The Critical Investment into Outdoor Education: An Investment too Valuable to Ignore

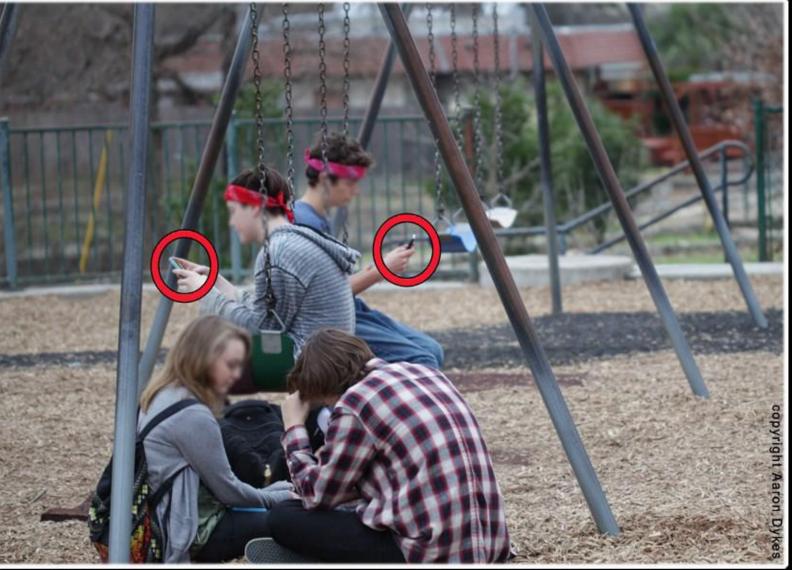
Association for Learning Environments October 28, 2017



"An environment-based education movement, at all levels of education, will help students realize that school isn't supposed to be a polite form of incarceration, but a portal to the wider world."

> Richard Louv, Last Child in the Woods

Why Outdoor Learning?



DIGITAL PLAYGROUND

Because I go all the way to a park with my friends just to get on an iPhone









Live TV 🔹 U.S. Edition + 🔎 🗮

Teens spend a 'mind-boggling' 9 hours a day using media, report says

By Kelly Wallace, CNN ① Updated 9:07 PM ET, Tue November 3, 2015

🖸 🕤 💟 🚭

 More from CNN

 Cafe busted for serving Popeyes

 Popeyes

 New details emerge in Sherri Papini case, one year after bec.

Health » Diet + Fitness | Living Well | Parenting + Family

Live TV • U.S. Edition + $\rho \equiv$

Kids under 9 spend more than 2 hours a day on screens, report shows

By Jacqueline Howard, CNN () Updated 4:47 PM ET, Thu October 19, 2017



More from CNN

This is what it means to be poor in India today

Two women and their dogs rescued after 5 months adrift in the...

🖂 🗗 💙 🚥

The amount of time children spend glued to a screen has risen dramatically n the last 20 years, a new report suggests.

Children aged five to 16 spend an average of six and a half hours a day in front of a screen compared with around three hours in 1995, according to market research irm Childwise.

Feenaged boys spend the longest, with an average of eight hours.

Eight-year-old girls spend the least - three-and-a-half hours, according to the study.

Screen time is made up of time spent watching TV, playing games consoles, using a mobile, computer or tablet.

Earth Travel	el
Magazine	E

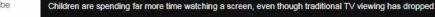
Children spend six hours or more a day on screens

By Jane Wakefield Technology reporter

() 27 March 2015 | Technology

🈏 📀 🗹 < Share





Average daily media and communications time





Wednesday 27 July 2016 05.00 BST



🗊 Game of Thrones actor Raleigh Ritchie launches the National Trust campaign to help children engage with the outdoors. Photograph: Doug Peters/PA

Children today spend half the time their parents did playing outside, a survey suggests.

While more than four-fifths (83%) of parents questioned thought it was important their children learned to use technology, nine out of 10 would prefer them to spend their childhood outdoors, developing a connection with nature.





Nature Conservancy Magazine

Special Features

Newsroom >

Kids in Nature

Books by Our Staff



Why Is America's Youth Staying Indoors?





Facebook Twitter

Lack of access to, and interest in, nature keeps kids from experiencing the outdoors.

There is a growing disparity between the time kids spend indoors wired to technology and the time they spend outside enjoying nature. The vast majority of today's kids use a computer, watch TV, or play video games on a daily basis, but only about 10 percent say they are spending time outdoors every day, according to a new nationwide poll from The Nature Conservancy.

Why? Lack of access to natural areas and discomfort with the outdoors are two primary factors identified by the Conservancy's poll.

The poll was conducted from July 28 through August 4, 2011, and asked 602 kids between the ages of 13 and 18 about their attitudes toward nature, outdoor activity and environmental issues. Topics covered included:

- reasons youth do not spend more time in nature,
- · words and phrases used by youth to describe nature, and
- attitudes toward preserving nature and on other environmental issues of the day.

The bipartisan polling team of Fairbank, Maslin, Maullin, Metz & Associates (D) and Public Opinion Strategies (R) conducted the poll, which was funded by The Toyota USA Foundation, The Nature Conservancy, and the Foundation for Youth Investment.

HEAT, LACK OF ACCESS OR INTEREST-AND EVEN

"Roughly 76 percent of youth today strongly believe issues like climate change can be solved if action is taken now. They also think safeguarding important lands and waters should be a priority regardless of any ancillary benefits and the struggling economy."





Man who infected more



[©] K Martinko -- Outdoor playtime for children is an increasing rarity

Prisoners at a maximum security facility in the U.S. are guaranteed 2 hours of outdoor time daily, whereas 1 out of 2 kids worldwide spends less than an hour outside.

Children spend less time outside each day than prison inmates do in the United States. Inmates are guaranteed two hours of outdoor time daily, whereas one in two children is outside for less than an hour. A recent survey of 12,000 parents in 10 countries, who have children aged five to 12, found that one-third of kids spend under 30 minutes outside each day.

(*) MOST POPULAR RIGHT



and U.S. refu genetically m

SLIE



Low-impact L built to go of weeks at a til

Chainless 4.v

WHAT WORRIES PARENTS



U.S. parents who view spending time in nature as "very important" to their children's developmentsecond only to reading as a priority. To parents, nature is not just "something to do," it is a crucial part of growth.

