

GROWING A SHARED SCHOOLYARD:

Strategies for Transferring Stewardship and
Supporting Learning Communities in Richmond, VA



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Introduction

Schoolyards play an important role in cities, in not just supporting children’s mental and physical health but also in bolstering green infrastructure and ecosystems crucial to ensuring greater resilience against heat islands (Bikomeye, Balza, & Beyer, 2021; Díaz-López et al, 2026). By shifting from asphalt, concrete and mowed grass to gardens, meadows and forests, schoolyards can become powerful places of teaching and learning, and welcoming community gathering spaces (van den Bogerd et al, 2023). Beyond providing human benefits, green schoolyards offer natural shading, absorb and clean stormwater runoff, and support multi-species biodiversity, all building more resilient city spaces for human and more-than-human life (Clauzel et al, 2025; Michaels & De La Bellacasa, 2026).

But how to care and sustain these changing schoolyards across seasons and school years remains a challenge on multiple fronts. City school divisions often face annual shortfalls in funding resources, making it difficult to carry forward funding for people’s time and equipment. Higher turnover rates among educators and administrators can make it difficult to share expertise and insights year to year. Yet at the same time, cities are sustained by vibrant communities of caregivers, youth-serving organizations, and local government agencies, known for their actions organizing and collaborating to strengthen city learning ecosystems.

Sustaining green schoolyards is of mutual interest to us. As an associate professor at William & Mary’s School of Education and an environmental educator at Alliance for the Chesapeake Bay (“The Alliance”), we share a curiosity and wonder about how schoolyards can become more vibrant places, what ecological and social systems can flourish therein, what learning becomes possible as new relationships and partnerships are formed, and how stewardship can be sustained and transformed over time.

In this white paper, we describe one approach to sharing and shifting stewardship of a green schoolyard, focusing on an elementary school in Richmond, VA. Drawing on interviews with a wide range of school community stakeholders, and reviewing relevant research from public websites and digitally accessible research journals, we describe a case study example of the shifting stewardship at Lois Harrison-Jones Elementary School (LHJ). This shift occurred when stewardship transitioned from the Richmond Public School’s Facilities Department staff to the Alliance for the Chesapeake Bay and now to LHJ’s Parent Teacher Association (PTA) leadership. We investigate the nuances of stewarding a green schoolyard, as opposed to other public places - and offer a series of best practices for other school communities.

Our hope is that this white paper can be a resource in the city of Richmond, the surrounding Chesapeake Bay watershed and beyond, for sustaining more ecologically vibrant schoolyards.

The intended audiences are:

- City-based school divisions administrators, curriculum leads, and teachers
- Youth-serving and non-profit organizations
- Regional school communities in the wider Chesapeake Bay watershed
- Virginia Environmental Literacy Network (VEN) members
- Virginia Association of Environmental Education (VAEE) members
- National Association of Environmental Educator (NAEE) members
- Chesapeake Bay Landscape Conservation Council (CCLC) members
- Past, current and future Chesapeake Bay Trust grant applicants



Aerial photo of Lois Harrison-Jones Elementary School's green schoolyard taken on August 14, 2024, three years after project installation.



SECTION 1: Why are Green Schoolyards Important in Cities?

When concrete, asphalt, and mowed grass expanses are transformed into forests, gardens, and open meadows, new green schoolyards emerge with multiple benefits. These powerful places can expand what types of learning can happen, while also creating ecological systems that support habitats for multiple species, improve stormwater management, and counter heat island effects in US cities.

Expanding Types of Learning: Play, Wonder, and New Relationships

Changing schoolyards creates new types of play for children, new opportunities for wonder, and infinite curricular connections for educators (Tranter & Malone, 2004). Shifts in socio-emotional wellbeing, physical activity, and academic learning gains - all interrelated - have been documented in national and international studies of green schoolyards (Bikomeye, Balza & Beyer, 2021).

Importantly, green schoolyards make possible new opportunities for learning outdoors, in turn changing relationships among children, educators, caregivers, community members and the socio-ecological systems themselves that everyone calls home (Starr et al, 2026).



Kindergarten students studying a schoolyard tree's bark texture and patterns.

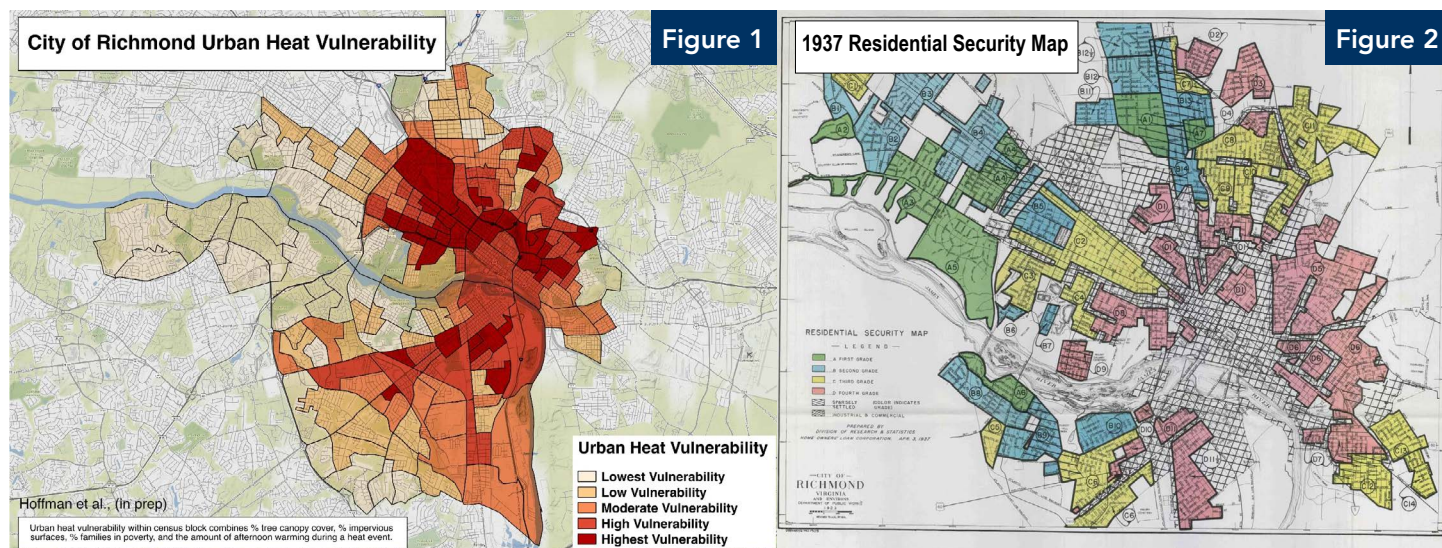
Supporting Biodiversity and Multi-Species Thrivance

