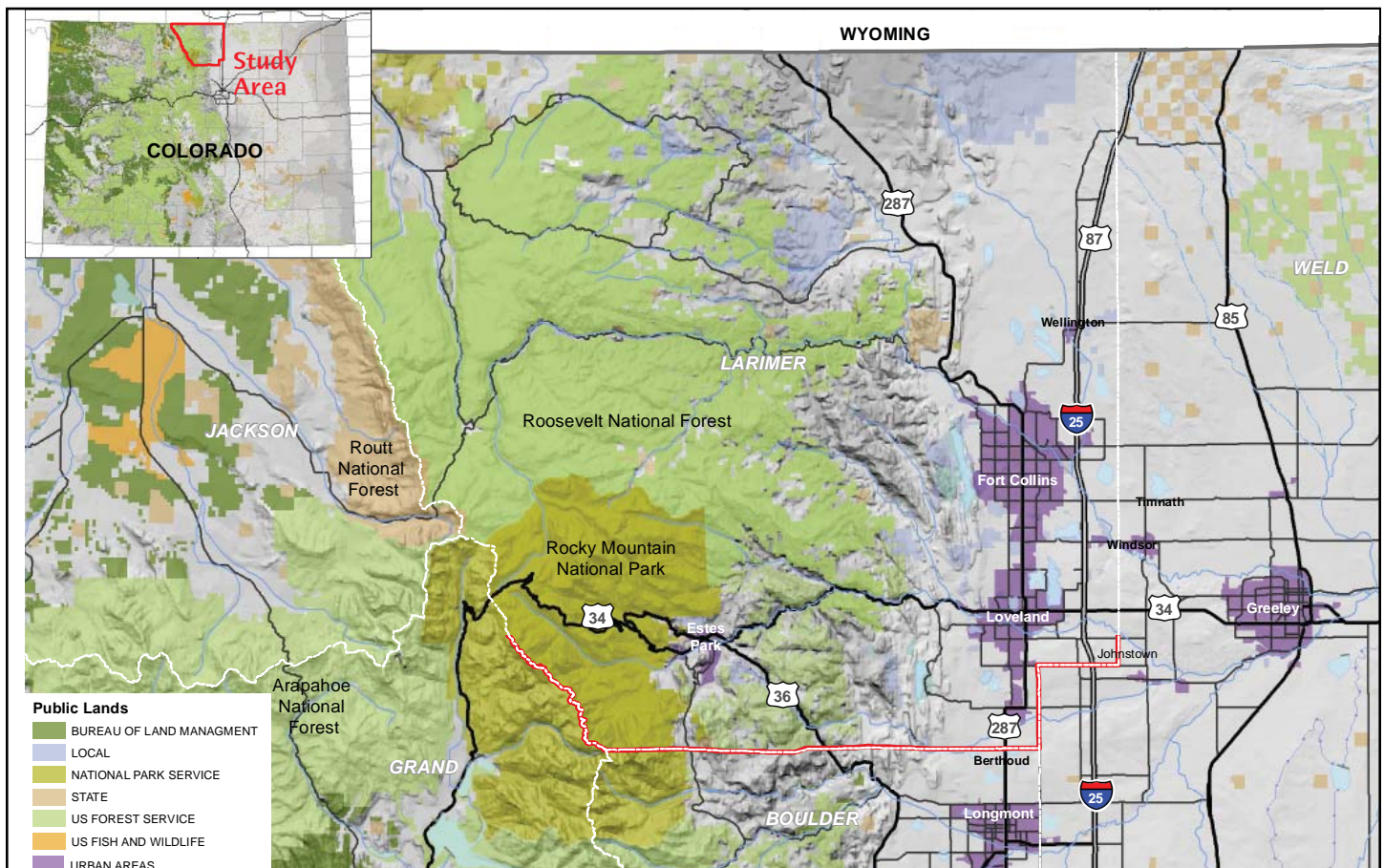
This guidebook provides ideas for how to:

- Develop partnerships and collaborations among decision-makers, the public sector, the private sector and non-profit groups.
- Select strategies to meet project goals and objectives.
- Minimize project costs.
- Evaluate the performance of project implementation over time.

Great Outdoors Colorado (GOCO) undertook a pilot project in 2011/2012 in Larimer County that provides many lessons and examples that are transferable to other communities and regions. GOCO chose to start with Larimer County because it contains diverse communities including rural areas, small towns and larger urban population centers. The county contains a spectrum of landscape types from mountains to prairies and hosts a mix of private and public lands. The diverse composition of settings is an ideal demonstration project as portions of the approach as well as the recommendations can be useful for a variety of communities. Larimer County was also able to dedicate staff and organize volunteers to devote time to the project.