BRAZIL: 89% UNITED STATES: 82% **HONG KONG: 59%** CHINA: 56% FRANCE: 55%



Time spent in nature contributes to

- o improved physical health
- $\circ~$ establishing the idea of a conservation legacy
- o improvements in short term memory
- $_{\odot}$ $\,$ a reduction in stress and increase in focus
- improvements in children's cognitive development by improving their awareness, reasoning, and observational skills
- o improved mental health

Reasons Youth Do Not Spend More Time in Nature

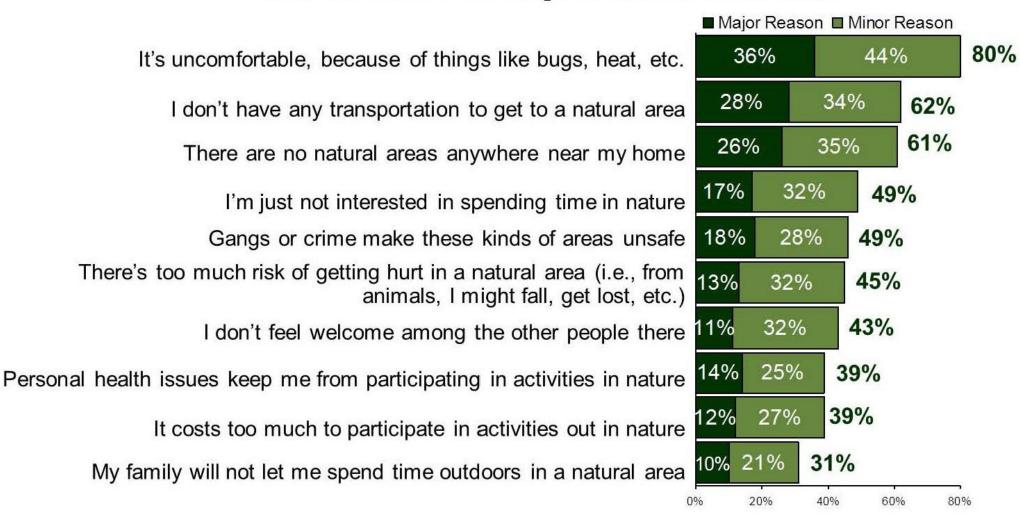
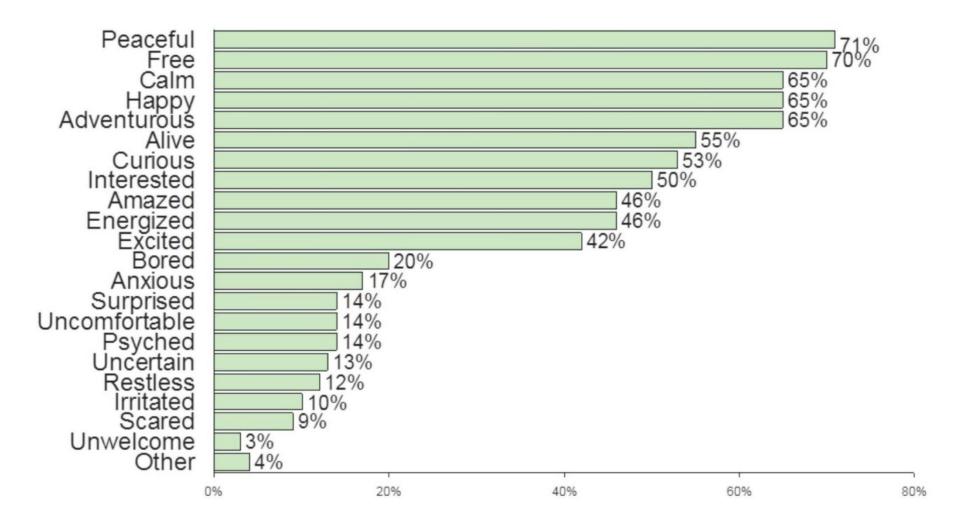


FIGURE 4: Phrases Most Often Chosen by Youth to Describe How They Feel Being in Nature



The data suggest that if American youth are given more opportunities to have a meaningful experience

outdoors, they will be more likely to value nature, engage with it, and feel empowered to do something about it.

The survey shows that 66% of youth say that they "have had a personal experience in nature" that made them appreciate it more. That subset of American youth is markedly different from those who have not had such experiences. They are:

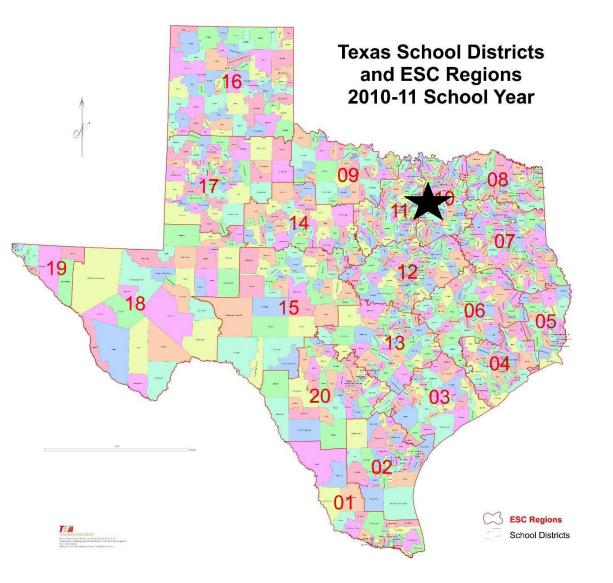
- Almost twice as likely to say they prefer spending time outdoors;
- Significantly more likely to express concern about water pollution, air pollution, global warming, and the condition of the environment;
- Ten points more likely to agree that we can solve climate change by acting now;
- o 13 points more likely to say environmental protection should be prioritized over economic growth;
- More than twice as likely to "strongly agree" that protecting the environment is "cool;"
- More than twice as likely to consider themselves a "strong environmentalist," and
- Substantially more likely to express interest in studying the environment in college, working in a job related to nature, or joining an environmental club at their school.

