

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/316617099>

The Regulatory Framework for Outdoor Learning Environments in Texas Childcare Facilities: A Practitioner's Guide to State Laws, Regulations, and Policies Associated with 18 Early C...

Research · May 2017

DOI: 10.13140/RG.2.2.31681.56169

CITATIONS

0

4 authors, including:



Daniel Jost

North Carolina State University

82 PUBLICATIONS 13 CITATIONS

[SEE PROFILE](#)

READS

149



Nilda Cosco

North Carolina State University

25 PUBLICATIONS 831 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Human Use of the Urban Landscape [View project](#)



Regulations in Childcare Facility Outdoor Learning Environments [View project](#)

The Regulatory Framework for Outdoor Learning Environments in Texas Childcare Facilities

A Practitioner's Guide to State Laws, Regulations, and Policies Associated with 18 Early Childhood Play and Learning Settings at Childcare Centers and Childcare Homes



Intentionally blank.

OLE! Texas

The Regulatory Framework for Outdoor Learning Environments in Texas Childcare Facilities



**A Practitioner's Guide to State Laws, Regulations, and Policies Associated
with 18 Early Childhood Play and Learning Settings at Childcare Centers
and Childcare Homes**



Citation

Jost, D., Cosco, N., Moore, R. & Cooper, A. 2016. *The Regulatory Framework for Outdoor Learning Environments in Texas Childcare Facilities: A Practitioner's Guide to State Laws, Regulations, and Policies Associated with 18 Early Childhood Play and Learning Settings at Childcare Centers and Childcare Homes*. The Natural Learning Initiative, NC State University.

ISBN 978-0-9982572-0-4

© Natural Learning Initiative & National Wildlife Federation, 2016
All rights reserved. PDF copies of this report may be freely downloaded and electronically copied. However, no part of the whole, including photographs, may be extracted and published elsewhere in any form or by any means available now or in the future without permission of the publishers.

Cover Photograph: First Environments Early Learning Center, Research Triangle Park, North Carolina. Photo by the Natural Learning Initiative.

Disclaimer

The intent of this document is to encourage early childhood outdoor environment designers to understand the regulatory framework affecting childcare centers and homes at the state level in Texas and thus more fully meet the needs of all children and the adults who work with them. It is intended to help practitioners navigate five documents issued by the state of Texas. It is not intended as legal advice. The framework should be used in conjunction with other existing health, safety, and accessibility measures, guidelines, and standards. The document does not duplicate or fully incorporate all the language in the laws, regulations, and policies discussed herein. It was not intended to encourage practitioners to overlook or neglect health, safety, or accessibility issues that are not discussed or that are not subject to clear regulation. It was not intended to provide guidance on best practices for optimizing safety, accessibility, or developmental benefits. Fortunately, a wealth of resources is available to address specific

concerns for those designing environments to allow all children (and their caregivers) to take advantage of the developmental benefits of outdoor learning environments. The information contained in this document was the most current available at the time the document was created. The document was largely reviewed and finalized in August 2016. Sections related to Texas Department of Family and Protective Services were reviewed by representatives of that department in September 2016 and edited based on the feedback provided. Prior to substantive use, refer to state agencies to determine if updates to the standards discussed have occurred. Also, refer to local jurisdictions to ensure awareness of additional laws or standards at the local level that must be followed.

Project Team

Report prepared by the Natural Learning Initiative, North Carolina State University, and the National Wildlife Federation for the Texas Department of State Health Services.

Texas Department of State Health Services

Brett Spencer, Manager, Primary Prevention Branch, Health Promotion and Chronic Disease Prevention Section
Division for Disease Control and Prevention Services

Cari Browning, MA, CTRS, CHES, Physical Activity Coordinator,
Obesity Prevention Program, Health Promotion and Chronic Disease Prevention Section, Division for Disease Control and Prevention Services

Natural Learning Initiative, North Carolina State University

Nilda G. Cosco, PhD, PI, Research Associate Professor, Director of Programs of NLI

Robin C. Moore, MCP, Dipl. Arch., Hon. ASLA, Co-PI, Professor of Landscape Architecture, Director of NLI

Daniel Jost, MLA, ASLA, CPSI, Graduate Research Assistant

Karli Stephenson, Graduate Research Assistant (Graphic Design)

National Wildlife Federation

Allen Cooper, MPP, JD, Director of Learning

Table of Contents

Project Background	1
Overview of Regulatory Environment	3
Language in Standards, Laws, and Guidelines Associated with Specific OLE Settings	5
Acoustic Play Settings	5
Bird, Butterfly, and Pollinator Habitat.....	6
Decks, Platforms, and Stages	7
Dry Creek Beds and Playable Rain Gardens (LID Features)	8
Earth Play Settings	9
Grass Mazes and Tall Grass Areas.....	10
Groves of Small Trees or Large Shrubs	11
Loose Parts Play Areas	12
Portable Toys and Equipment.....	12
Natural Loose Parts/ Construction.....	12
Manufactured Playground Equipment.....	13
Stationary Natural Play Features	14
Logs	14
Boulders	14
Stumps.....	14

Mounds and Sloping Topography.....	16
Multipurpose Lawns	17
Primary Pathway	18
Sand Play Areas	19
Vegetable and Fruit Gardens.....	20
Water Play: “Hands-in” Features.....	21
Water Tables.....	21
Water Play: Sprinklers and Spraying Features that do not Pool Water.....	22
Appendix 1: List of Interview Participants and Reviewers	23
Appendix 2: Discussion: When do stationary natural features qualify as “stationary equipment” or “active play equipment” that is subject to more extensive standards?.....	25
Resources	27
State Regulations for Childcare Facilities (Requirements).....	27
Voluntary Guidelines Tied to Public Funding for Childcare Facilities in Texas.....	27
Grants for Childcare OLEs.....	27
Best Practices for Creating OLEs.....	27

Creating Habitat Areas.....	27
Invasive Plants in Texas.....	27
Non-Toxic Plants that Encourage Play.....	27
Plants for Rain Gardens	28
Managing Risk Related to Natural and Naturalistic Features in OLEs	28
Managing Risk Related to Playground Equipment.....	28
Summary of Health and Wellness Benefits Associated with Access to Nature	28
Sustainable Landscape Design	28

Project Background

Two 4-year-old boys carefully tend a batch of sand cupcakes at an outdoor “kitchen.” A girl pedals a tricycle around looping pathway while another girl picks purple grapes off an adjacent vine. “What’s your favorite meal we make at the center?” a teacher asks a small girl dressed in pink. At first, the girl seems confused but then her face lights up. “Oh... Kale Salad!” she yells. “Kale Salad! Kale Salad! Kale Salad! I love Kale Salad.”