Green schoolyards also bring a host of benefits to ecological systems, such as building resilience to drought and other extreme weather fluctuations, and creating and sustaining more complex habitats. Even a small greening project can boost communities of microbes, insects, birds, small mammals and other organisms and build more robust networks above and below the ground surface.



Countering Heat Islands in US Cities Through Green Schoolyards

The heat island effect particularly impacts cities, causing higher temperatures and humidity relative to surrounding suburban and rural areas (<https://www.epa.gov/heatislands>). Redlining and other deliberate disinvestment strategies based on race, begun in the 1930s, has led to an unequal distribution of heat island effects in US cities today (Hoffman, Shandas & Pendleton, 2020). For example, in Richmond, VA, the areas of greatest urban heat vulnerability today are the same areas targeted for divestment almost 80 years ago (See Figures 1 and 2 below), disproportionately impacting residents who are from lower income households and marginalized racial groups.



Schoolyards are a crucial context for adaptation and resiliency to countering heat islands' impacts and these lingering inequalities, as part of wider efforts to strengthen the city's green infrastructures. Schoolyards' reforested and garden areas lower surface temperatures substantially compared to asphalt, concrete, or mowed grass. Natural shade and shade structures provide localized areas of even greater cooling (Antoniadis, Katsoulas, & Papanastasiou, 2020), critical for children who are more sensitive to heat than adults.



SECTION 2: What Is Long-Term Stewardship?

While there can be much enthusiasm and resources for initial green schoolyard changes, from designing plans to planting, there is often less attention to the long-term stewardship needed to sustain these spaces over time. Below, we offer a working definition of stewardship, outline the different components of long-term models, and describe a shifting stewardship model using a specific case study.

Defining Stewardship

Stewardship encompasses a range of activities, a term that as Green Schoolyards America notes “shifts our focus from ‘maintenance’ as a chore to one of care, consideration, and relationship to the space” (Pringle & Ercelwan, 2024, pg. 1). We champion this terminology, as it includes a host of gardening, mulching, and irrigation tasks, as well as community organizing, shifting teaching practices, and new relationship building through networks. In fact, throughout our project, we came to see the importance of using the word “stewardship” versus “maintenance” as essential to capturing the mixture of care happening to sustain the changing schoolyard. Stewardship as a term is also useful for re-orienting humans as part of - not separate from - the broader socio-ecological systems in which we live, work, and play. This is especially powerful in school-based settings, where green schoolyards have the potential to transform how children and adults relate to one another and more-than-human life.



Above, volunteers perform a variety of stewardship tasks.

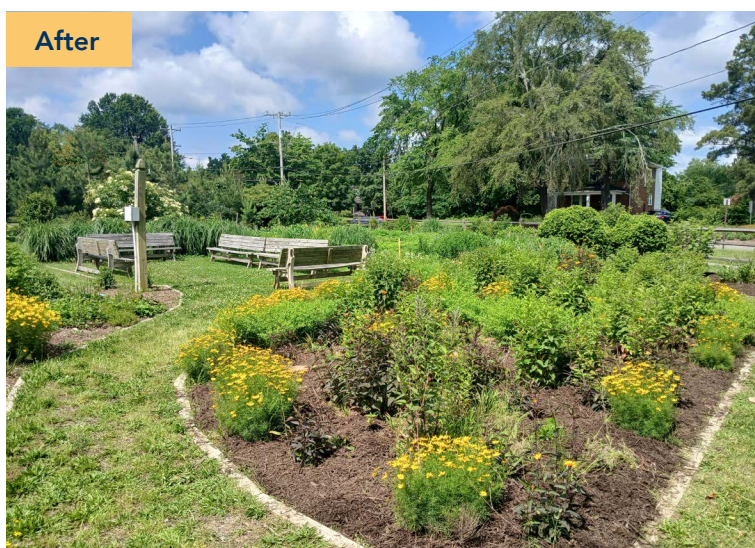
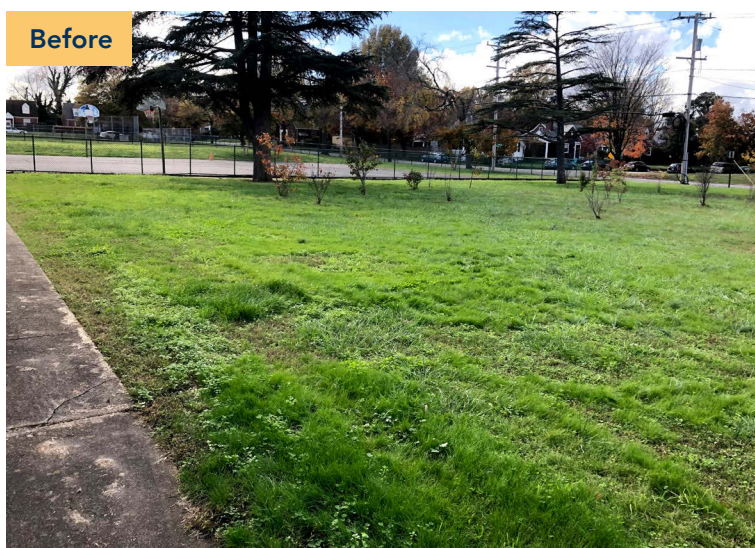
Building Successful Long-Term Stewardship Models