Back to Nature

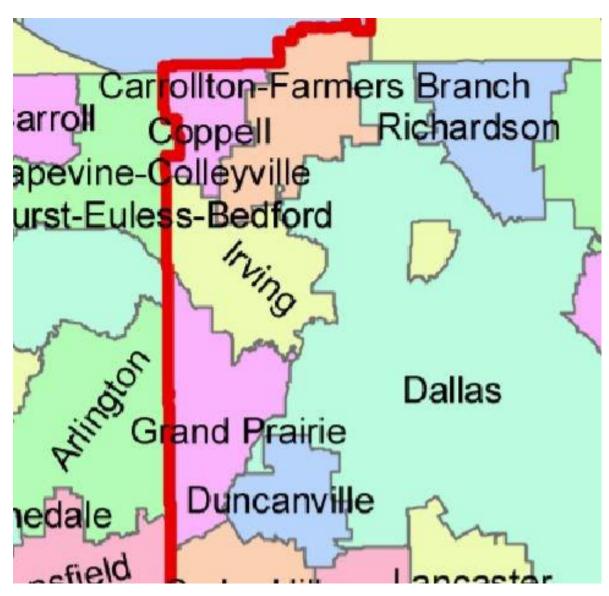
Two approaches



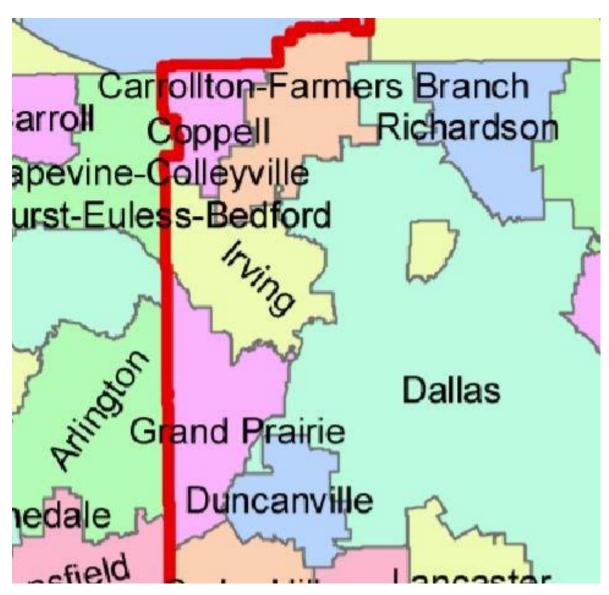
Elise Walker Outdoor Learning Center



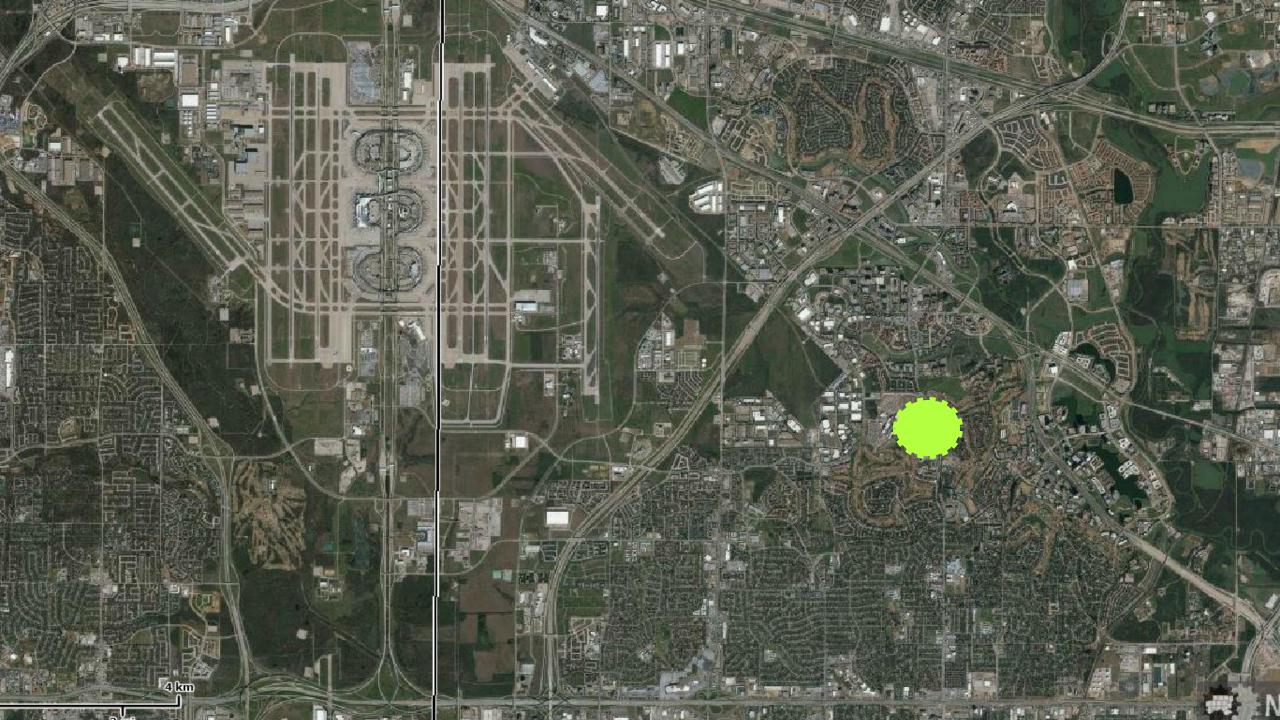
Enrollment Profile by School Year				
		2013-14	2014-15	2015-16
Total	Enrollment	35,328	35,191	34,929
Gender	Female	48.9%	48.7%	48.5%
	Male	51.2%	<mark>51.3%</mark>	<mark>51.5</mark> %
Race/	American Indian or Alaska Nat	1.3%	1.3%	1.5%
Ethnicity	Asian	3.3%	3.3%	3.3%
	Black or African American	12.8%	13.0%	12.9%
	Hispanic/Latino	71.7%	71.9%	72.1%
	Native Hawaiian/Other Pacific	0.2%	0.2%	0.2%
	Two or More Races	1.2%	1.1%	1.1%
	White	9.6%	9.2%	8.9%
Program Participation	Bilingual Education	25.3%	26.6%	25.6%
	Career & Technical Ed	24.1%	25.7%	27.2%
	English as a Second Language	13.8%	14.8%	16.0%
	Gifted & Talented	12.2%	12.5%	12.5%
	Special Education	7.6%	7.5%	7.5%
Student Population	At Risk	70.1%	73.9%	74.2%
	Economically Disadvantaged	80.5%	79.4%	79.0%
	English Language Learner	38.2%	39.2%	39.3%
	Immigrant	2.2%	3.6%	2.9%
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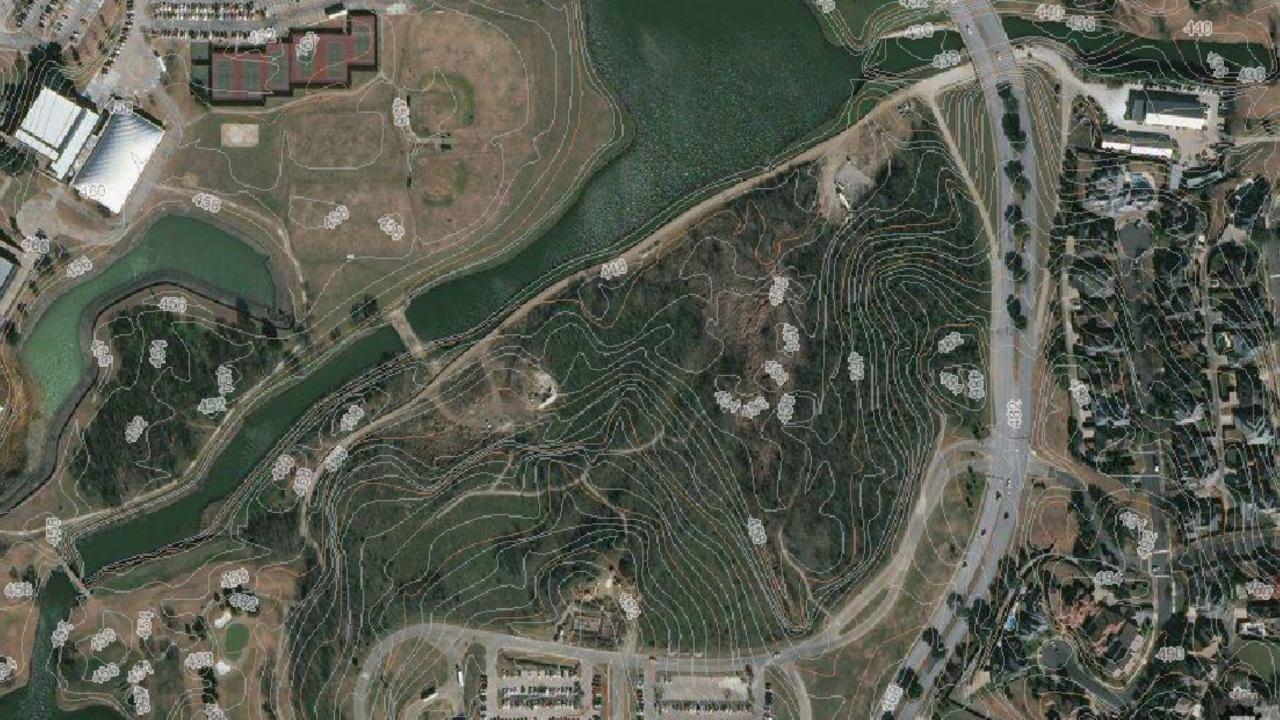