If this seems like an atypical response for a 4-year-old child, that may be because this isn’t your typical playground or childcare center. It’s been designed to promote active play and to encourage kids to eat healthy foods—like kale—by involving them in vegetable gardening.

It is one of eight model outdoor learning environments developed as part of Preventing Obesity by Design (POD) Wake County, a program developed by the Natural Learning Initiative (NLI) at North Carolina State University’s College of Design. The program promotes active play areas and encourages kids to eat healthy

foods—like kale—by teaching them to grow their own vegetables in their childcare facilities. Similar outdoor learning areas may soon sprout up in childcare facilities across Texas as part of a new initiative.

OLE! Texas is a multidisciplinary intervention to promote early childhood health through improving the outdoor learning environment (OLE) at childcare facilities (childcare centers and childcare homes).

Launched in 2016, OLE! Texas is supported by the Health Promotion and Chronic Disease Prevention Section, Texas Department of State Health Services, and implemented through a statewide project leadership team with support from the Natural Learning Initiative (NLI) and National Wildlife Federation (NWF).

The OLE! Texas initiative aims to increase physical activity, promote healthy eating, and support outdoor learning for young children. Project components include training Texas landscape and design professionals about outdoor learning environment best practices and training landscape and early childhood education

professionals on Preventing Obesity by Design methods and materials. During the first year of OLE! Texas, its partners are working together to create demonstration sites that adapt best practices from elsewhere to Texas’s unique ecological and regulatory environments. The goal is to inspire improvements to early childcare OLEs throughout Texas.

Potential site improvements at childcare facilities may include a diverse range of manufactured, constructed, and natural features and settings. Manufactured features are standardized and mass-produced in a factory. They may include manufactured playground equipment such as standardized swings and slides as well as loose parts such as plastic building blocks and Tonka toys. Constructed features and settings tend to be customized and constructed on-site. They may include concrete pathways and decks or stages made from dimensioned lumber. Natural settings may include groves of trees, dry creek beds, and bird and butterfly habitat. These settings may contain stationary natural features such as prepared logs and natural loose parts. **“Naturalization”** describes the process of establishing natural settings and features in an OLE.

Time spent playing in naturalized outdoor learning environments has been linked to a variety of positive health and wellness outcomes. It has been shown to support gross motor development, reduce rates of myopia, and increase physical activity. It reduces children's levels of stress and aggression, increases concentration, and lessens the symptoms associated with ADHD. It is also associated with improved performance on science tests and development of an environmental ethic.

OLE Texas! encourages the creation of settings that provide diverse opportunities for play and learning across all domains and stages of child development, including fixed features, portable toys and equipment, and loose parts. Although its primary focus is renovation of outdoor areas in existing childcare facilities, the OLE! Texas design strategy can also be applied to new construction.

This report examines the regulatory environment for outdoor learning environments in Texas childcare facilities. It is part of the OLE! Texas project. NLI and NWF were asked to collaborate in identifying state-level Texas laws, regulations, standards, and grant/funding language

that may affect opportunities to improve OLE quality, including natural settings and features.

To execute this task, NLI and NWF conducted background research and structured interviews with individuals with a direct stake in OLE! Texas, including center directors, early childhood educators, college instructors, and facility regulators. Also included, were representatives of agencies, organizations, and professional fields with potential influence over OLE quality, including designers and design instructors (see Appendix 1). Materials from Texas AgriLife Extension and the "green industry" were also reviewed.

The report consists of two distinct documents. **This guide**, directed towards early childhood education and design professionals, explains how standards, laws, and guidelines identified through this process affect the design and management of play and learning settings that may be found in best practice outdoor learning environments at childcare facilities. All settings featured in this document can be designed to comply with existing Texas requirements.

A related but separate internal policy analysis report was also created to summarize health and developmental benefits of natural outdoor learning environments and provide an overview of relevant state laws, regulations, policies, and funding programs. A primary task was to review the language contained in these documents to understand potential effects on the implementation of OLE best practices. This report was shared with the OLE! Texas Leadership Team and state departments.

This guide aims to explain what is possible under the major policies affecting OLEs. Other resources may be referenced to learn about best practices for OLEs and to see illustrations of completed projects. Some such resources are listed at the end of this article.

Information provided in this guide was the most current available at the time the it was created. Prior to using this document, refer to state agencies to determine if updates to the standards discussed have occurred. Refer to local jurisdictions to ensure you are aware of additional laws or standards at the local level that must be followed.

Overview of Regulatory Environment

Texas regulations recognize two main types of fulltime childcare operations serving children in early childhood:

1. Childcare centers, defined as serving seven or more children outside the administrator's own home; 2. Childcare homes, defined as serving 12 or fewer children in the administrator's own residence. A third type of childcare operation, school-age and before or after school programs, serve *exclusively* school-age children. Therefore, they are not addressed here. *

Childcare Standards vary based on the type of operation. Childcare centers are required to meet *Minimum Standards for Child-care Centers* (Chapter 746 of the Texas Administrative Code) issued by the Texas Department of Family and Protective Services (DFPS). Childcare homes are required to meet *Minimum Standards for Child-care Homes* (Chapter 747 of the Texas Administrative Code) also issued by DFPS. Both standards cover the outdoor learning environment.

In some situations, a waiver or variance may be obtained from DFPS if a childcare operation does not meet these standards. This requires submitting documentation explaining how the operation is going to ensure children's safety. Some considerations include children's age, degree of risk, temporary nature of risk, and alternate safety protocols in place. To request a variance, use Form 2937, found here: http://www.dfps.state.tx.us/child_care/information_for_providers/cclforms.asp

Accessibility standards cover childcare centers and the non-residential portions of childcare homes. Both are required to comply with the ***Texas Accessibility Standards*** (TAS), which largely mirror the ***2010 ADA Accessibility Standards*** issued by the U.S. Department of Justice (DOJ).