Long-term stewardship for green schoolyards takes many forms, but “requires sustained attention and works best when it is supported by the district and is woven into the overall culture of a school” (Pringle & Ercelwan, 2024, pg. 1). In an article titled “How to Care for Schoolyard Forests and Living Schoolyards | Part 1 Stewardship principles and best practices”, the authors highlight three core principles to guide the process: expect change, embrace nature, and develop an ethic of care and connection. They also describe five component parts of any long-term stewardship model: Design with stewardship and management in mind, Establish partners in stewardship, Form a committee, Draft a stewardship plan and Keep records.

Lois Harrison-Jones Elementary School: A Case Study of Shifting Partnerships, People, and Funding in Richmond, VA

In February 2020, a partnership began when the Alliance for the Chesapeake Bay’s Environmental Education Specialist, Meredith Dash, connected with Michael Powell, former Principal of Lois Harrison-Jones Elementary School. Mr. Powell sought to create multiple outdoor classroom spaces around his schoolyard through a proposal he wrote called, “The No Child Left Inside (NCLI) Outdoor Heat Island Classroom Project Proposal.” The Alliance took action and received a [Conserve the Future Fund](#) grant for \$40,000 through the Community Foundation for Greater Richmond, with \$5,000 matching support from Richmond’s [Department of Public Utilities](#), to build out a portion of his proposal and it became known as the Reforestation Area.

Designed by the landscaping professionals at [Manchester Gardening](#), the [Reforestation Area](#) mimics forest succession (Figure 3). Each section represents a different time period along an ecosystem gradient, from meadow to mature forest (Figure 3). The 15,000 square foot project has added 34 trees, more than 302 native plants, and a meadow to what was previously an empty lawn (Figure 4).



The schoolyard locale currently includes sweetbay magnolia, loblolly pines, two bald cypress and a circle of oak trees known as a “council ring” based on the designs of landscape designer Jens Jensen (Haiman, 2009). As the oak trees mature, the council ring is an intentional shaded gathering area for classes or communities to meet. In the past five years, the forest succession has become clearly visible. Native trees show strong signs of growth, birds, butterflies and bees are plentiful, and parents use the area as a restful place on Friday mornings where they gather after dropping their children off and have coffee.

Stewardship of the Reforestation Area has been ongoing since project installation in 2021. Stewardship costs have been offset by additional grants from [Dominion Energy](#), in-kind donations from Richmond Tree Stewards and Bartlett Tree Service for tree care. Regular volunteer events, facilitated by the Alliance, have allowed [Manchester Gardening](#), [HandsOn](#) volunteers, the [LHJ Parent Teacher Association](#), and corporate volunteers, including Dominion Energy and CarMax employees to work in the space. In 2024, the Alliance transitioned stewardship of the Reforestation Area to the LHJ PTA's self-named “Garden Party Committee”, a group of dedicated parents, partners and interested volunteers. For the last two years, the PTA has used membership and fundraising funds to support mowing, mulching, and weeding activities at approximately \$8,000/per year. It is important to note that active, well resourced PTAs are better able to handle this annual maintenance cost as part of their yearly budget.

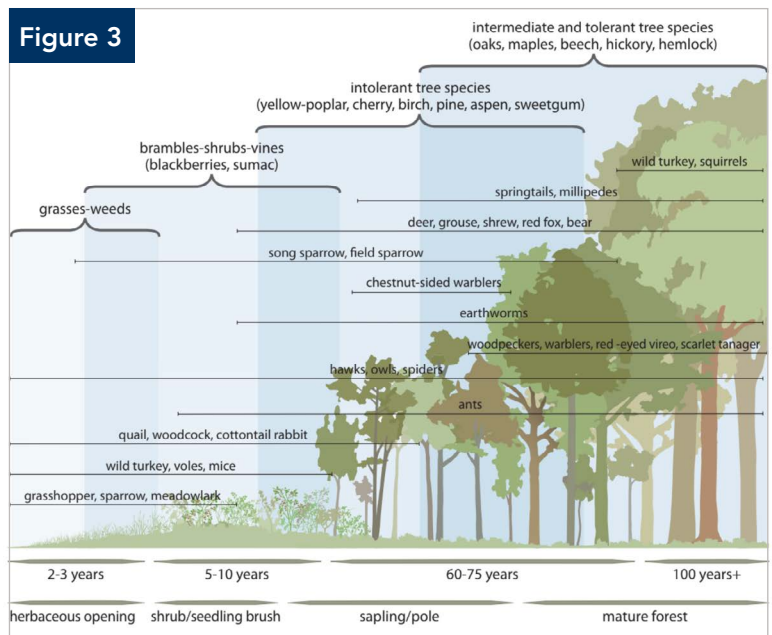


Figure 3: Forest Succession as depicted in [The Woods in Your Backyard: Learning to Create and Enhance Natural Areas Around Your Home](#)