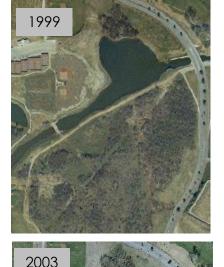








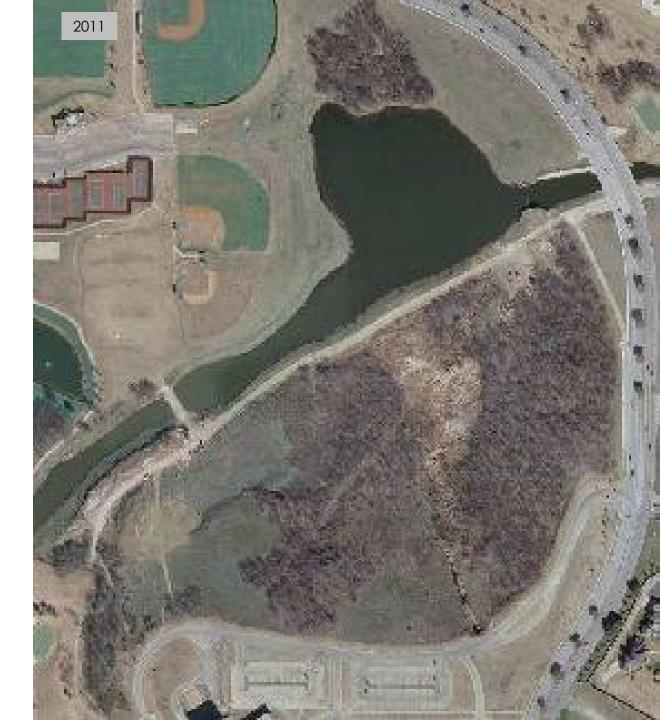






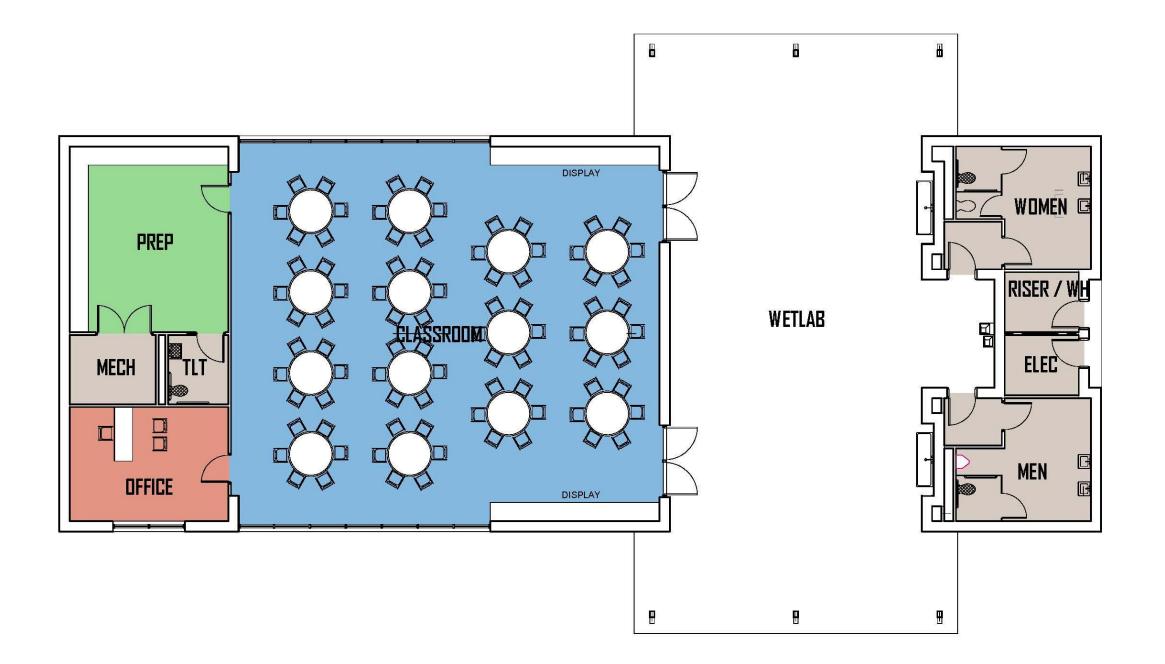


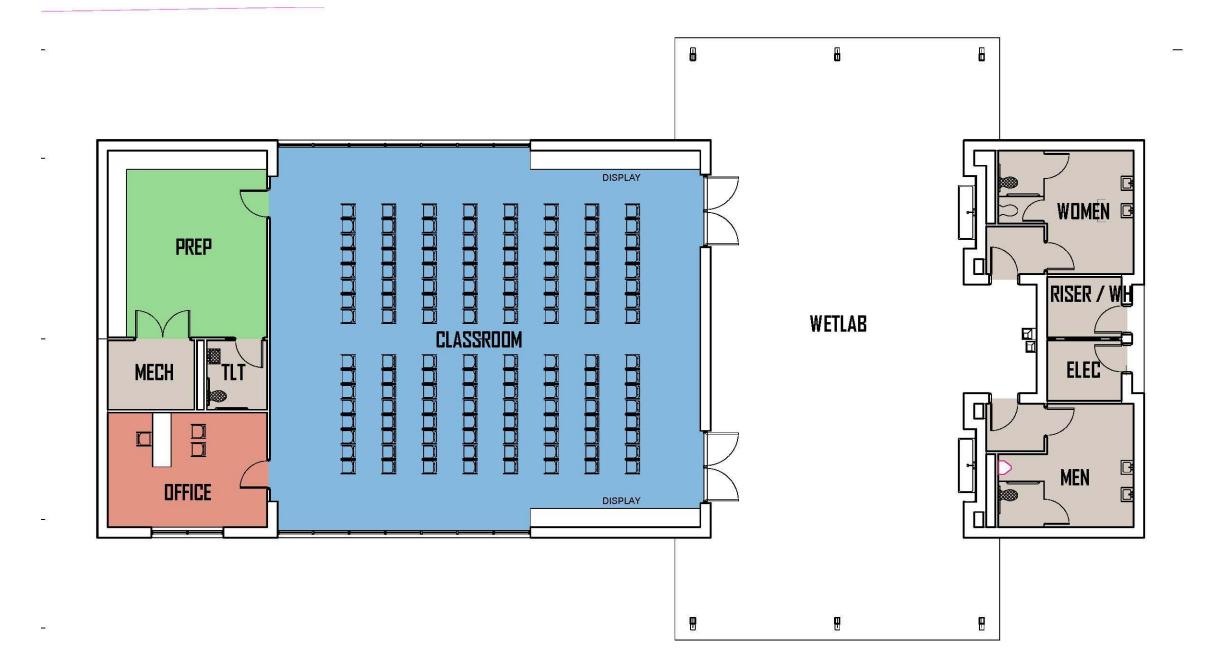




















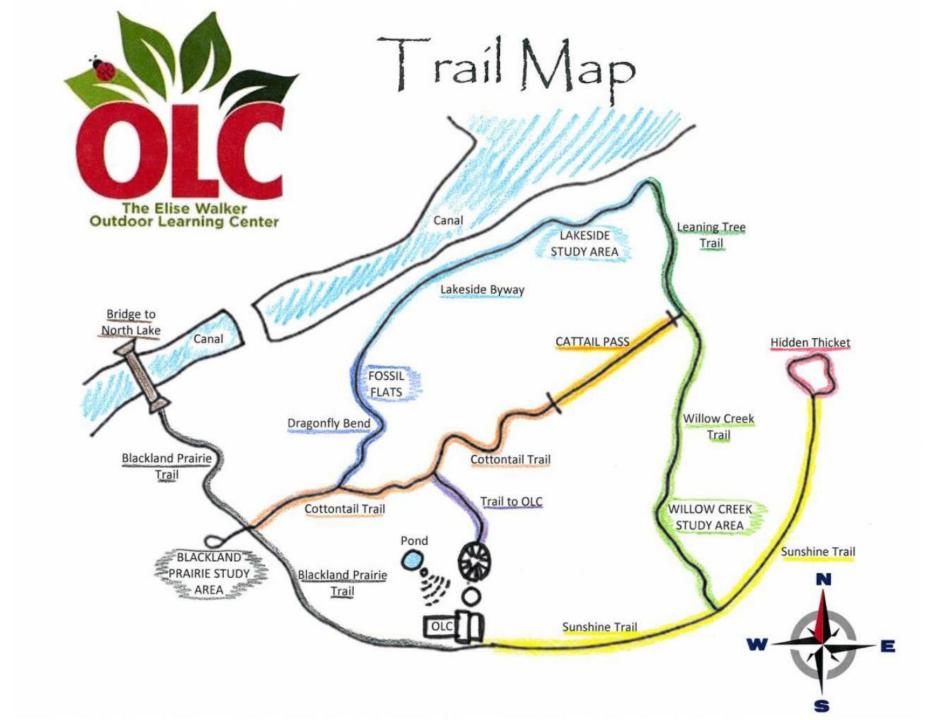














What will happen in the Blackland Prairie?

All parts of an area interact to create a stable ecosystem. The students will participate in a food web activity that shows the flow of energy in an ecosystem and the importance of each component of the web in the sustainability of the ecosystem. In this particular grassland ecosystem, the wildflowers are especially dependent on pollinators. Students will also discuss pollinators, what they do, and their importance. Students will collect and study insects in this area, recording what they find. Students can take pictures with the iPad to be added to iNaturalist. *Teacher Connection: Activities are included on the OLC webpage (Mini-Page: Pollinators, interactive websites).*









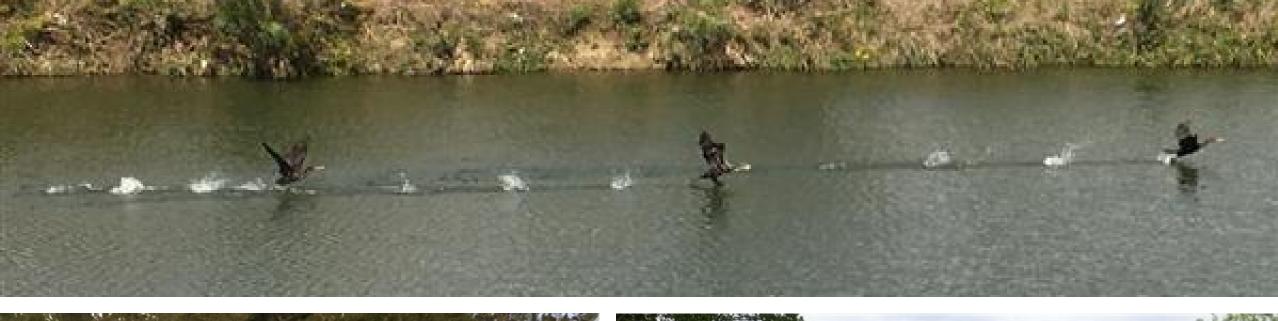


What will happen at Fossil Flats?



Students will talk about what fossils are and how they are formed by erosion and deposition. As you walk the trails, erosion is easy to see. We'll talk about where the sediment ends up that is picked up in various areas and how that type of process contributed to the formation of fossils. The students will also have the opportunity to dig for fossils. They are allowed to take ONE home with them. *Teacher Connection: Activities are included on the OLC webpage (career connections, fossil ID)*







What will happen at the Lakeside Study area?