This guidebook builds off the experiences of the pilot project to suggest how similar studies can be carried out in other communities in Colorado who seek to increase the quality and quantity of interactions between youth and families and natural places. It may be desirable for communities to undertake portions of the project in stages or incorporate them into existing projects such as parks and open space master planning inventory of resources and identification of natural areas with public access.

Other groups within the state that are addressing similar issues include: the Lieutenant Governor's Colorado Kids' Outdoors Initiative, Colorado Kids Outdoors Group in the MetroDenver area, and the US Forest Service's Children's Forest Corridor initiative.



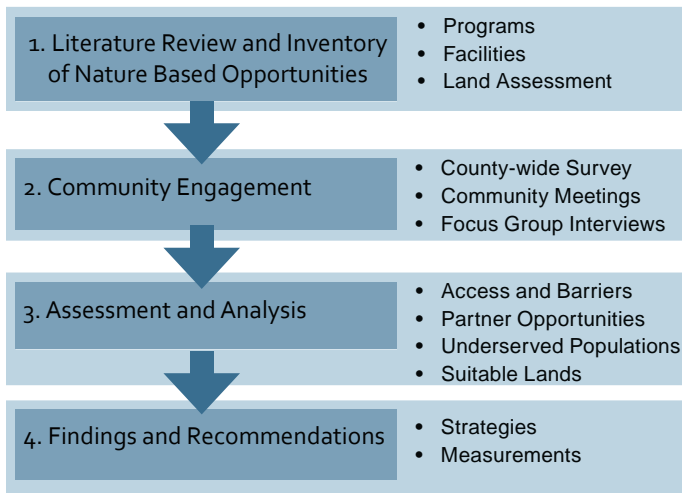
*The Larimer County Context Map shows the wealth of natural areas available in close proximity to urban areas including Fort Collins and Loveland as well as rural communities like Estes Park and Wellington.*



## Pilot Study Project Approach

What are the perceived and actual barriers to youth and families interacting with nature? The *Plug in to Nature* pilot project specifically addresses this question by engaging the community and understanding the local geography. The study includes an inventory and recommends potential programs, facilities, partnerships and target areas for land conservation. The values articulated by the public are used to inform future funding and prioritize projects that fill identified gaps and eliminate barriers. The report includes strategies including programmatic changes, recreational amenity enhancement, and changes to the built environment that encourage connections to nature.

The steps utilized in this study include:

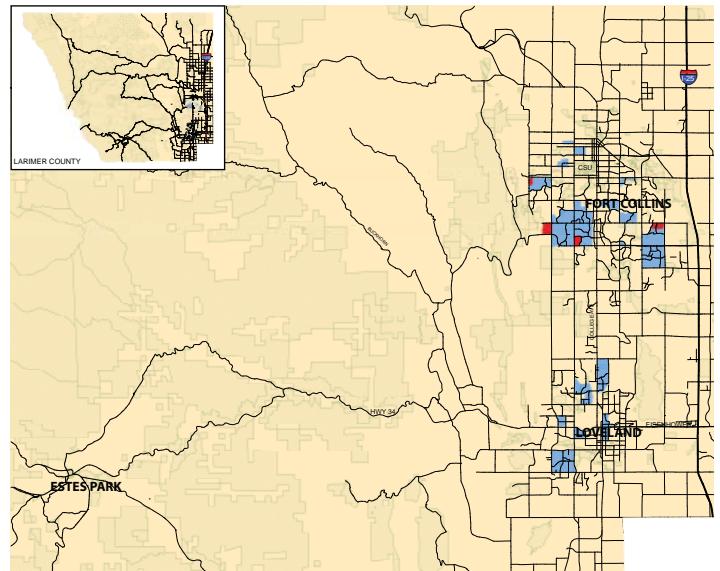


Among the topics addressed by the study, it was important to understand the following key questions:

1. How satisfied are residents with their connections to nature and the outdoors?
2. What is the current level of connection between youth and families to nature, and what barriers are discouraging these interactions?
3. Are there groups within the community that have less of a connection to nature than others and could be identified as underserved?
4. Do current outdoor facilities and programs in the region meet the needs of families, schools and youth program providers?
5. How can existing efforts to connect children and families to nature be improved through new partnerships and coordination between organizations?
6. Are the right types of open lands and facilities available and accessible to youth and families?
7. How can we better provide connections to nature for future residents as communities grow?