Minimum requirements for play areas serving children over age 2 are provided by the TAS – Sections 206.2.17, 240, and 1008. For childcare centers, TAS specifies how many play components must be at ground level and on an accessible route. "Play component" refers to all elements in play areas "intended to generate specific opportunities for play, socialization, or learning," whether they are

"manufactured or natural...stand-alone or part of a composite play structure" (See 106.5.44).

Childcare homes have fewer requirements for accessibility, as "play areas located in family childcare facilities where the proprietor actually resides" are excluded from the requirements of Section 240 and the more specific requirements in Sections 206.2.17 and 1008 that are grounded in requirements in section 240 (See 240.1).

The main accessibility requirement in childcare homes is to provide "at least one accessible route" within the play area (See 206.2.17.1). There are no requirements for the number of play components that need to be accessible or at ground level. Exceptions are settings regulated in other sections of TAS. For example, a lawn seating area intended for assembly and stages in performance areas must be connected to an accessible route although the lawns do not have to be wheelchair accessible themselves.

For both childcare centers and childcare homes, the specifications for accessible routes in licensed outdoor areas are different than for other landscape types.

Refer to TAS Section 1008 for more specific information on slopes, clearances, ramp lengths, path widths, and use of transfer platforms.

Texas Rising Star (TRS) is a voluntary quality rating and improvement system for certification of early childhood education centers and homes that are part of the Texas Workforce Commission (TWC) subsidized childcare program. TRS is used to assess the quality of childcare providers, to communicate that information to parents seeking childcare, and to determine the level of funding providers receive for each TWC-subsidized child. Licensed childcare centers and licensed or registered childcare homes that serve TWC-subsidized children may be certified as two-star, three-star, or four-star facilities, using criteria published in the *Texas Rising Star Child Care Provider Certification Guidelines*.

TRS reimbursement rates. Texas Government Code §2308.315 requires that the local workforce board provide at least 5% higher reimbursements for subsidized children attending facilities awarded a two-star rating, at least 7% higher reimbursements for facilities

awarded a three-star rating, and at least 9% higher reimbursements for facilities awarded a four-star rating. These percentages are minimums and local increases in funding based on TRS certification can be higher. (See Texas Government Codes §809.20 and §2308.315).

Playground equipment. Texas Health and Safety Code Section 756.061 requires that all “playground equipment” purchased or installed using public funds in the State of Texas (after September 1, 2009) must comply with *ASTM Standard F1487-07ae1*, published by ASTM International. Surfacing for “the area under and around playground equipment” purchased with public funds must comply with *ASTM Standard F2223-04e1*. Note: these are historic standards—not the most recent editions of ASTM standards. Publicly funded equipment is also required to provide shading of bare metal surfaces to avoid burns. Given the mature development of manufactured playground equipment standards, the topic is recognized within this report but not dealt with in depth. Rather various other settings that represent OLE best practice—including natural features—are addressed in detail.

The majority of this document is dedicated to exploring how the language in the five documents identified above may affect the creation, design, and management of 18 OLE settings considered to be best practices. The charts on the following pages identify whether these settings are permitted in the OLEs at Texas childcare facilities. They identify design and management considerations based on the laws, regulations, and funding programs that are or may be relevant to each setting. They discuss how the settings support child development mandates found in the minimum standards and may contribute to the points facilities receive under the Texas Rising Star rating system.

Specific sections that are relevant are identified for ease of reference. And links to the standards and guidelines themselves may be found at the end of the document.

**Minimum Standards for School-age and Before or After School Programs are found in Chapter 744 of the Texas Administrative Code. Though the specifics of these standards are not addressed here, this document may be useful for understanding certain language shared with Chapters 746 and 747.*

State Standards, Laws, and Guidelines Associated with Specific OLE Settings

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Acoustic Play Settings	Permitted <i>Design Considerations:</i> None <i>Child Development Mandates Addressed:</i> Helps meet requirements for “a variety of activities daily” and “opportunities for active play both indoors and outdoors.” Providing “rhythm instruments” helps meet requirements for activities encouraging large muscle development in toddlers and small muscle development in pre-K children. (§746.2205, §746.105 (23), §746.2507; §746.2607).	Permitted <i>Design Considerations:</i> None <i>Child Development Mandates Addressed:</i> Helps meet requirements for “a variety of creative activities” and “opportunities for active play both indoors and outdoors.” Providing “rhythm instruments” helps meet requirements for activities encouraging large muscle development in toddlers and small muscle development in pre-K children. (§747.2103, §747.105 (23), §747.2407, §747.2507).	Permitted <i>Design Considerations:</i> Subject to this law only if it is part of a freestanding playground structure that is bought or installed using public funds. If connected to a freestanding playground structure, it would be required to meet ASTM F1487-07ae1 standards for entrapment, protrusions, entanglements, crush and shear, etc.	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-01 and P-OLE-04.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Bird, Butterfly, and Pollinator Habitat	Permitted <i>Design Considerations:</i> “Poisonous or potentially harmful plants must be inaccessible to all children.” (§746.3701 (6))	Permitted <i>Design Considerations:</i> “Poisonous or potentially harmful plants must be inaccessible to children.” (§746.3501 (6))	Not applicable, because feature does not qualify as playground equipment.	<i>Design Considerations:</i> If a garden is intended as a setting for learning, contributing to points awarded for P-OLE-01, it would need to be on an accessible route; however, not every part of the garden would be required to be accessible (See Advisory 201.3; 206.2.4)	Contributes to points awarded for P-OLE-02 May Contribute to points awarded for P-OLE-01 if it links to or reinforces indoor learning. <i>Design Considerations:</i> Plants must be non-toxic