Each living thing depends upon an ecosystem; a community of plants and animals which depend on one another as well as their non-living environment. Your students will be looking closely at one particular lake ecosystem. There are so many interconnected creatures in a pond that we can't possibly study all of them in one day. Instead, we will focus primarily on the invertebrates that live in the lake. We can identify the invertebrates in the lake as members of various groups based on what they eat; they are herbivores, carnivores, omnivores, scavengers, and/or filter feeders. Your students will be sorting a sample of the lake's invertebrates into these groups. After an introductory discussion, your students will work in small teams to take samples of lake water from the bucket and sort the invertebrates in their trays. They will keep a tally on the worksheets in their field guides of what they find and how many. Your students will then use the collected data to draw a lake food chain. This study is also an excellent opportunity to study insect life cycles and discuss both incomplete and complete metamorphosis. Students can take pictures with an iPad to be added to iNaturalist. *Teacher Connection: Activities are included on the OLC webpage (virtual pond dip)*.







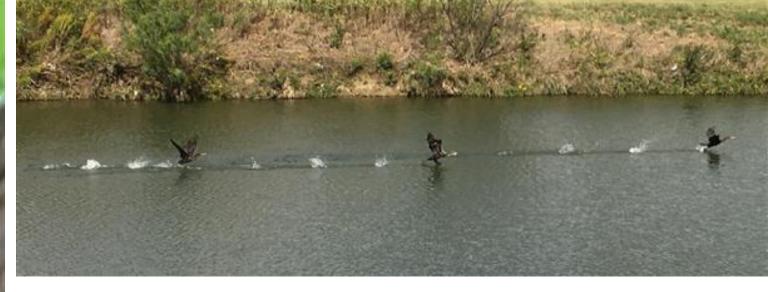


What will happen at Cattail Pass and Willow Creek? Nature can be soothing and restorative. On the boardwalk that is Cattail Pass, the students will line up along the railing and use their senses to make and record observations. These observations can later be used to write poetry. After this, the students will hike through a wooded area to Willow Creek where you will find tables under a tree close to a creek. Along the way, students will complete a scavenger hunt, looking for various natural objects or phenomena. Teacher Connection: Activities are included on the OLC webpage (nature poetry).