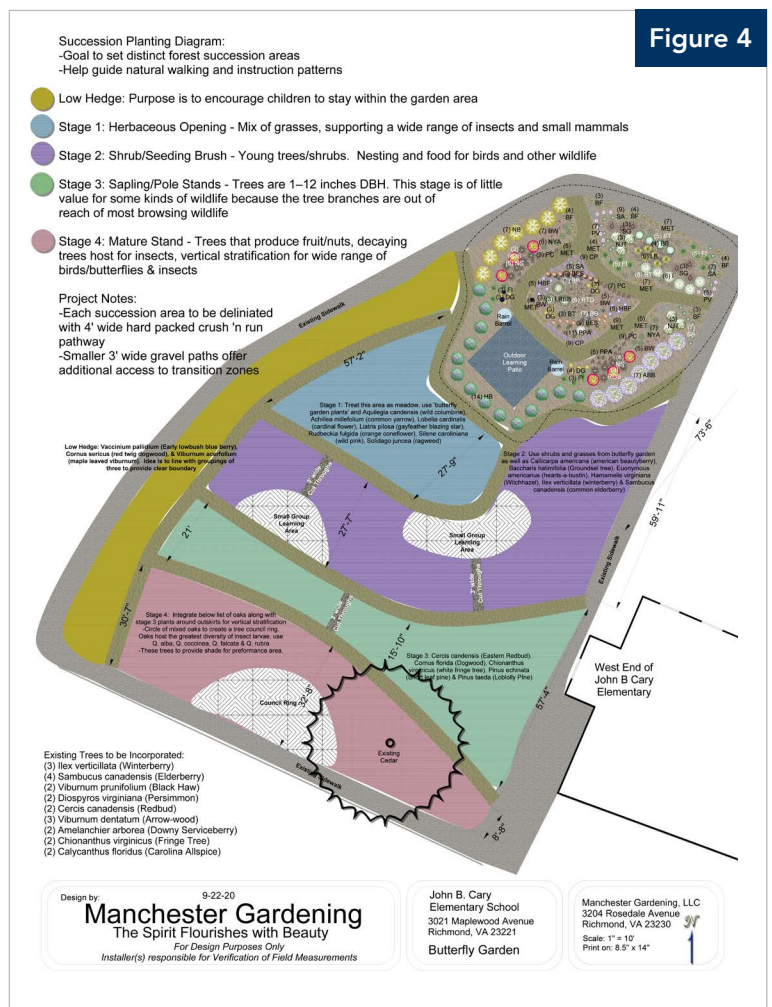


Figure 4: Original design of Reforestation Area by Manchester Gardening.



SECTION 3: Themes and Recommendations from Community Interviews and Resource Review

To understand how long-term stewardship takes shape in school communities, we conducted group interviews with members of the LHJ school community in the winter and spring of the 2025-2026 school year and reviewed public and paywalled resources on city-based green schoolyards and long-term stewardship models.



5th grade students used posit it notes and a large color photograph map to share their ideas and insights about the changing schoolyard.

Community Interviews

At five different sessions, we held hour-long focus group interviews with members of Lois Harrison-Jones Elementary School. This included current 5th grade students, current administrators, elementary science instructional coaches and district leads, current and past LHJ elementary teachers, and current PTA members.

Over the span of an hour, we led participants through activities that included (1) free-writing and drawing, (2) map annotation and (3) outside walking observations and conversations. First, we asked participants to draw and/or write their responses to these two prompts: What are signs that the schoolyard is thriving? What are changes that you have noticed in the reforested schoolyard?

Next, using post-it notes placed on top of a large 4 feet by 5 feet color photograph of the schoolyard, we asked school community members to show us where they go in the schoolyard before, during and out of school hours. We also asked for them to show how other people use and move through the schoolyards. Lastly, we asked their ideas about who cares for these different places in the schoolyard? And what type of care work they do?

Finally, we headed outside with participants to the Reforestation Area. They heard a short introduction about the area's transformation, completed a silent walking reflection using their senses, and then discussed their ideas about who cares for the different areas now, what type of care the schoolyard needs to sustain itself, what places have the potential for teaching and learning at LHJ and what hopes they have for this green schoolyard going forward.

Emergent Themes

Theme 1: Stewardship means different things to different people.

Administrators tended to focus on a broader birds-eye perspective, describing particular city and school entities (Parks and Recreation, RPS Facility Services), individual schools, parent groups, and community organizations. Teachers focused more on the general tasks like mowing and garden maintenance across the whole duration of the day, tied to their knowledge of afterschool and outdoor classroom group collaborations. Since recess is held away from the Reforestation Area, there was less discussion by teachers of green schoolyard specific care in that area. PTA members had detailed insights into the wide range of people and activities caring for multiple schoolyard places, focusing on specific places and people and activities.

Children focused on both human and more than human, describing mulching, mowing, weeding as well as pollinators, water and sunlight as key forms of care. They also raised instances of "anti-care" such as a drastic pruning of trees that appeared harmful to the trees.



Administrators discuss who uses the schoolyard and where they go in the schoolyard while researcher Kathryn Lanouette looks over their responses.



During the second part of the session, participants spent time walking outside in the Restoration Area and using their senses to make observations.

