EVERGREEN

ALL HANDS: A PRIMER

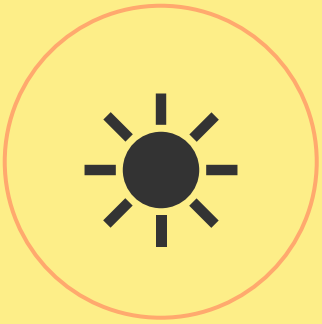
Designing and Greening School Grounds in a Changing Climate

August 2025

WHY GREEN YOUR SCHOOL GROUND?

Greening your school grounds is an exciting and worthwhile project that can benefit the whole school community. By using nature and ecology as a foundation, schools can foster creativity, learn about and practice sustainability, and help the community understand what is involved in climate resilient design.

Climate change increases the risks of major weather events such as flooding and extreme heat. Increasing natural permeability and shady areas are key components of a climate ready school ground.



WHAT THIS PRIMER WILL HELP YOU DO

This primer offers practical guidance to help you organize the actions to take from start to finish.

The phases of action are:

Phase 1: Getting your project started

Phase 2: Building your team

Phase 3: Gathering information and input

Phase 4: Digging into design

Phase 5: Creating a budget and finding support through fundraising

Phase 6: Getting ready for planting day and sharing the results

Phase 1

Getting Your Project Started

It's exciting to imagine the possibilities when it comes to greening school grounds.

Most active public schools were designed and built before sustainable design principles were widely understood or economically feasible. The school's exterior property – the school grounds – is no different; a grassy field, a play structure and a whole lot of concrete is likely the extent of it.

The work to reimagine your school grounds will depend on a variety of people with different personalities, skills and experience. While your project may have a clear leader, it is the collective vision of the whole team that will transform your school grounds from the ordinary to the extraordinary. We highly recommend that you use a participatory design process to start and sustain your project.

The 5 Design Principles

Use these five design principles as the foundation of your participatory design process to create an ethic of stewardship in your project. Refer to the colourful *5 Design Principles* (poster) to share with your larger school community and elicit some discussion. For reference, the principles are:

Children at the centre

Placing children at the center of green school ground design means recognizing them as creative contributors with valuable insights.

Healthy natural systems

Create living landscapes that support health, wellbeing, and connection—landscapes in which both people and nature can thrive.

Integrated landscape and program design

Plan the outdoor space and educational activities together—so the physical environment and learning experiences support and enhance each other.

Co-creation

Develop ideas together with children and invite the wider community to actively participate in shaping the project.

A place for everyone

Create school grounds that welcome all living beings—people, plants, animals, and insects alike—are accessible and foster a true sense of belonging.

Consensus Decision-making

Unlike taking a majority vote, making decisions by consensus requires participants to try to reach agreement before a decision is finalized. Deciding by consensus can be done by any group – from senior managers to school-aged children. The benefits include:

- Equality among members of the group.
- Opportunity for participants to appreciate different perspectives.
- Creative solutions and alternative strategies that would have been missed if a majority vote were called.
- Effective longer-term decisions since decision-making reflects each person's perspective.

Establish your vision

Before approaching others, have a clear understanding of what you want to achieve and why. List out key benefits to the school community in relation to learning and wellbeing. The benefits derived from transforming school grounds cross many realms: educational, environmental, social, behavioural and economic, so being able to communicate a multitude of benefits will go a long way.

ecological design: a design that is responsive to the landscape as well as to all its inhabitants, human and non-human.

group process: a way to move the project along that involves and respects the input of everyone who shows an interest in the project.

Communicate your vision to staff and parents

It can take one person to spark a project, but many hands to make it come to life. Gather support from some key players in the school community. Talk to the school principal, the maintenance staff, the teachers and the parents. Let them in on the idea and seek their input. Without their support and involvement, the project is unlikely to succeed.

Note: The approach is different if you are a parent leading the project or a staff member at the school. Please consult the full toolkit *All Hands in the Dirt* for tips and strategies.