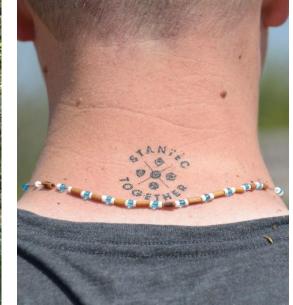












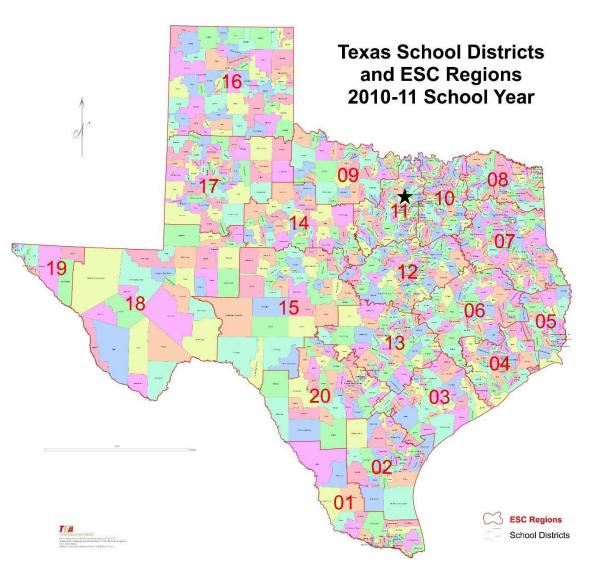






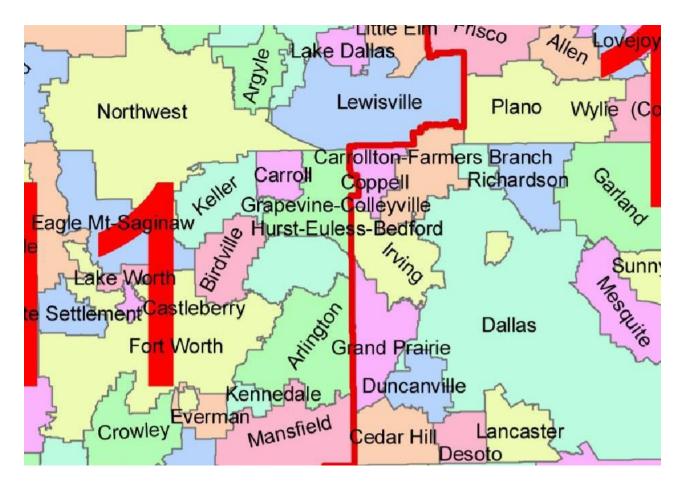
Northwest Outdoor Learning Center

Northwest I.S.D.



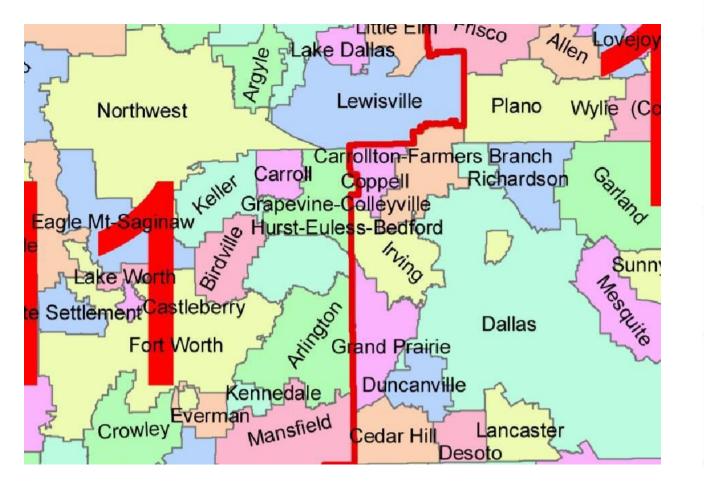
2015-16 Enrollment Profile

		Number	Percent
Total	Enrollment	20,976	100.0%
Gender	Female	10,173	48.5%
	Male	10,803	51.5%
Race/ Ethnicity	American Indian or Alaska Nat	112	0.5%
	Asian	680	3.2%
	Black or African American	1,438	6.9%
	Hispanic/Latino	4,339	20.7%
	Native Hawaiian/Other Pacific	33	0.2%
	Two or More Races	541	2.6%
	White	13,833	66.0%
Program	Bilingual Education	174	0.8%
Participation	Career & Technical Ed	4,447	21.2%
	English as a Second Language	880	4.2%
	Gifted & Talented	2,037	9.7%
	Special Education	1,774	8.5%
Student Population	At Risk	6,649	31.7%
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2015-16 Enrollment Profile

- Kids come first
- Continuous improvement is essential for future success
- The success of each student is the shared responsibility of students, families, schools, and communities
- Environment influences learning

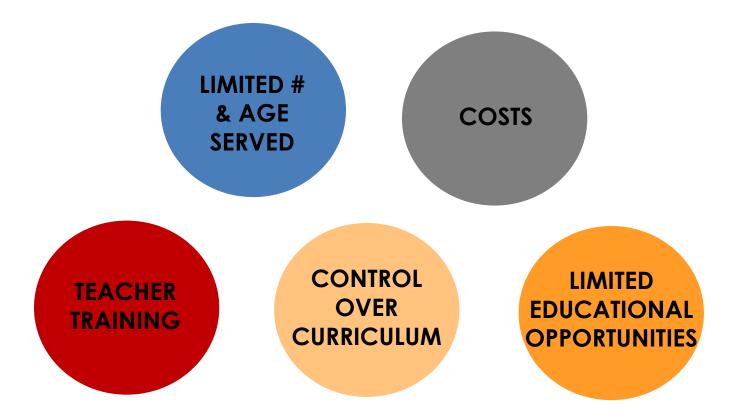


Northwest I.S.D. | Skills for Success

- Critical Thinking and Problem Solving
- Collaboration and Leadership
- Agility and Adaptability
- Initiative and Entrepreneurialism
- Effective Oral and Written Communication
- Accessing and Analyzing
 Information
- Curiosity and Imagination



Why an Outdoor Learning Center?