Theme 2: Stewardship on a Continuum

Stewardship also took many forms, from paid, contractual maintenance work, to volunteer non-paid tasks and activities, to emotional and multi-sensory connection to the changing schoolyard's plant and animal life. This theme reflects broader patterns we noticed in the Alliance's own work and in each groups' ideas - is it maintenance, is it care, is it stewardship, is it something else that is needed to sustain the changing schoolyard?

Theme 3: Stewardship to Whose Benefit?

At several points, the suggested care of the schoolyard shifted based on who was projected to benefit. For example, Beautyberry bushes were selected by Alliance and Manchester Gardening because they are a native plant that supports local birds with its vibrant purple berries. Yet from administrators' perspectives, these bright berries were not readily edible for children, presenting a challenge. Additionally, tall grasses from the meadow area provided habitats for multiple plant and animal life, yet as the heights increased, it was difficult to see students as they moved through the area. Clear communication is key, especially as landscape designs need to closely consider school needs and stewardship approaches need to shift and change as the space matures.

Strengthening Stewardship: Recommendations from Interviews

Increasing ACCESS

Provide children with free play in reforested areas, so it can be a welcome and familiar area for all ages. Additionally, update teacher's building key cards so all entrances in and out of school can make the egress to and from the green schoolyard area more efficient for educators and students during the school day.

Adding STRUCTURE

Consider adding moveable shade structures, different forms of seating and an outdoor drinking fountain to make the space more conducive to gathering and teaching, especially during hotter weather.

Supporting CURRICULAR INTEGRATION

Support educators in teaching outside, through professional learning sessions about their green schoolyard and outdoor environmental education opportunities. Provide paid planning time for teachers to integrate their professional learning into grade leveled curriculum, as appropriate.

Resource Review

To learn more about long-term stewardship best practices in city green schoolyards, we also reviewed publicly available resources such as organization's websites and posted manuals and case studies. We also reviewed academic journals, often behind paywalls. Below we share initial themes from these resources.

Emergent Themes from Publicly Available Resources

Theme 1: Support of Stewardship Varies

Notable variation exists among school districts in the level of support available for funding, volunteers, and physical resources needed for the long-term stewardship of green schoolyards (Schoolyard Forest Case Studies, 2026). This variation presents an opportunity for divisions to learn from one another and share successful approaches. At the same time, there remains a lack of clarity regarding the roles and responsibilities of individual schools, school districts, external partners, and volunteers in supporting long-term stewardship efforts. While substantial support is often available during the initial establishment of green schoolyards, significantly less assistance is provided for their ongoing care and management.

Theme 2: Specific vs. Holistic Stewardship

Existing resources also tend to focus on specific maintenance tasks, such as garden upkeep or individual tree care, rather than the holistic management of green infrastructure projects or complex forest ecosystems. For example, resources such as Arbor Day Foundation’s “Right Tree, Right Place” emphasize selecting an appropriate tree for a particular location, while materials like the “Training Manual for Tree Stewards” focus on identifying specific tree health issues. As a result, these resources provide limited guidance on the long-term stewardship of interconnected tree communities and broader ecological systems in schoolyard communities.



3rd grade students use a map to mark which areas of the schoolyard are best for supporting plants and animals.

Emergent Themes from Academic Journal Resources

Theme 1: Children’s Role in Stewardship

Most studies on green schoolyards and children tend to focus on children as designers of green schoolyards, detailing how voice and agency in the building process can be both supported and thwarted (e.g., Dominiak-Szymańska et al., 2024; Chawla, 2024). Alternatively, several studies documented children’s play and movement within redesigned green schoolyards, describing different ways the green schoolyards served as restorative or transformative spaces (Arvidsen & Beames, 2019; Nelson & Drew, 2024), or were transformed through play by children (Tranter & Malone, 2004; Lucas & Dymont, 2010). Importantly, environmental learning and play were co-constituted, with school communities’ philosophies about engagement and stewardship having an equal or more impact on what learning was possible (Malone & Tranter, 2003).

Theme 2: Types of Green Schoolyards

The majority of green schoolyard studies focused on school gardens, with just a select few focusing specifically on schoolyard forests or more varied ecological systems. None of the forest-based studies identified to date focused on city schoolyards; instead they focused on suburban, exurban, and rural school communities. If schoolyard forests were a focus, the majority were outside the United States.

In terms of long-term stewardship, very few studies explored the partnerships and learning involved in sustaining green schoolyards, mirroring broader trends in green schoolyard stewardship in environmental education research and city-based green infrastructure funding. Select studies documented caregiver’s support of green schoolyards but noted their limited ability to help beyond initial design and installation (van Dijk-Wesselius et al., 2021).



Children helping plant new species in the schoolyard.

Strengthening Stewardship: Recommendations from Resource Review

Support more REGIONAL studies

Need for more case studies of all the creative ways stewardship of forested green schoolyards can be supported, focused throughout the Mid-Atlantic and the Chesapeake Bay watershed. In the US, California constitutes the majority of existing work, due to Green Schoolyards America long-standing partnership in the state.

Connect to LOCAL PLANS

Need for green schoolyard stewardship plans to be linked to school division’s strategic plan, local Environmental Literacy Plans, or school division Facilities Plans, and broader regional city-based green infrastructure efforts.

Learn more from CHILDREN

More scholarship is needed that listens closely to children’s insights and ideas about their schoolyards, learning from them how to design and care for these ecologically vibrant places.



SECTION 4: Best Practices for Sharing and Shifting Long-term Stewardship

With the Green Schoolyards America framework in mind (Pringle & Ercelwan, 2024), there are a multitude of ways to sustain green schoolyards, forests and gardens. To develop the best practices below, we draw from lived experience through stewardship of LHJ and another RPS green schoolyard, the resource review, and information shared during focus group interviews. We offer these field-tested practices in the stewardship of Lois-Harrison Jones Elementary School and we see them as having value and applicability to other city green schoolyards.