*Public meeting participants give their feedback through an interactive mapping exercise in which they identify opportunities and barriers on maps of their communities.*



*Analysis of the relationship of parks and open space locations to demographic data was used to identify underserved populations.*

## Lessons Learned From the Pilot Project

General lessons learned from the Plug in to Nature project include understanding the importance of:

- Articulating the project scope, goals, desired outcomes and critical success factors to inform expectations and direct the project to completion.
- Creating an Advisory Group to involve local project champions and providing them with meaningful roles throughout the project. The Advisory Group may provide review of project documents, testing of survey questions, promotion of the project within social networks, and guidance to ensure all segments of the community are included.
- Encouraging local people to reach out to citizen groups, school administrators, program providers, agency contacts, etc. building on existing relationships.
- Ensure timing of the project fits within the schedules of families and key stakeholders (for example summer is not an ideal time to engage school administrators and teachers or contact parents through the schools).
- Thinking creatively about how to reach out and involve busy families in a way that is convenient for them. Strategies may include providing child care at the meetings, host meetings at libraries and other locations that parents visit, and conducting short surveys at family events.
- Capturing all viewpoints from those most interested in connecting youth and families to nature, to those who have particular challenges or are disinterested.
- Sequencing efforts so that one stage informs the next, moving the project from general, big-picture themes towards specific and unique applications.

## Stakeholder Identification

Clearly identifying who should be involved and why is important for such a broad topic. Stakeholders are, by definition, any person or group who has an interest in the project or could potentially be affected by its delivery or outputs. The *Plug in to Nature* pilot project started out with identification of a group of 10 individuals who served as the core team, managed the project and made decisions. Stakeholder groups were identified and organized by categories such as:

- Land-use planning staff.
- Recreation/parks departments.
- Land trusts.
- Open space/natural resources staff.
- Youth organizations with an outdoor mission.
- Youth organizations compatible with an outdoor mission.
- Environmental education program providers (government, private and non-profit).
- Health, early childhood and parent organizations.
- Schools.
- Latino groups.
- Low-income providers.
- Major employers.
- Outdoor industry.

It was useful to identify the reasons for involving each group as well as to define their roles, establish communication methods and contact information, and identify an individual to represent the broad interests of each group as a member of the advisory committee. Stakeholder engagement was important for advertising to constituents, forming focus groups, building partnerships, and creating support and buy-in for implementing the plan recommendations.



*Advisory Group participation was key to the success of the pilot study, from kicking off the project, through the identification of project goals and desired outcomes, to providing important suggestions and feedback throughout the study.*

## County-wide Survey

The goal of the County-wide Survey was to gain input from a representative sampling of parents of school-aged children regarding nature and the outdoors. Conducting the survey early-on in the process provided the benefit of gaining information to inform an overall direction for the project and focus attention on the most significant factors.

Questions were informed by a literature review and developed based on similar surveys such as the “Children and Nature Network Project Grow Outside 2010” report, Wyoming Survey & Analysis Center (WYSAC) “Our Children and the Outdoors Wyoming Survey 2010,” the Forest Service’s “National Survey on Recreation and the Environment” and “Parents’ Perceived Benefits and Fears about Experiences in Nature for Children” conducted by researchers at Colorado State University in 2011. The *Plug in to Nature* survey questions are available in the project book appendix. One lesson from the survey process was the importance of limiting the number and complexity of questions so that people would not find it overly time consuming. More in-depth questions were reserved for community meetings and focus groups.

The survey was made available on-line, and the link was advertised widely to the general public as well as to targeted groups. Traditional advertisement in newspapers and over the radio was utilized as well as advertisement in parent newsletters, family medical offices, and sporting good stores. Advertisement methods were adjusted mid-way through the survey period to ensure representation from all segments of the community. For example, responses to demographic questions indicated low survey completion from residents of rural communities and thus advertisements to newsletters with circulation in rural areas, town websites, and rural schools was increased to improve the rate of response.

While this method of soliciting survey responses is not random like a mail address or phone survey, the online version provides other benefits. The online survey is readily available to everyone within the county and provides a cost savings compared to the mail and phone survey options. Thirty-six (36) percent of survey responses were completed on-site from a variety of venues. The survey was translated into Spanish and made available by paper copy to specified audiences. The venues for paper copy distribution were selected to ensure the sample reflected Larimer County’s geographic and racial diversity. On-site surveying with paper copies was conducted at three back-to-school nights in schools with high Latino student enrollment, three English-as-a-Second Language classes, two schools with high enrollment of rural families, and two community events in the southern portion of the county. Part of the success of this method came from hiring college students who had graduated from the local high-schools and were familiar with some

of the families to conduct the surveys. Volunteer groups, park rangers, neighborhood groups, sports interest groups, health organizations and high school students might be other sources to help distribute surveys.