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Decks, Platforms, and Stages	Permitted <i>Design considerations:</i> “Porches or platforms more than 20 inches in height for pre-kindergarten and younger children, and more than 30 inches in height for school-age children, must be equipped with protective barriers that surround the elevated surface except for entrances and exits and that prevent children from crawling over or through the barrier” or “becoming entrapped.” (\$746.4601; \$746.4509)	Permitted <i>Design considerations:</i> “Porches or platforms more than 20 inches in height for pre-kindergarten and younger children, and more than 30 inches in height for school-age children, must be equipped with protective barriers that surround the elevated surface, except for entrances and exits and that prevent children from crawling over or falling through the barrier, or becoming entrapped.” (\$747.4401; \$747.4309)	Permitted <i>Design considerations:</i> Decks and platforms are not subject to this law unless they are part of a composite playground structure that is bought or installed with public funds. Platforms connected to a composite playground structure would be required to meet ASTM F1487-07ae1 standards for entrapment, protrusions, etc. Note the Department of Family and Protective Services Minimum Standards for Child-care Centers/ Homes are more restrictive than ASTM standards for what platforms require barrier rails, and trump ASTM.	<i>Design Considerations for childcare centers and homes:</i> Stages must be connected to an accessible route (See Advisory 201.3). <i>For childcare centers only:</i> Qualify as play components subject to requirements for accessibility contained in Sections 240 and 1008 of TA. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-04.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Dry Creek Beds and Playable Rain Gardens	Permitted <i>Design Consideration:</i> The dry creek bed or rain garden must not fill with standing water, as children are not allowed to swim or wade in anything other than swimming or wading pools. A dry creek bed or rain garden that fills with standing water to provide flood mitigation would require a variance. (§746.5017)	Permitted <i>Design consideration:</i> The dry creek bed or rain garden must not fill with standing water, as children are not allowed to swim or wade in anything other than swimming or wading pools. A dry creek bed or rain garden that fills with standing water to provide flood mitigation would require a variance. (§747.4817)	Not applicable, because feature does not qualify as playground equipment	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualify as play components subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components. Note requirements for accessible routes differ from other landscapes.	Contributes to points awarded for P-OLE-02, which encourages “topographic variations” and a “variety of ground surfaces (mulch, grass, pebbles)”

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Earth Play Settings	Permitted <i>Design/Management Considerations:</i> Should be treated in the same manner as sand play settings, which need to be maintained in a “sanitary manner” and require hand-washing when play is finished. Buckets filled with water must be inaccessible to children. <i>Child Development Mandates Addressed:</i> Earth play settings help meet requirements for thinking skills and sensory development for pre-K and school-age children. (§746.2607, §746.2707, §746.3407 (7), §746.3417 (5), §746.3701 (8))	Permitted <i>Design/Management Considerations:</i> Should be treated in the same manner as sand play settings, which need to be maintained in a “sanitary manner” and require hand-washing when play is finished. Buckets filled with water must be inaccessible to children. <i>Child Development Mandates Addressed:</i> Earth play settings help meet requirements for thinking skill and sensory development for pre-K and school-age children. (§747.2507, §747.2607, §747.3407 (7), §747.3417 (5), §747.3501(8))	Not applicable, because feature does not qualify as playground equipment	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualify as a play component subject to accessibility requirements contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components .	Not specifically mentioned. May Contribute to points awarded for P-OLE-04: “Natural outdoor environment supports social emotional development including but not limited to areas that invite social gatherings, tummy time, dramatic play, group games, music and movement, and spaces for quiet and calm activities.” May contribute to points awarded for P-OLE-02 (“a variety of ground surfaces”)

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Grass Mazes and Tall Grass Areas	Permitted <i>Design Considerations:</i> “Poisonous or potentially harmful plants must be inaccessible to all children;” Standards require supervision of children at all times, but do not require visual awareness at all times. Required is “appropriate visual and/or auditory awareness, physical proximity, and knowledge of activity requirements and each child’s needs.” As the level of risk associated with a grass maze is low, required supervision is low. (§746.3701 (6), §746.1501, §746.1503)	Permitted <i>Design Considerations:</i> “Poisonous or potentially harmful plants must be inaccessible to children;” Standards require supervision of children at all times, but do not require visual awareness at all times. They require “appropriate visual and/or auditory awareness, physical proximity, and knowledge of activity requirements and each child’s needs.” As the level of risk associated with a grass maze is low, required supervision is low. (§747.3501 (6), §747.1501, §747.1503)	Not applicable, because feature does not qualify as playground equipment	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-02. <i>Design Considerations:</i> Plants must be non-toxic.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Groves of Small Trees or Large Shrubs	Permitted <i>Design considerations:</i> Although shade is not required, it is recommended: “shaded areas should be provided by means of open space and tree plantings or other cover in outdoor spaces.” Plants must be non-toxic and located outside use zones for active play equipment. (guidance on §746.4301, §746.3701 (6), §746.4801 to §746.4815)	Permitted <i>Design considerations:</i> Plants must be non-toxic and located outside use zones for active play equipment. (§747.3501 (6), §747.4601 to §747.4615)	Generally not applicable, because feature does not qualify as playground equipment <i>Design considerations:</i> Note that trees may be incorporated into elevated decks of playground equipment to create a composite play structure, much like posts holding up shade sails and roofs, if trunk is free from protrusions, entanglements, and there are no limbs within 84 inches of the use zone, each designated play surface (larger than 2” x 2”), and the pivot point of any adjacent swings. (See ASTM 1487-07ae1, 9.8.4.1)	<i>Design considerations for both childcare centers and homes:</i> Vertical clearance of 80 inches must be provided wherever trees overhang accessible routes (See 1008.2). <i>For childcare centers only:</i> The area under a grove needs to be accessible only if it is intended for use as a gathering space to score Texas Rising Star points. In that case it would be a play component subject to requirements in Sections 240 and 1008.	Contributes to points awarded for P-OLE-02; May contribute to points awarded for P-OLE-04 if designed to promote gathering <i>Design Consideration:</i> Plants must be non-toxic.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Loose Parts Play Areas (Manipulatives) Portable toys and equipment (examples: sand and earth play implements, Tonka-type wheeled vehicles, balls, pieces of textile, buckets, hollow blocks, etc.). Natural loose parts/construction (examples: fallen leaves, pine needles, smoothed branches, straw bales, rounded stones, seed heads, flowers, tree cookies, small timbers, roots, corn stalks, etc).	Permitted <i>Design Considerations:</i> Plants supplying loose parts must be non-toxic; loose parts must be “free from sharp or rough edges” and toxic paint. <i>Child Development Mandates Addressed:</i> Construction play with blocks or sand and water is explicitly encouraged to promote “thinking skills and sensory development.” Play with other natural loose parts may also help meet this mandate. (§746.3701 (6), §746.3701 (5), §746.2607, §746.2707)	Permitted <i>Design Considerations:</i> Plants supplying loose parts must be non-toxic; loose parts must be “free from sharp or rough edges” and toxic paint. <i>Child Development Mandates Addressed:</i> Construction play with blocks or sand and water is explicitly encouraged to promote “thinking skills and sensory development.” Play with other natural loose parts may also help meet this mandate. (§746.3501 (6), §746.3501 (5), §747.2507, §747.2607)	Not applicable, because feature does not qualify as play-ground equipment. Texas Code requires use of ASTM F1487-07ae1 for “playground equipment,” and that standard states: “Independent loose items intended to be manipulated by the intended users are not covered in this standard.” (3.1.30.1)	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> If specially designated areas are provided for loose parts play, they would qualify as play components subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area, which for portable toys and loose parts is their natural behavior.	May contribute to points awarded for P-OLE-01 if they reinforce indoor learning. May Contribute to points awarded for P-OLE-02, which encourages varied ground surfaces such as mulch and pebbles. May Contribute to points awarded for P-OLE-04 given the social interaction typical of loose parts/toy play. <i>Design Consideration:</i> Plant parts must be non-toxic.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Manufactured Playground Equipment (including equipment manufactured from natural materials).	Permitted <i>Design Considerations:</i> Standards for “active play equipment” including equipment that is not allowed, hazards that must be avoided, and use zones and surfacing required. (See §746.4601-§746.4913)	Permitted <i>Design Considerations:</i> Standards for “active play equipment” including equipment that is not allowed, hazards that must be avoided, and use zones required. The Child-Care Home standard does not require any surfacing beneath play equipment. If unitary surfaces are provided, they must meet standards for those materials. (See §747.4401-§747.4711)	Permitted <i>Design Considerations:</i> All playground equipment purchased or installed using public funds must be designed to meet ASTM F1487ae1 and have surfacing in its use zone compliant with ASTM 2223-04e1, Playground equipment that has horizontal bare metal surfaces such as platforms, steps, and slides (slides, etc.) must be shaded from direct sun. (See discussion on incorporating trees with playground equipment on p. 12).	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-03