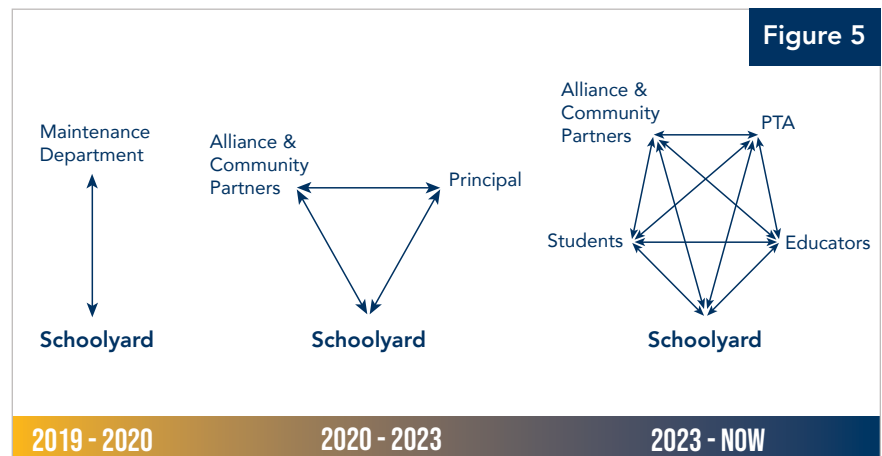
- #1** Build a multi-faceted network focused on long-term stewardship.
- #2** Clarify roles and responsibilities.
- #3** Establish routine stewardship events.
- #4** Provide hands-on education about stewardship.
- #5** Get ready to adapt and learn!

#1 BUILD A MULTI-FACETED NETWORK FOCUSED ON LONG-TERM STEWARDSHIP

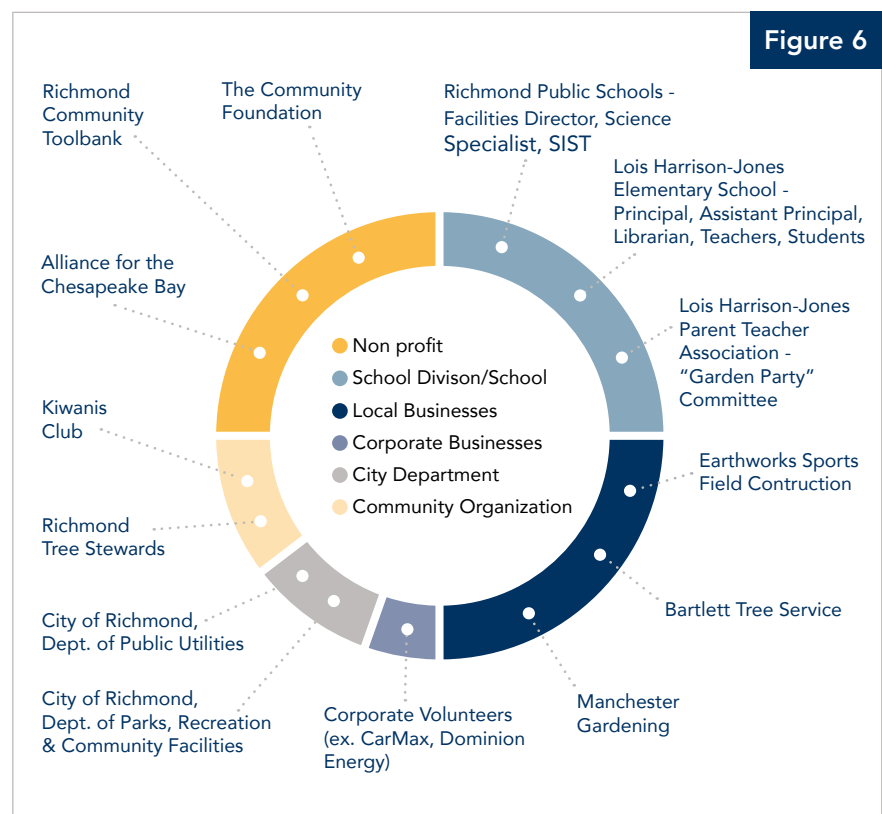
According to Green Schoolyards America, "Schoolyard forests and living schoolyards require a team to manage and sustain them through the years (Pringle & Ercelawn, 2024, p.5). The members of this team or network may ebb and flow over the lifetime of the project and will serve as the main driver of stewardship at the school site. Green Schoolyards America emphasizes the importance of recruiting new members each year to avoid burnout. Service learning, engaging students in meaningful service while addressing a community need, is one way to target youth volunteers for your network (Claggett, 2021). Some school divisions have the advantage of permanent grounds maintenance staff (Sudilovsky et al., 2023) others have Environment Food Garden Champions (Sudilovsky et al., 2023) and others rely more heavily on community members and volunteers due to the limited facilities staff for school divisions.

The timeline (see Figure 5 and Figure 6) gives sense of the latter and how the stewardship network at LHJ has shifted and is currently operating.