The most useful survey questions addressed barriers, parents’ desires for children to spend more time in nature and the importance of different settings (school yard, national parks, community garden, river, mountain, and etc.) for families to be in nature/outdoors. The question regarding barriers that influence children’s connections to nature was useful in that the results directed recommendations to address the specific barriers. The question regarding parents’ desire for children to spend even more time in nature helped to validate the importance of the study and support the implementation of the project’s recommendations. Understanding the importance and satisfaction with outdoor settings provided valuable input used to inform the evaluation of potential parks and open space land priority recommendations.

12. Please rate the extent to which you agree with the following statements based on how you feel today.

|   | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| Spending time in nature/outdoors provides worthwhile benefits for children.                                   | 1                 | 2        | 3       | 4     | 5              |
| The risks to a child while in nature exceed the benefits.   | 1                 | 2        | 3       | 4     | 5              |
| The effort to have children in nature/outdoors is not worth the benefits.                                     | 1                 | 2        | 3       | 4     | 5              |
| I would like my child/children to spend more time in nature/outdoors than they currently do.                  | 1                 | 2        | 3       | 4     | 5              |
| My child would rather play with technology (i.e., computers, video games) than spend time in nature/outdoors. | 1                 | 2        | 3       | 4     | 5              |
| Spending time in nature is something I like to do.  | 1                 | 2        | 3       | 4     | 5              |
| People who are important to me like to spend time in nature/outdoors.   | 1                 | 2        | 3       | 4     | 5              |

13. Please indicate how much each of the following would influence your family’s decision to spend time in nature/outdoors based on how you feel today.

|                | No influence | Minor influence | Some influence | A lot of influence | Very strong influence |
|----------------|--------------|-----------------|----------------|--------------------|-----------------------|
| Time           | 1            | 2               | 3              | 4                  | 5                     |
| Cost           | 1            | 2               | 3              | 4                  | 5                     |
| Transportation | 1            | 2               | 3              | 4                  | 5                     |
| Location       | 1            | 2               | 3              | 4                  | 5                     |

14. Please rate the extent to which you agree with the following statements based on how you feel today.

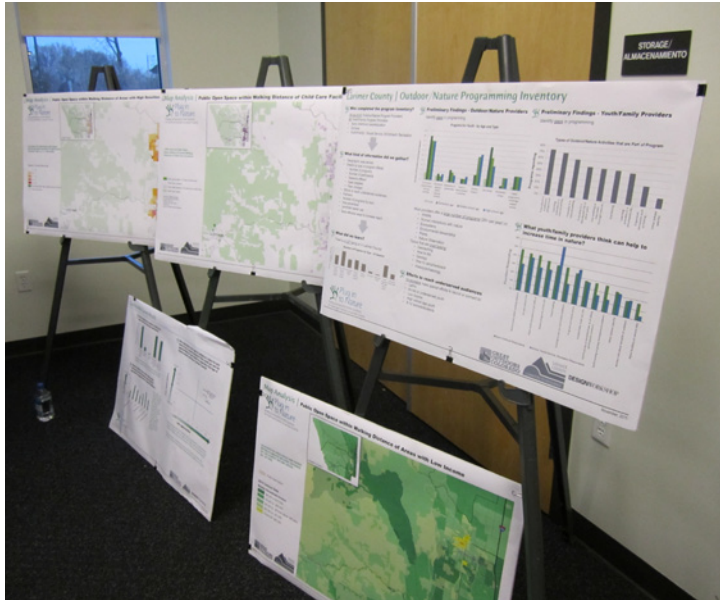
|   | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| I am familiar with the places we can go to spend time in nature/outdoors in Larimer County.                         | 1                 | 2        | 3       | 4     | 5              |
| I am aware of the programs we can attend in Larimer County to experience nature/outdoors.                           | 1                 | 2        | 3       | 4     | 5              |
| I am uncomfortable with my family being in nature/outdoors because we don’t see other people who share our culture. | 1                 | 2        | 3       | 4     | 5              |
| We would not attend a program if it was offered in a language different from the language we speak at home.         | 1                 | 2        | 3       | 4     | 5              |

*Example page from the survey questionnaire: the survey sought to understand individual’s values and beliefs about spending time in the outdoors, their participation levels in outdoor and nature programs, as well as the importance of different types of natural settings.*