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Stationary Natural Play Features (standalone logs, boulders, and stumps vs. equipment constructed of natural materials)	Permitted <i>Design Considerations for standalone objects and structures constructed of natural objects:</i> “Play materials and equipment must be safe and free from sharp or rough edges and toxic paints” (§746.3701 (5); §747.3501 (5)). <i>Additional design Considerations for standalone objects:</i> Individual standalone objects—logs, boulders, and stumps sitting on or partially submerged within the ground—do not require use zones, an area six feet to all sides of the features that is “free of obstacles that a child could run into or fall on top of and be injured” (See discussion in appendix 2). Consideration must be taken to avoid locating these features within the use zones of stationary equipment. <i>Additional design considerations for structures constructed of natural objects:</i> When natural features are combined together to create free standing structures for active play, they qualify as “stationary equipment,” which does require a use zone, an area 6 feet to all sides of the features that is “free of obstacles that a child could run into or fall on top of and be injured” (See §746.4801, §747.4601, extended discussion in Appendix 2). (Continues on p. 15)		Permitted <i>Design Considerations:</i> The code requires ASTM F1487-07ae1 compliance for “playground equipment.” That standard defines “public playground equipment as a “play structure for use in play areas of [various different public facilities]” and defines play structure as a “free standing structure with one or more components and their supporting members.” Under this definition, individual logs, boulders, and stumps would not qualify as playground equipment unless they were part of a structure intended for play and would not be (Continues on p. 15)	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualifies as a play component subject to requirements for accessibility and accessible route design laid out in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-02, which encourages use of “Smooth rocks, wood or logs;” Contributes to points for P-OLE-03. Boulders and tree stumps are noted as features associated with social emotional development; Certain natural features may help earn points for P-OLE-04, as well, by encouraging “active play such as balancing.”

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Stationary Natural Play Features (Continued from p. 14)	Structures made of natural materials would also be subject to other restrictions requiring active play equipment to be anchored in place, to be free of protrusions and openings that could be entrapment hazards, etc. (See §746.4601 and §747.4401). Whether surfacing is required for structures within their use zone would depend on the type of play they are meant to facilitate and the type of facility. There are currently no requirements to provide safety surfacing at childcare homes. At childcare centers, “there must be loose-fill surfacing material or unitary surfacing material in the use zones (area around and under equipment where resilient surfacing is needed to prevent serious injury from occurring as result of a fall) for all climbing, rocking, rotating, bouncing, or moving equipment, slides, and swings.” (§746.4901). Note that balancing equipment and equipment for dramatic play does not require surfacing under this standard. Surfacing materials used must meet the standards laid out in §746.4901- §746.4913 for childcare centers and §747.4707- §747.4711 for childcare homes.		subject to the standard. ASTM F1487-07ae1 also specifically excludes from its scope features not intended for play that are outside of the use zone of play equipment: “Products or materials (site furnishings) that are installed outside the equipment use zone, such as benches, tables, and borders, used to contain protective surfacing, are not considered playground equipment” (Section 1.4). Play structures made of natural materials would need to meet ASTM F1487-07ae1 and have surfacing in their use zones compliant with ASTM 2223-04e1.	(See p. 14)	(See p. 14)