Texas Lil's Dude Ranch

- Opened 1977
- Sports and recreation camp
- 38,000 SF Special Event & Conference Center
 - Parties, conventions and special events for groups up to 10,000 people
- 24,000 SF outdoor pavilion
- Texas-size swimming pool
- Rustic, air conditioned full service
 restaurant and bar

































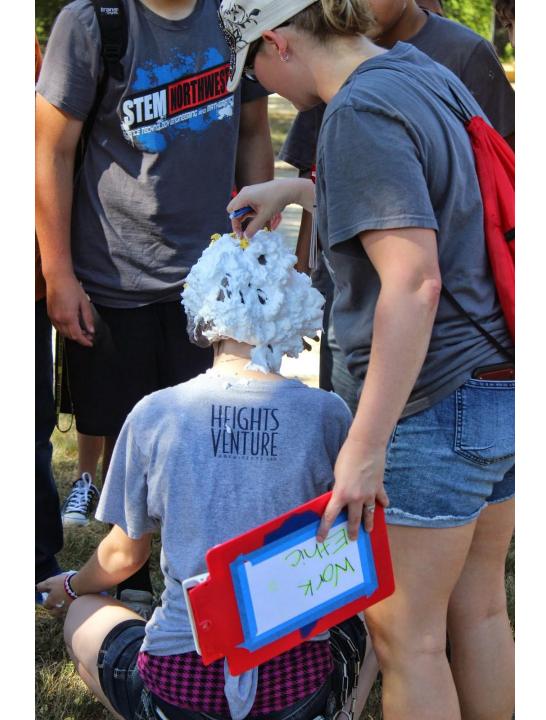










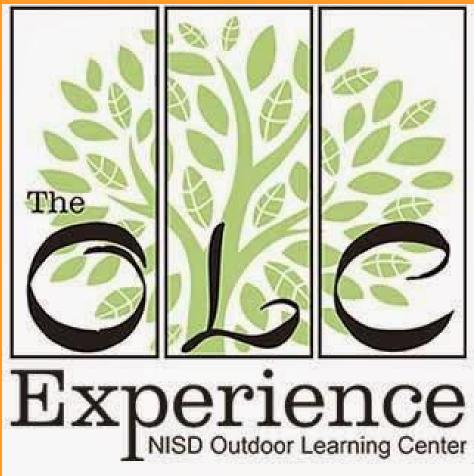


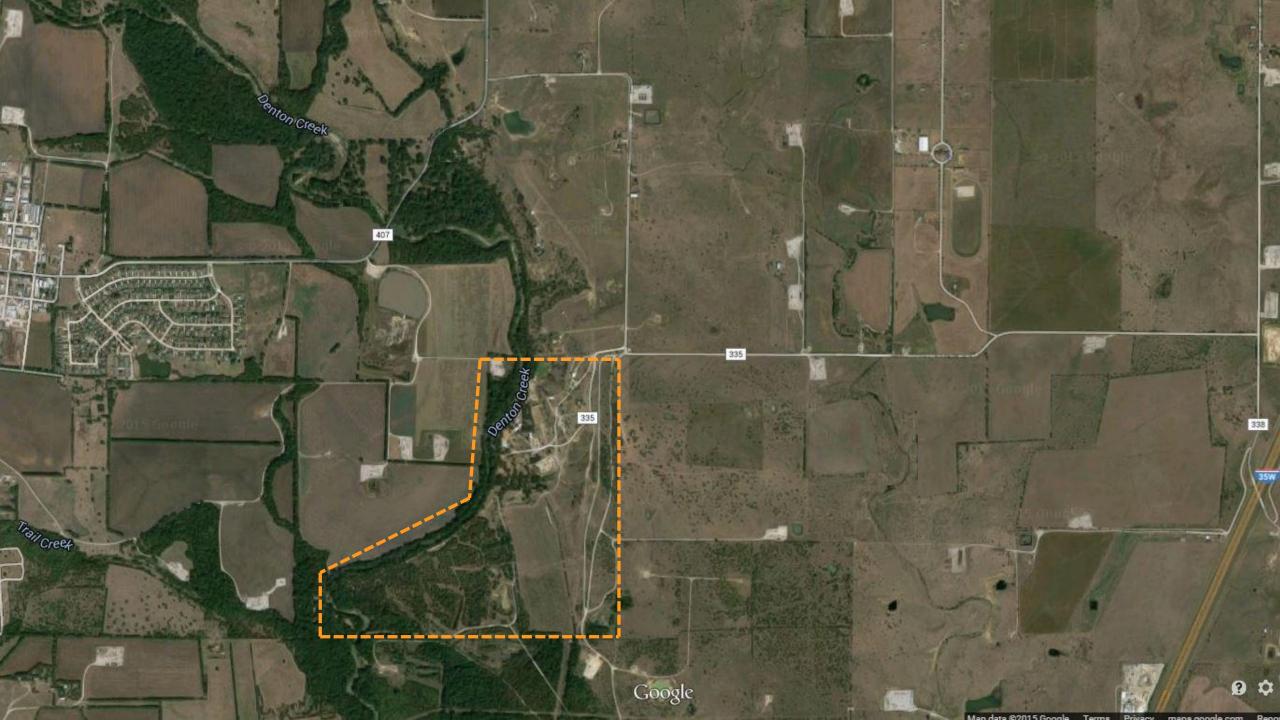






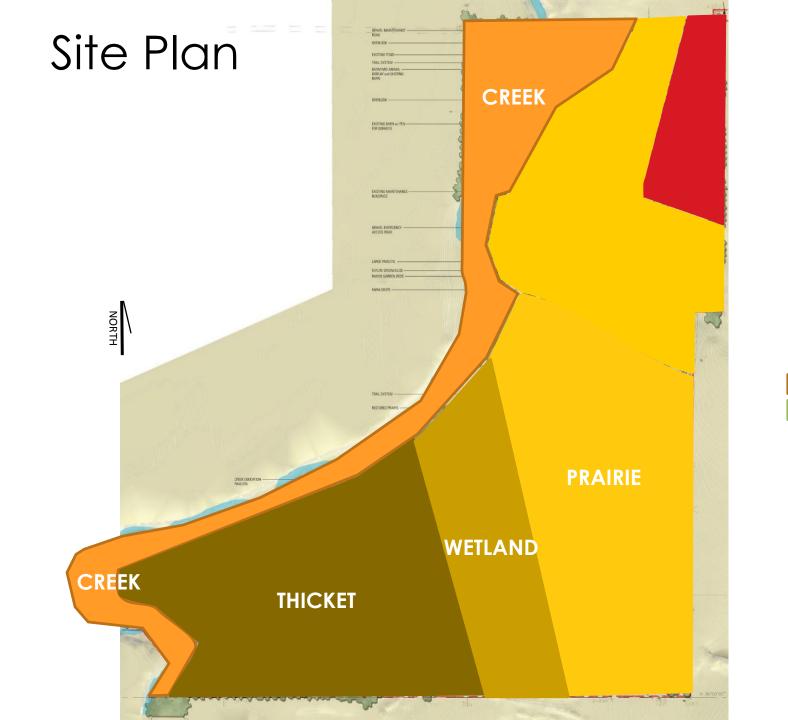
Re-imagining the Outdoor Learning Center