## Public Engagement

The importance of speaking directly with people about this topic must be stressed. Two national examples of similar outreach efforts include America's Great Outdoors Initiative and the Outdoor Nation Summits. America's Great Outdoors Initiative was launched by President Obama in 2010 and included a series of 21 listening sessions aimed at hearing from America's young people. During these sessions, facilitators inquired about how young people relate to the outdoors, what obstacles keep them from spending more time in the outdoors, and what ideas they had on how to overcome these obstacles. Similarly, since 2010, Outdoor Nation has hosted summits every summer in cities across the nation to organize youth to find solutions to the challenges to getting people outside. Outdoor Nation Summits are two-day events for 250 youth to discuss barriers, brainstorm creative ideas and even receive funding for the best project.



The *Plug in to Nature* focus groups and community meetings included many of the same questions as the national examples. The focus groups included more specific questions directed to capture the unique viewpoints of high school youth, parents of young children, parents of children with developmental and physical disabilities, rural and mountain community parents, Latino families, early care and education providers, school teachers and administrators, and outdoor program providers. The community meeting conversations were useful in developing practical solutions, such as understanding that many of the safety concerns that prevented children from walking to parks could be overcome by providing or improving sidewalks and trail connections in specific locations. The mapping exercise was particularly helpful in identifying place-based ideas. The meeting formats, keypad polling questions, mapping exercises and input collection methods utilized in the *Plug in to Nature* project are provided in the document report and appendix and can serve as an example to other engagement efforts.



One of the greatest challenges to gaining input from the public is that the topic may not present a pressing or controversial issue requiring immediate action or inspire a need for people to share their opinion. While the County-wide Survey presented a convenient and quick way for people to respond, the meeting attendance required the additional commitment of an hour of time. Attendance at meetings was greatest in settings that were already part of parents' routine, including libraries, recreation centers and an early childhood development meeting. Childcare and activities were provided by volunteers to encourage parent attendance. The meetings were advertised using the same low-cost methods as the County-wide Survey, with the addition of a list of email addresses generated from the 530 County-wide Survey responses.



Meeting rooms were set up with exhibits for the public to view prior to the formal presentation. The Community Meeting map exercise presented 21 activity choices that participants placed on locations within their city or throughout the County. The activities most frequently desired were bicycling, camping close to urban areas, and nature classes.

## Programs and Facilities Inventory

Collecting information on all the outdoor program offerings and facilities for residents is a helpful step in evaluating what opportunities are available and identifying the gaps and overlaps. Most Colorado communities have a variety of agencies, parks and recreation departments, outdoor activity interest groups, non-profits, and property managers whose missions or objectives includes connecting youth and families with nature. However, coordination between these groups to provide comprehensive and efficient services often does not occur. Parks, open space and other outdoor facilities within a region are often owned and operated by an assortment of entities and a comprehensive inventory and evaluation of their offerings is not readily available.

Establishing and maintaining communication with the array of programs and facility operators is recommended prior to the project start-up meeting in order to identify the key contacts, understand the mission of the organization and develop support for the project. Ways to identify the different organizations and groups to contact include:

- Complete a web search for providers such as community gardening groups, outdoor volunteer groups, YMCA, girl scouts and boyscouts;
- Work with a local environmental education network to brainstorm a list of organizations they are aware of;
- Review Lt. Governor Barbara O'Brien's Colorado Kids Outdoors Initiative A Toolkit for Communities, Families & Youth for a list of potential partners and their contact information; and
- Contact outdoor recreation providers.

The facilities inventory data collection can begin before the project start-up by obtaining Geographic Information System (GIS) map data for existing and proposed parks, open space and trails from all entities within the study area and reviewing the information for accuracy.

The Colorado Ownership, Management and Protection (COMap) GIS map data is available for download from <http://www.nrel.colostate.edu/projects/COMap/> at no cost. The COMap data is a good starting point to initialize the identification of county, city, land-trust, federal and state protected lands, however this data must be vetted to ensure it is accurate, complete and up-to-date. It is also desirable to add school sites, libraries and other public facilities containing natural areas to the GIS dataset. This database can then be expanded upon with the project inventory to identify properties with public access and natural features. This data could be gathered from school facility managers, city GIS departments, and from evaluating aerial images.

The creation of an inventory questionnaire is best initiated after the community survey is complete. This will allow questions to be prioritized that address the specific topics in need of evaluation. The most useful questions in the *Plug in to Nature* inventory included:

- Variables of programs (where programs are offered and who attends by age, socio-economic information and place of residence);
- Types of programs (provide program categories for multiple choice questions);
- When programs are offered (weekdays, weekends, time of day, month)
- How program providers advertise their offerings;
- Total number of people that participate in each program (identified by type of audience and program); and
- Initial questions about barriers, needs and possible opportunities.