Shifting Stewardship Model for the Reforestation Area



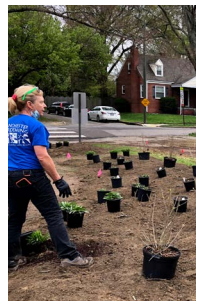
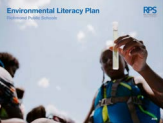
Current Network of Stewardship Partners and Type of Partners



#2 CLARIFY ROLES AND RESPONSIBILITIES

We draw on the expertise of Green Schoolyards America and our own lived experience at LHJ to approach stewarding and sustaining a schoolyard with a clear understanding of partner roles and responsibilities. Stewardship responsibilities can be specific to the task (Sudilovsky et al., 2023), the type of plant (McGlone et al., 2025) or to the season (Corson, n.d.). Teachers, students and administrators at LHJ spoke about observed “mowing” and “weeding” in the Reforestation Area, but answers varied as to who or what organization was responsible for those tasks. Meeting regularly with your network avoids confusion, holds members accountable to their tasks and allows for roles and responsibilities to adapt and adjust over time.

Shifting Stewardship Roles and Responsibilities at LHJ:

	Alliance for the Chesapeake Bay Grant write to fund project, manage grant, manage maintenance from installation to 2024, professional learning for teachers (2021-2022), environmental education lessons for students (various times during 2023-2025), technical support for lifetime of the project.	  	LHJ PTA/Garden Party Committee Engage school community members in care, fundraising for maintenance of the project, main stewards of the Reforestation Area, seek guidance from network when needed, act as decision makers for the future of the space, perform garden maintenance tasks themselves, using contractors, volunteers or some combination.
	Corporate Volunteers (ex. CarMax, Dominion Energy) - Garden maintenance tasks such as mowing, weed whacking, hand weeding, mulching, pruning.		
	Earthworks - Install irrigation system, maintain lines and sprinkler heads for the life of the project, winterize system when needed.		
	Lois Harrison-Jones Elementary School Principal & Assistant Principal Assist in project installation, show up to volunteer events, provide site access, attend project meetings, encourage use of projects by teachers and students.		Richmond Public Schools Facilities Director Approve project, provide site access, answer site specific questions such as location of water sources or future plans for buildings.
			Manchester Gardening Provide oversight of installation, provide technical gardening and land-scaping expertise (ie. watering, plant selection and location, weed suppression, compost, pruning), show up to volunteer events, provide pro bono garden maintenance.
			Richmond Public Schools Science Specialist - Support professional learning for teachers, connect the project to goals of RPS Environmental Literacy Plan.

#3 ESTABLISH ROUTINE STEWARDSHIP EVENTS

By holding stewardship events on a regular basis as part of annual management, networks can help green schoolyards thrive. The purpose of routine events vary per schoolyard and can range from control of invasive species populations (Corson, n.d.) monitoring tree health (McGlone et al., 2025) to mulch replacement. In addition, Green Schoolyards America explains hosts should plan stewardship events around different seasonal cycles (ex. Leaf drop, frozen ground in winter) and academic cycles (e.g., school break closures; Pringle & Ercelawn, 2024). The Alliance hosted events in Fall, Spring and limited events in Winter and Summer, unless early morning or late evening. During the interviews, teachers reflected on the need for shade and outdoor access to drinking water in order for students to participate in stewarding the Reforestation Area. These events can be conducted and/or hosted by permanent school staff (Sudilovsky et al., 2023) or partners within the network (McGlone et al., 2025). Other notable aspects of stewardship events include using a volunteer platform to track events, providing food and drinks for participants, reviewing safety information, and communicating about your event with the school (Pringle & Ercelawn, 2024).



In Richmond, VA, the Alliance uses the volunteer engagement platform called [CFEngage](#), hosted by the [Community Foundation](#) for a Greater Richmond, which requires training on how to work with volunteers.



In the first 3 years after installing the Reforestation Area at LHJ, we hosted 3-4 community volunteer events during peak growth season/per year and gradually decreased to quarterly events. We used our [own website](#), [Chesapeake Network](#) and word of mouth to past volunteers to advertise events.



We have had volunteers that are community members, Green Teams from corporate sponsors/businesses, students seeking service hours or fulfilling court-appointed hours, clubs and parents. In January/February, Alliance conducts a site visit to reassess what stewardship is required and create a schedule of events for the rest of the year.

#4 PROVIDE HANDS-ON EDUCATION ABOUT STEWARDSHIP

In Trees and Schools: Growing the Connection, A Resource Guide for Chesapeake Communities, “Trees and green spaces provide an accessible and multidisciplinary environment...” (Claggett, 2021, p.5). In other words, green schoolyards are natural extensions for learning across subject areas in the outdoors. As a green schoolyard takes shape, multiple forms of hands-on education help a network and community learn about tree planting tips (Cooper, 2022), and tree care (Tree Care & Maintenance, 2026). As revealed by our interviews, sometimes members of the network will have limited stewardship experience. One PTA member noted she grew up “in the city with a very small yard” that required minimal maintenance. She continued to explain that for folks who are used to small yards, understandably, weeding a much larger area might feel overwhelming. By capitalizing on partner strengths to educate the network through active demonstrations during a volunteer event (see picture below) or allowing reflection time between volunteers at the end of a stewardship task, the Alliance turns these events into opportunities to train others and fill stewardship gaps. Find additional ideas of extending learning about stewardship on <https://www.allianceforthebay.org/lhj>.

In-person Teaching

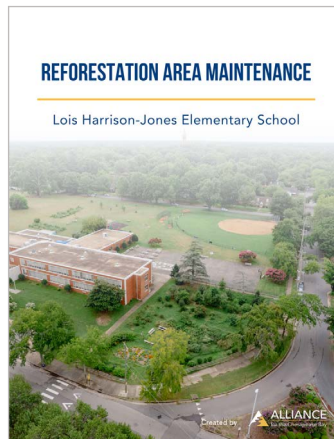


In 2021, LHJ teachers attended a professional learning series called, “Come Outside Cougars,” where they learned how to compare the surface temperature of the blacktop vs. under a tree in the Reforestation Area using a surface temperature thermometer.