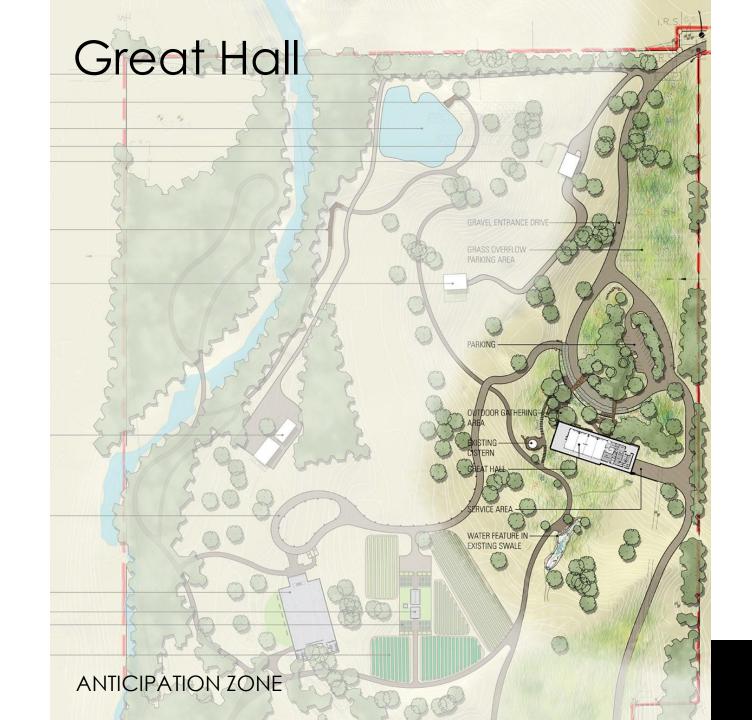
IMMERSION

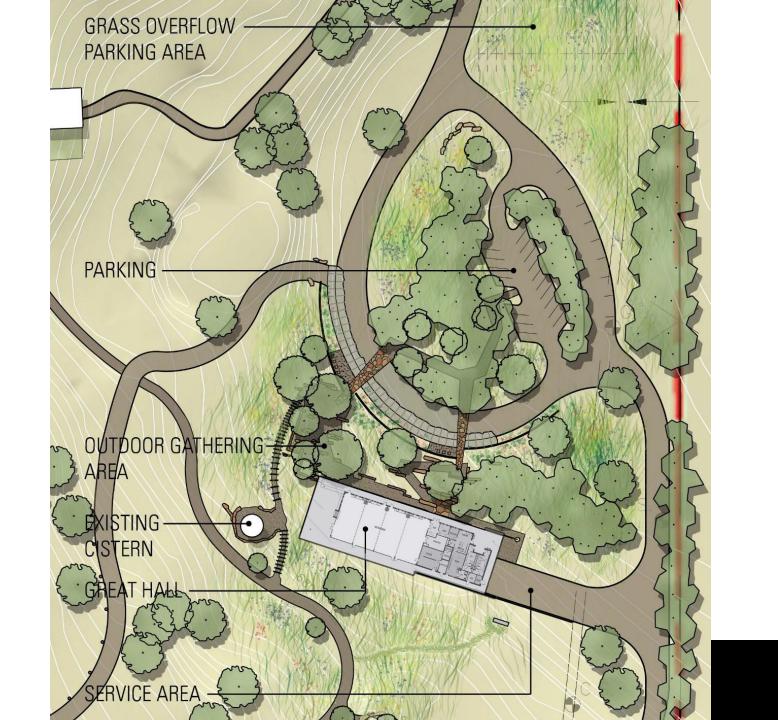


ANTICIPATION Arrival Orientation Preparation

TRANSITION Active Collaborative Constructive

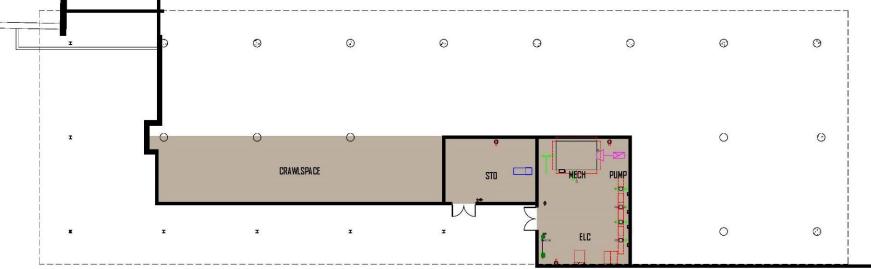
IMMERSION Passive Observational Experiential

















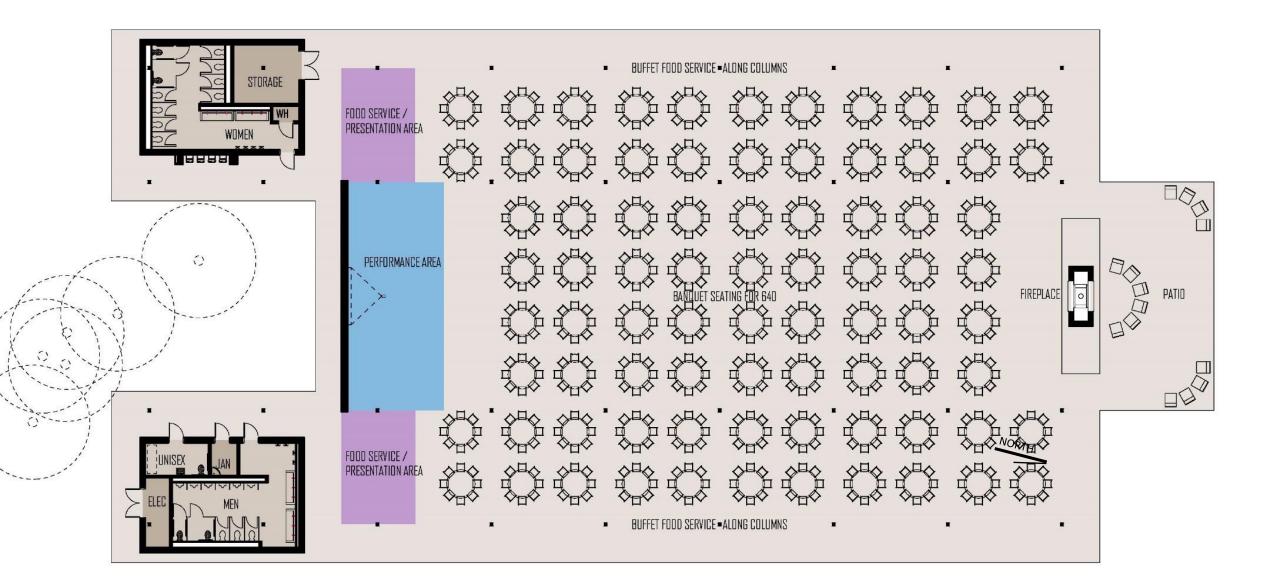








Large Pavilion Floor Plan















Creek Pavilion

IMMERSION ZONE



Wetland Pavilion







Amphitheater

Community Opportunities

- Summer programs
- Corporate and Organization Rental
- Weddings & Receptions
- Community-wide events e.g. Pioneer Days





Questions?

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Tim McClure, Assistant Superintendent for Facilities

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