The *Plug in to Nature* appendix document contains a summary of the program inventory utilized in the analysis. The full database and analysis of program information is available by contacting the Larimer County Natural Resources department.

### Larimer County Natural Areas Facilities Inventory List Example

|                              | GIS Map | Natural Areas | Parking | Trail head | Trail System | Indoor Meeting | Outdoor Meeting | Interpretive Signs | Campground | Rest rooms | Main Attractions/Characteristics/ Uses  | Public Access (1. Yes, 2. No, 3. Trail, 4. Seasonal, 5. Restricted, 6. Unknown) |
|------------------------------|---------|---------------|---------|------------|--------------|----------------|-----------------|--------------------|------------|------------|---|---|
| <b>Federal</b>               |         |               |         |            |              |                |                 |                    |            |            |   |   |
| U.S. Forest Service          |         |               |         |            |              |                |                 |                    |            |            |   |   |
| Arapaho National Forest      | Yes     | Yes           | Yes     | Yes        | Yes          | No             | Yes             | Yes                | Yes        | Yes        |   | yes, trail  |
| Roosevelt National Forest    | Yes     | Yes           | Yes     | Yes        | Yes          | No             | Yes             | Yes                | Yes        | Yes        |   | yes, trail  |
| National Park Service        |         |               |         |            |              |                |                 |                    |            |            |   |   |
| Rocky Mountain National Park | Yes     | Yes           | Yes     | Yes        | Yes          | No             | Yes             | Yes                | Yes        | Yes        | Scenery, Wildfire, Alpine Tundra, easy access   | yes   |
| <b>State</b>                 |         |               |         |            |              |                |                 |                    |            |            |   |   |
| Colorado State Parks         |         |               |         |            |              |                |                 |                    |            |            |   |   |
| Boyd Lake                    | No      | Yes           | Yes     | Yes        | Yes          | Yes            | Yes             | Yes                | Yes        | Yes        | Boyd Lake (boating, swimming, tubing, sailing, fishing, water skiing, PWC use), camping, picnicking, relaxing on the swim beach, winter activities, hunting | yes, trail  |



## Analysis of Trends and Underserved Groups

Evaluating access to open space, parks and trails within a community is a way to assess the opportunities available for youth and families to get outdoors and experience nature. The assessment includes a gap analysis of underserved areas and identification of geographic disparities in facility distribution. The GIS dataset developed in the outdoor facilities inventory can be utilized much like a proximity analysis used in Parks and Open Space Master Planning projects. The major difference is that the goals of a project to better connect youth to the outdoors must evaluate the relationship specifically of children to outdoor facilities. Examining the proximity of parks and open space to schools, child care centers and areas of high concentration of children are unique to this evaluation. Understanding people's tolerance for travel is an important factor when evaluating accessibility. For example, the distance children are willing or allowed to walk to reach a park is often much less than an adult would travel. Also, parents may choose not to drive long distances to take their children to parks and open space during the week when time available for activities is limited. A helpful rule-of-thumb for proximity analysis is a five minute (quarter mile) walk or less is desirable and a 10 minute walk (half mile) is an acceptable distance to reach a park or open space. However, community expectations may vary greatly and it is best to gain feedback from the public regarding the proximity standards to apply.

Another important factor that may differ from traditional Parks and Open Space Master Planning is the importance of identifying open space properties that provide public access. Conservation easements, for example, provide many open space benefits but often are privately owned and do not allow the public to enter. Evaluating proximity only to the parks and open spaces that allow public access creates an analysis related to the project goals.

Disparities in the provision of open space, parks and trails may exist for different demographic groups. These potential disparities can be analyzed using US Census data incorporated into GIS maps. Low income areas and areas of high concentration of minority race populations can be identified using US Census data maps to determine if they are underserved by parks and open space. Community meetings and focus groups that include these populations can verify these relationships to determine if more open space and parks are needed to serve the population equitably.