Alliance staff Christina Bonini and Neal Friedman demonstrate proper tree planting for volunteers.

Educational Resources



Created specifically for the Reforestation Area at LHJ by Alliance staff, this guide contains site-specific stewardship practices, history of the project, points of contact, annual and monthly maintenance checklists, maps of irrigation and plant zones, native and invasive plant lists, and tips for leading volunteer days. A copy was given to the LHJ PTA and the school office, and is available to the public through <https://www.allianceforthebay.org/LHJ>



An educational sign was custom designed to be used by teachers, students and community members who visit the Reforestation Area. This sign describes forest succession in simple terms, uses a map to orient visitors to the space and questions to activate a sense of wonder.

#5 GET READY TO ADAPT AND LEARN!

Green schoolyards are dynamic systems, with their stewardship requiring attunement and adaptation or as Green Schoolyards America states, “a willingness to engage with—and even embrace—“messy” natural processes” (Pringle & Ercelawn, 2024). Members of the stewardship network should be aware of the seasonal shifts within the school, such as transitions in leadership, policies, and staffing, as well as shifts within the schoolyard as it matures, such as plant replacement, weed pressure, and height variation. For example, PTA leaders reported during the interviews that they host leaf collections during the fall so they may purposely spread leaves under the larger trees to force a “forested floor” and try to suppress weeds until the trees reach maturity and drop enough leaves to effectively cover the ground. Adapting to the amount of watering needed for newly planted trees changes after an establishment period (Sudilovsky et al., 2023). All of these points illustrate moments to learn, reflect and strategize with your network on a way forward that works with the natural progression of the space. Table 1 outlines site specific examples of adapting at LHJ.

Reforestation Area Zone	Issue	Solution
Perennial pollinator garden	We did not plant densely enough and wiregrass moved in quickly.	We transplanted the plants that had survived, solarized the area using a plastic tarp, then re-planted the space, more densely, using a variety of sizes of plants.
Meadow	The combination of native perennial grasses and flowers grew in and were much taller than expected with weeds growing throughout. School staff said they could not see students on all sides (ie. sight lines were difficult). The meadow also was accidentally mowed down due to a miscommunication. Growing back in, more weeds have appeared.	The plan is to divide the meadow with a walking path through the middle so that students can have better access, sight lines are improved and there is less space overall to be stewarded.
Trees/forest	We noticed a strange, orange-tinted fungus growing on two of the pine trees that appeared to be damaging tree branches. 	We worked with Manchester Gardening to identify the fungus as Southern Fusiform Rust and immediately pruned the damaged branches.
Trees/forest	A line of pine trees with a circle of oak trees was planted in the back of the Reforestation Area to demonstrate mature trees in the forest. When planted, the trees were about 7-8 feet tall and the ground beneath the trees was mulched with wood chips. Wiregrass quickly grew in and made the gathering space inside the circle of oaks uncomfortable for staff and students.	The PTA organized a leaf collection. Community members dropped off bags of leaves to the school which then were spread under the trees to help simulate and speed up the process of creating a forest floor.



SECTION 5: Takeaways and Next Steps

Green schoolyards bring a wealth of benefits to people, communities and urban flora and fauna. By transforming asphalt, mowed grass and concrete surfaces into forests, gardens, and pollinator meadows, new relationships, learning, and connection have become possible at Lois Harrison-Jones Elementary School. However, a transformation is not enough. We urge schools to collaborate with their community partners to plan for and apply long-term stewardship practices to achieve success.

In Richmond Public Schools alone, there are approximately 617 acres of land (Facilities Department, personal communication, 6/2/2026) housing 49 school buildings and their surrounding schoolyards, managed and maintained by the school division facility team. Lois Harrison-Jones Elementary's site is estimated to cover 10.5 of those 617 acres (Champion, 2024). Working to build more robust stewardship networks and support RPS in best stewardship practices is critical to sustaining care for the LHJ schoolyard and the others within the division. In 2024, community partners, alongside RPS, published the [Richmond Environmental Literacy Plan](#). "The Plan has been developed for the students at RPS and seeks to support their development into conscientious, confident adult stewards, driven to advocate for the collective good" (Environmental Literacy Plan Richmond Public Schools, 2024, p.1). Thriving green schoolyards must be present to offer the robust teaching and learning opportunities discussed in the Environmental Literacy Plan. More importantly, thriving green schoolyards are necessary to counter increasing heat island effects prevalent in Richmond, VA and other US cities.

We are excited by how changing schoolyards can influence ecological systems and learning systems (never separate, e.g., Hecht & Crowley, 2020), and see ample opportunities for further scholarship and advocacy. Future focus group interviews with Alliance staff and community organizations and others that played a role in the Reforestation Area are necessary to reveal more about the shifting stewardship in our case study. While embracing the principles laid out by Green Schoolyards America, we want to further examine the cost to long-term stewardship. Some models of funding were revealed during the resource review process (ie. grants, city parcel tax) but there is room to learn more. Finally, we remain committed to adapting our understanding of long-term stewardship as new information becomes available. Through collaboration, successfully "growing a shared schoolyard" becomes possible.

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DEDICATION

In memory of Michael Powell (center, blue shirt), former Principal at Lois Harrison-Jones Elementary School (formerly John B. Cary Elementary) who was a driver for reimagining green schoolyards and children's learning outdoors.