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Mounds and Sloping Topography	Permitted <i>Design considerations:</i> Should be designed to avoid blocking views to active play equipment (like climbers) from likely supervision points. “The indoor and outdoor active play equipment must be arranged so that caregivers can adequately supervise children at all times.” Standards only require “appropriate visual and/or auditory awareness,” and the level of supervision needed is related to the level of risk. (§746.4601, §746.1503)	Permitted <i>Design considerations:</i> Should be designed to avoid blocking views to active play equipment (like climbers) from likely supervision points. “The indoor and outdoor active play equipment must be arranged so that caregivers can adequately supervise children at all times.” Standards only require “appropriate visual and/or auditory awareness,” and the level of supervision needed is related to the level of risk. (§747.4401, §747.1503)	Generally not applicable, because feature does not qualify as playground equipment. <i>Design considerations:</i> Nothing prohibits mounding/sloping topography from being incorporated into the use zone of playground equipment purchased with public funds if surface meets surfacing requirements of ASTM F2223-04ae1.	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Not every mound or sloping topography would be a play component per the TAS standards. Intention is key here. If a mound is treated as a play component, and used to get credit as an active play environment, it qualifies as a play component subject to requirements for accessible route and accessibility contained in Sections 240 and 1008 of TAS.	Contributes to points awarded for P-OLE-02; May Contribute to points awarded for P-OLE-03 if designed to promote rolling

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Multipurpose Lawns	Permitted <i>Design Considerations:</i> None	Permitted <i>Design Considerations:</i> None	Not applicable, because feature does not qualify as playground equipment.	Permitted <i>Design Considerations:</i> “Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route.” (221.5)	Contributes to points awarded for P-OLE-02 and P-OLE-05 (in centers that serve infants).

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Primary Pathway (with Loops and Curves for Wheeled Toy Use).	Permitted <i>Design Considerations:</i> None <i>Child Development Mandates Addressed:</i> Facilities must develop written activity plans that include “outdoor play in which the children make use of both small and large muscles, both in the morning and afternoon.” Examples of large-muscle development for preschool children identified in the standards include: small wagons, small wheelbarrows, tri-cycles, and push toys. (§746.2507 §746.2607, §746.2205)	Permitted <i>Design Considerations:</i> None <i>Child Development Mandates Addressed:</i> Facilities must develop written activity plans that include “outdoor play in which the children make use of both small and large muscles, both in the morning and afternoon.” Examples of large-muscle development for preschool children identified in the standards include: small wagons, small wheelbarrows, tri-cycles, and push toys. (§747.2407, §747.2507, §747.2103)	Not applicable, because feature does not qualify as playground equipment.	<i>Design considerations for both childcare centers and homes:</i> Both must have an accessible route serving the space. The path used by wheeled toys may serve (or help serve) this purpose if it meets the requirements contained in Sections 206.2.17, 240, and 1008. Five feet is the minimum clear width for an accessible route in play areas with an area of 1000 feet or more (1008.2.4). Forty-four inches is required in smaller areas. Other requirements relate to slope, length of ramp, etc.	Contributes to points awarded for P-OLE-02 Texas Rising Star awards points for having an “outdoor environment” that motivates “active play such as... riding.” “Tricycles and riding” toys are specifically identified as equipment that facilitates physical activity.

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Sand Play Areas	Permitted <i>Design /Management Considerations:</i> Need to be maintained in a “sanitary manner” and require hand-washing when play is finished. Buckets filled with water cannot be accessible to children as part of sand play area, though mixing sand and water is encouraged. <i>Child Development Mandates Addressed:</i> They help meet requirements for thinking skills and sensory development for pre-K and school-age children. (§746.3407 (7), §746.3417 (5), §746.2607, §746.2707, §746.3701)	Permitted <i>Design /Management Considerations:</i> Need to be maintained in a “sanitary manner” and require hand-washing when play is finished. Buckets filled with water cannot be accessible to children as part of sand play area, though mixing sand and water is encouraged. <i>Child Development Mandates Addressed:</i> They help meet requirements for thinking skill and sensory development for pre-K and school-age children. (§§747.3203 (7), §747.3213 (5), §747.2507, §747.2607, §747.3501)	Not applicable, because feature does not qualify as playground equipment.	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of TAS. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components.	Contributes to points awarded for P-OLE-04 Sand areas are provided as an example of play areas that support “social emotional development.”

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Vegetable and Fruit Gardens	Permitted <i>Design /Management Considerations:</i> Poisonous or potentially harmful plants must be inaccessible to children. When serving food grown on site, care taken is similar to other food preparation. Centers must have written operational policies regarding meal and food service practices, which might be expanded with policies for handling garden vegetables. Handwashing sinks should not be used for preparing food. (§746.3701 (6), §746.3317, §746.2419 (8), §746.501 (8))	Permitted <i>Design /Management Considerations:</i> Poisonous or potentially harmful plants must be inaccessible to children. When serving food grown on site, care taken is similar to other food preparation. Handwashing sinks should not be used for preparing food. (§746.3501 (6), §747.3117, §747.2319 (7))	Not applicable, because feature does not qualify as playground equipment.	<i>Design Considerations:</i> If a fruit and vegetable garden is intended as a setting where children learn about growing and caring for fruit and vegetables, it would need to be on an accessible route; however, not every part of the garden would be required to be accessible (See Advisory 201.3; 206.2.4)	Contributes to points awarded for P-OLE-02 <i>Design Considerations:</i> Plants must be non-toxic

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Water Play: “Hands-In” Features (water tables and other water play where hands get wet but body doesn’t get soaked.)	<i>Design /Management Considerations:</i> Water play tables are allowed. Standards require: “Emptying water play tables and toys used in water tables daily, sanitizing, and ensuring children and caregivers wash their hands before using the water table.” Otherwise, according to the standard: “All bodies of water such as pools, hot tubs, ponds, creeks, birdbaths, fountains, buckets, and rain barrels must be inaccessible to all children.” Features such as birdbaths must be physically inaccessible, but may be visually accessible. (§746.3701 (8), §746.3407 (6), §746.3417)	<i>Design /Management Considerations:</i> Water play tables are allowed. Standards require: “Emptying water play tables and toys used in water tables daily, sanitizing, and ensuring children and caregivers wash their hands before using the water table.” Otherwise, according to the standard: “All bodies of water such as pools, hot tubs, ponds, creeks, birdbaths, fountains, buckets, and rain barrels must be inaccessible to all children.” Features such as birdbaths must be physically inaccessible to children, but may be visually accessible. (§746.3701 (8), §746.3407 (6), §746.3417)	Not applicable, because feature does not qualify as playground equipment.	<i>Design Considerations:</i> Play components with which children interact are subject to requirements for accessibility contained in Sections 240 and 1008 of TAS if located in childcare centers but not if located in childcare homes. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies to elevated components. Note requirements for accessible routes differ from other landscapes.	May contribute points to P-OLE-02. May contribute points to P-OLE-05 aimed at encouraging connection to nature and sensory experiences for infants