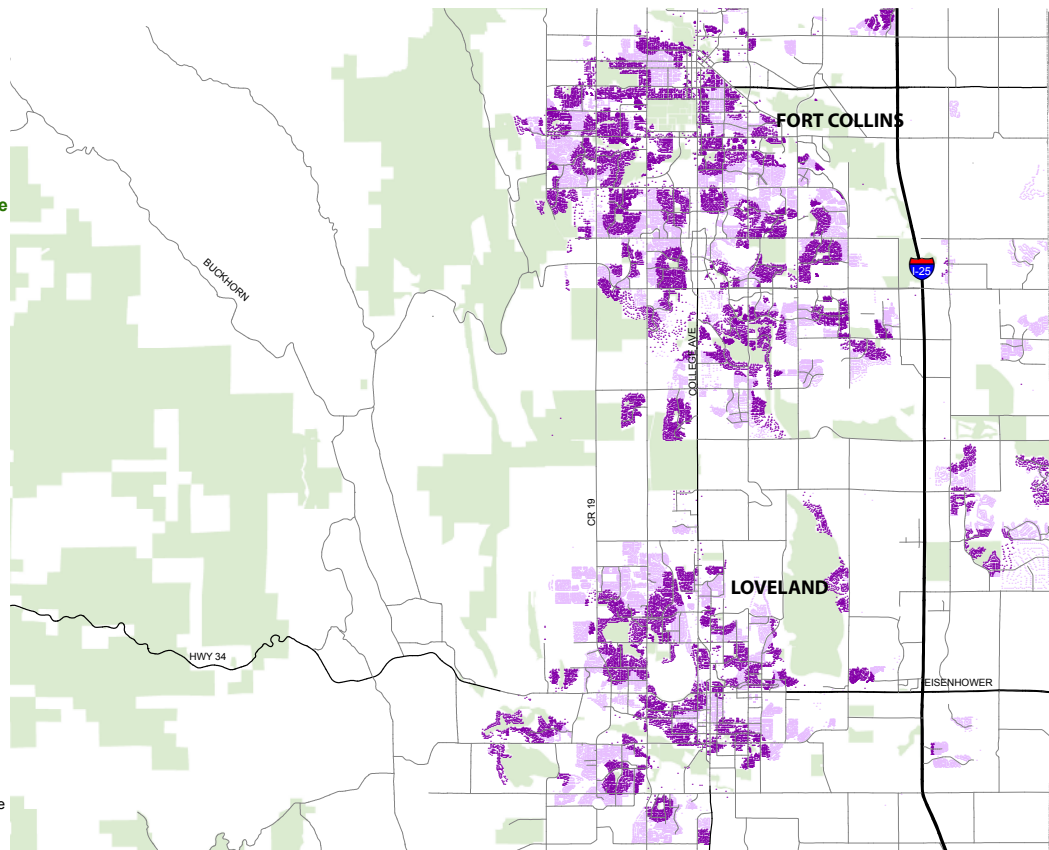
**Within incorporated areas, 51% (46,214 residences out of 89,751) have access to parks and open space within walking distance of 1/4 mile.**

Fort Collins: 59% (28,785 residences out of 49,106)  
 Loveland: 49% (13,363 residences out of 27,109)  
 Estes Park: 65% (2,525 residences out of 3,909)  
 Berthoud: 0% (0 residences out of 2,086)  
 Wellington: 15% (45 residences out of 2,911)  
 Windsor: 52% (1,413 residences out of 2,692)  
 Timnath: 2% (26 residences out of 1,178)  
 Johnstown: 7% (51 residences out of 760)

**Within incorporated areas, 52% of units (51,458 out of 99,454) have access to parks open space within walking distance.**

Fort Collins: 59% (32,463 out of 55,453)  
 Loveland: 49% (14,765 out of 30,074)  
 Estes Park: 64% (2,686 out of 4,171)  
 Berthoud: 0% (0 out of 2,176)  
 Wellington: 2% (45 out of 2,941)  
 Windsor: 53% (1,419 out of 2,696)  
 Timnath: 2% (29 out of 1,183)  
 Johnstown: 7% (51 out of 760)

- Residences with access within 1/4 mile
- Residences without access within 1/4 mile
- Public Access to Parks and Open Space



Public Parks and Open Space within Walking Distance of City Residences - Fort Collins/Loveland

## Identification of Lands that Present Future Outdoor/Nature Opportunities

Recommendations that come out of the study may include suggestions for acquisition of lands to become parks, open space, and trails. Within a small town or a place with limited natural resources these potential sites may be readily identifiable and land analysis to identify the sites may not be necessary. Regional scale study areas or within a community with many potential sites, a land suitability analysis is a useful tool for site identification. GIS mapping software allows for land features, such as rivers, forest, and wildlife habitat to be overlaid to identify locations that have the greatest number of features. In addition to natural features, social variables such as locations of future schools and areas of high concentration of children can be added into the map analysis. The result is a targeted understanding of lands that are best suited to become places for nature based experiences in the future.