OLE Settings	Minimum Standards for Child-Care Centers (2015)	Minimum Standards for Child-Care Homes (2015)	Texas Health and Safety Code Section 756.061	Texas Accessibility Standards (2012)	Texas Rising Star Guidelines (2015)
Water Play: Sprinklers and Spraying Features that Do Not Pool Water.	Permitted <i>Design /Management Considerations:</i> Unlike wading pools and swimming pools, additional caregivers are not required for sprinkler play. However, a caregiver must not leave children alone with a sprinkler. “You must ensure that no child uses sprinkler equipment on or near a hard, slippery surface, such as a driveway, sidewalk, or patio. You must store sprinkler equipment and water hoses out of children’s reach when not in use.” (§746.2117, §746.5015)	Permitted <i>Design/Management Considerations:</i> Unlike wading pools and swimming pools, additional caregivers are not required for sprinkler play. However, a caregiver must not leave children alone with a sprinkler. “You must not allow sprinkler equipment to be used by children on or near a hard, slippery surface, such as a driveway, sidewalk, or patio. You must store sprinkler equipment and water hoses so that they do not present a hazard to children.” (§747.2017, §747.4815)	Not applicable, because feature does not qualify as playground equipment.	<i>Design Considerations for childcare homes:</i> None <i>For childcare centers only:</i> Sprinklers may either be fixed or mobile and likely to be stowed when not in use. A fixed sprinkler installation would likely be regarded as a play component subject to requirements for accessibility contained in Sections 206.2.17, 240, and 1008.	Not discussed in guidelines.

Appendix 1

Special thanks to the following individuals for participating in interviews related to this report.

***John Hart Asher**, Environmental Designer, Lady Bird Johnson Wildflower Center, University of Texas at Austin

***Paula Barton**, Site Director, University of Texas Child Development Center, San Jacinto

Diana Foss, Urban Wildlife Biologist and Natural Resources Specialist, Texas Parks and Wildlife Department

Josetta Hawthorne, Executive Director, Council for Environmental Education

***Nancy Herron**, Outreach and Education Director, Texas Parks and Wildlife Department

Charles Klein, Associate Professor of Landscape Architecture, Texas Tech University

Jeff Lindstrom, Associate, TBG Partners

Cindy Loeffler, Water Resources Branch Chief, Texas Parks and Wildlife Department

Laura Olson, Program Coordinator, Family Support Services, Go Austin! Vamos Austin!, and Early Childhood Manager, United Way for Greater Austin Early Childhood Program, United Way for Greater Austin

Rhonda Rakow, Provider Services Manager, Child Care Assistance, ChildCareGroup

***Linda Simmons**, Nutrition Specialist, Child and Adult Care Food Program (CACFP), Texas Department of Agriculture

Jason Sowell, Associate Professor and Director of Graduate Program in Landscape Architecture, University of Texas at Austin, School of Architecture

John Sutton, Director of Municipal Water Conservation, Texas Water Development Board

***Jeannie Young**, Program Specialist, Childcare Licensing, Texas Department of Family and Protective Services

Those individuals marked with an asterisk (*) also reviewed an early draft of the report. Additionally, thanks to the following individuals who reviewed an early draft.

Phil Warner, Manager, Workforce Technical Assistance and Childcare, Texas Workforce Commission

Karen Killian, Program Specialist, Texas Workforce Commission

Appendix 2

Discussion: When do stationary natural features qualify as “stationary equipment” or “active play equipment” that is subject to more extensive standards?

Some natural play features will require a use zone, an area 6 feet to all sides of the features that is “free of obstacles that a child could run into or fall on top of and be injured” (§746.4801, §747.4601). The *Minimum Standards for Child-care Centers* and *Minimum Standards for Child-Care Homes* both state: “The use zone for stationary equipment, excluding slides and soft contained play equipment, must extend a minimum of six feet in all directions from the perimeter of the equipment. Use zones for stationary equipment must not overlap other use zones” (§746.4803, §747.4603). What qualifies as stationary equipment under this standard? Why doesn’t every log, boulder, and stump relocated to the site as a play feature require a use zone?

Texas’ minimum standards for childcare facilities draw on technical definitions found in other sources, including various ASTM Standards and the Consumer

Product Safety Commission (CPSC)’s *Handbook for Public Playground Safety*. ASTM F1487-07ae1, which is required for all playground equipment purchased with public funds in Texas, defines “stationary equipment” as “any play structure which has a fixed base and does not move” and defines play structure as a “free standing structure with one or more components and their supporting members” (See sections 3.1.23 and 3.1.41). This definition clearly limits the definition of stationary equipment to freestanding structures that are not movable. Similarly, the CPSC handbook, which is listed in the *Minimum Standards for Child-care Centers* and *Minimum Standards for Child-care Homes as a resource*, defines “stationary play equipment,” as “any play structure that has a fixed base and does not move” (DFPS, 2015, p. vi; CPSC, 2010, p. 4). An earlier version of the CPSC handbook from 1997, when describing how to determine the use zone of “stationary equipment” referred to “the designated play surfaces of each structure” (CPSC, 1997, p. 6).

Under these definitions, individual logs, boulders, and stumps, would not qualify as stationary equipment unless they were

part of a structure intended for play. However, if natural looking materials were combined to create a play structure, it would qualify as stationary equipment and it would require a use zone. Whether the equipment is manufactured by a company or handmade by volunteers is immaterial when making this designation.

Both the *Minimum Standards for Child-care Centers* and the *Minimum Standards for Child-care Homes* also include a variety of requirements for “active play equipment.” As with stationary equipment, the standards do not include a definition of active play equipment or even play equipment. However, once again, the term “play equipment” has a very specific technical meaning. ASTM F2373-11, a standard for “Public Use Play Equipment for Children 6 Months through 23 Months” defines public use play equipment as “play structure that is intended for use in play areas of schools, parks, early care and education facilities,” and a variety of other “areas of public use” (Section 3.1.39). CPSC uses play equipment and playground equipment interchangeably in its handbook. Its definition of “‘public’ playground

equipment” as “equipment for use by children age 6 months through 12 years in the playground areas of: commercial (non-residential) child care facilities...” is not particularly useful since the terms equipment and playground are not defined (CPSC, 2010, p. 1). ASTM F1487-07ae1, which CPSC references, clearly defines public use playground equipment as a “play structure for use in play areas...” (Section 3.1.30) Once again, whether the stationary play features qualify as equipment rests on whether or not they are freestanding structures located in an area designated for play.

Resources

State Regulations for Childcare Facilities in Texas

Minimum Standards for Child-Care Centers
(2015): https://www.dfps.state.tx.us/Child_Care/documents/Standards_and_Regulations/746_Centers.pdf

Minimum Standards for Child-Care Homes
(2015): https://www.dfps.state.tx.us/Child_Care/documents/Standards_and_Regulations/747_Homes.pdf

Texas Accessibility Standards (2012):
<https://www.license.state.tx.us/ab/2012TAS/2012tascomplete.pdf>

Voluntary Guidelines Tied to Public Funding for Childcare Facilities in Texas

*ASTM F1487-07ae1: Standard Consumer
Safety Performance Specification for
Playground Equipment for Public Use*
(2007): <http://www.astm.org/DATABASE.CART/HISTORICAL/F1487-07AE1.htm>

*ASTM F2223 - 04e1 Standard Guide for
ASTM Standards on Playground Surfacing*
(2007): <http://compass.astm.org/Standards/HISTORICAL/F2223-04E1.htm>

Texas Health and Safety Code Sec.
756.061: <http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.756.htm>

*Texas Rising Star Child Care Provider
Certification Guidelines* (2015):
<https://texasrisingstar.org/about-trs/trs-guidelines/>

Grants for Childcare OLEs

Healthier CACFP Recognition
Award/Establishing 3E's Nutrition Grant
Program (Education, Exercise, Eating Right
E3E Grant): <http://www.squaremeals.org/FandNResources/HealthierCACFP.aspx>

Contact your local water authority to learn
if grants are available for converting water
intensive turf areas into low-water
plantings, creating rain gardens, or
implementing other water conserving
measures.

Best Practices for Creating OLEs

Natural Learning Initiative:
<https://naturalearning.org/>

*Nature Play and Learning Places: Creating
and Managing Places where Children
Engage with Nature* by Robin C. Moore
and Allen Cooper (2014):
https://natureplayandlearningplaces.org/wp-content/uploads/2014/09/Nature-Play-Learning-Places_v1.2_Sept22.pdf

Creating Habitat Areas

*Creating a School Habitat: A Planning
Guide for Habitat Enhancement on School
Grounds in Texas:*
http://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_0309.pdf

Texas Wildscapes Certification:
http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/wildscapes/

Invasive Plants in Texas

Texas Invasives- Invasive Plant Database:
http://texasinvasives.org/plant_database

Non-Toxic Plants that Encourage Play

*Plants for Play: A Plant Selection Guide for
Children's Outdoor Environments* by Robin
C. Moore (2002) (book)

Plants for Rain Gardens

Texas Rain Garden Plant List (2009):
<http://rainwaterharvesting.tamu.edu/files/2011/05/Rain-Garden-Plant-List-11-02-09.pdf>

Managing Risks Related to Natural and Naturalistic Features in OLEs

Chapter 6 of *Nature Play and Learning Places: Creating and Managing Places where Children Engage with Nature* by Robin C. Moore and Allen Cooper (2014):
https://natureplayandlearningplaces.org/wp-content/uploads/2014/09/Nature-Play-Learning-Places_v1.2_Sept22.pdf

Firewise Landscaping in Texas (2012):
[http://texasforests.tamu.edu/uploadedFiles/TFSMain/Preparing_for_Wildfires/Prepare_Your_Home_for_Wildfires/Contact_Us/EDITED%202012firelandscape\(1\).pdf](http://texasforests.tamu.edu/uploadedFiles/TFSMain/Preparing_for_Wildfires/Prepare_Your_Home_for_Wildfires/Contact_Us/EDITED%202012firelandscape(1).pdf)

Managing Risk Related to Playground Equipment

ASTM F1487-11: Standard Consumer Safety Performance Specification for

Playground Equipment for Public Use (2011): <http://dx.doi.org/10.1520/F1487-11>.

ASTM F2223-15: Standard Guide for ASTM Standards on Playground Surfacing (2015):
<http://dx.doi.org/10.1520/F2223-15>.

ASTM F2373-11: Standard Consumer Safety Performance Specification for Public Use Play Equipment for Children 6 Months through 23 Months (2011):
<http://dx.doi.org/10.1520/F2373-11>

U.S. Consumer Product Safety Commission's Public Playground Safety Handbook (2010):
<https://www.cpsc.gov/PageFiles/122149/325.pdf>

U.S. Consumer Product Safety Commission's Handbook for Public Playground Safety (1997). (Historical reference only):
http://www.michigan.gov/documents/dhs/Handbook_for_Public_Safety_CPSC_PUB-325_241534_7.pdf

Summary of Health and Wellness Benefits Associated with Access to Nature

American Public Health Association Policy Statement: *Improving Health and Wellness Through Access to Nature*:
<https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/08/09/18/improving-health-and-wellness-through-access-to-nature>

Sustainable Landscape Design

Sustainable Sites Initiative
<http://www.sustainable-sites.org/projects>

Texas A&M AgriLife Extension, Earth-Kind Landscaping Resources
<http://aggie-horticulture.tamu.edu/earthkind/publications/#water>

U.S. Environmental Protection Agency Resources on Low Impact Development
<https://www.epa.gov/polluted-runoff-nonpoint-source-pollution/urban-runoff-low-impact-development>