## Developing Recommendations

A set of recommendations must clearly relate to the community input and information analysis to be effective in addressing community needs. Recommendations should include actions that can be implemented immediately or within a short time frame along with those that are substantial undertakings that may take years to complete. Addressing the complex topic of connecting youth and families to the outdoors requires recommendations which touch on a variety of topics; such as programs, partnerships, land policies, public awareness building and more. Including an expansive list of topics allows for the exploration of new initiatives and partnerships. It is useful to vet the recommendations with the many stakeholders that will be responsible for implementation to ensure existing policies are understood and feasibility is evaluated.

Metrics are also an important part of the recommendations. Performance metrics allow for the measurement of progress towards achieving goals. The metrics were selected to address identified deficiencies, such as places without parks and open space within a five minute walk and gaps in outdoor/nature programs. Anticipation of development and population growth was also considered in the metrics to ensure community design and planning for access to outdoor/nature places addresses future resident needs. Developing baseline data associated with the metrics allows for quantitative comparison to other communities. Once other communities develop metrics and baseline calculations similar to Larimer County this information can be used to understand what makes a community particularly successful in encouraging youth and families' to connect with nature.

## Metrics and Standards for Improvement Example

|   | Indicator  | Baseline Condition  | Measurement Method                            | Target for the Future   |
|---|--|---|---|---|
| 1 | Increased citizen satisfaction with family connections to nature                                 | 87% of survey respondents reported their child's nature connection as very high.  | Survey every other year                       | Maintain or increase reported satisfaction from all demographic groups and communities.   |
| 2 | Annual number of people participating in Larimer County outdoor/nature programs                  | 67,000 people participated in Larimer County outdoor programs in 2011.  | Program providers annual reporting            | On a per-capita basis, participation numbers are maintained or increased.   |
| 3 | Number of new programs to fill needs identified in this study                                    | 65 program providers as of 2011.  | Program providers annual reporting            | More comprehensive programs offered with coordinated effort among providers. Increase by 20%, the number of programs which focus on needs that are currently unfulfilled in young children age groups, winter focused programs, and those for outdoor skills. |
| 4 | Total publicly accessible parks and open space in Larimer County                                 | 944,551 acres of publicly accessible parks and open space in Larimer County as of 2011.   | GIS calculations of lands with public access. | A growth of publicly accessible lands per-capita that is equal to the proportion of population growth plus five percent.  |
| 5 | Parks and open space within a five minute walk of schools, child care facilities, and residences | 51% of residential address points, 57 out of 91 (63%) of schools, and 182 out of 363 (or 50%) of child care facilities are located within a five minute walk of parks and open space. | GIS calculations, Assessor Data               | Improve the amount of parks and open space within existing developed areas by 10 percent to improve nature based access.  |

Sources for information that could be included in a similar analysis include:

- Colorado Parks and Wildlife Natural Diversity Information Source Server  
<http://ndis.nrel.colostate.edu/ftp/index.html>
- US Geological Survey Land Cover Data  
<http://nationalmap.gov/landcover.html>
- US Fish and Wildlife Data Services  
<http://www.fws.gov/gis/data/regional/index.html>
- Natural Resource Conservation Service Prime Farmland Maps  
<http://www.co.nrcs.usda.gov/technical/soil/important-farmlands/prime-farmlands.html>
- Colorado Wetland Inventory  
<http://www.cnhp.colostate.edu/wetlandinventory/>
- Bureau of Land Management  
<http://www.geocommunicator.gov/GeoComm/>
- US Census Bureau  
<http://www.census.gov/geo/www/maps/>
- City and County GIS mapping offices and assessor's office



## Elements of Project Success

1. Cohesiveness – pulling all the pieces together into the final products, having each step inform the next.
2. Inclusiveness – including all appropriate audiences in focus groups and adequately representing the entire community. Communicate and network with other groups that have similar goals and interests.
3. Focus – selecting the right things to measure, analyze and report. This project covers many facets. Requiring the energy and resources of the project to be focused in the right places to meet clearly defined project goals.
4. Applicability – making sure the project applies to all the diverse parts of the study area. Recommend the right tools for the situation.
5. Measurable – Convert recommendations into measurable indicators. This will allow for evaluation of near-term and long-term success.
6. Inspirational – The message should inspire others so they see the benefits of the project.



*A presentation of the study conclusions is a good way to inspire stakeholders to involve themselves the implementation steps.*

For more information or a presentation about this project please contact the Larimer County Department of Natural Resources.

**Project Website:**

[www.larimer.org/plugintonature](http://www.larimer.org/plugintonature)



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