Phase 2

Building your team

When collaborating with people of different ages and backgrounds, have an open mind and accept that diversity on your team is an advantage.

When you're bringing people into your project, let them know that there are a variety of ways they can contribute. Not everyone needs to be an experienced gardener or have a child's imagination.

Plan the initial meeting

Once you've done some initial outreach to some of the key players in your school community, it's time to bring people together to share ideas and to attract members to the steering committee. This is also good time to take stock of the skills and interests of your group. See Template 1: Inventory [link} to determine interest in tasks that involve say fundraising or technical requirements. When you build your first project presentation, include photos of examples or short videos. Try to anticipate any questions or concerns that might arise and record the initial impressions of the group in your notes. *Find more tips for planning a meeting in the full toolkit All Hands in the Dirt.*

Communicate widely

Continue to get the word out through all stages of project development. The more informed people are about what you're doing, the better your chances of attracting volunteers, receiving donations, and gathering input into the design of the site. Getting the word out widely at the start of the planning process can address potential concerns the community may have. Make sure you collect everyone's email addresses so you can send updates. When your list gets large, consider sending out an e-newsletter.

Develop your project team

Establish a core team of people who are willing to see the project through from beginning to end. Refer to the task area lists and identify individuals from each group whose names appear under each task area. Use **Template 1: Inventory of the Skills and Interests of Your Group** from the toolkit to find out what people are most interested in doing. For example, are there any teachers, parents or community members who have expressed an interest in helping with all or most of the task areas? These people are good candidates for a steering committee or for taking on long-term positions and serving as representatives of their respective groups. is this referring to assigning tasks or identifying skills.

Form committees and define roles

Engage the broader community and aim for inclusivity. To keep things manageable, form subcommittees or working groups. Even if a small core group handles most of the work—as is often the case—divide tasks clearly to focus efforts and assign responsibility. Consider the following task groups to organize your volunteers effectively:

- Site planning
- Documentation
- Planting design
- Technical requirements
- Fundraising and publicity

Now it's time to assign tasks. Contact those who have expressed interest and invite them to a meeting. Keep in mind that volunteers will decide what needs to be done and how. Try to end up with at least one core group member and a representative from each specialized group, including students, in each task group.

Phase 3

Gathering information and input

It's time to assess your school grounds. Gather information about the physical features of the grounds such as size, directional orientation, and the location of natural and built features. You'll also want to find out how various individuals or groups currently use the space and what they'd like to be able to do there. Ask people what they like and don't like about the space.

Make a base map

Mapping the information you collect on the physical features, uses and views of the school grounds is important. A visual representation communicates a lot of information about the area and can be used to communicate with students of all ages. To start, you'll need a base map of the school drawn to scale. To find a ready-made map of the site, ask the school board office, local municipal office in charge of planning or land registry, grounds maintenance contractor or library.

Map the physical features of the site

Now you can start adding details to your base map. Use one copy to record the physical features of the site — both natural and built. Check your site for these **natural features** at different times of the day and, if possible, different times of the year:

Sunlight

Vegetation

Landforms and drainage

Wind

Soil

Built and temporary features

Establish your statement of purpose

Encourage the group to create a statement of purpose for its efforts. Ask yourselves a few questions, then write a couple of sentences that represent an aligned message. *What is the dream goal of this project? What are we trying to accomplish? Who are we doing this for?*

Involve additional volunteers

Most school ground greening projects are volunteer driven. Find volunteers in your community by advertising your project in key places; online neighbourhood groups, newsletters and bulletin boards. Then engage volunteers by providing a list of varied tasks they can choose from. And of course, appreciate and recognize their efforts. Note: community volunteers should only supplement or help the efforts of students and teachers, not replace them.

Use our sample letters, questionnaires and surveys provided in *All Hands in the Dirt: Designing and Greening School Grounds in a Changing Climate* to gather information and input.

Phase 4

Digging into design

One of the most important factors to remember during the design process is to keep things small and manageable!

Be mindful of what people are capable of and the resources you have available. This might mean developing your project in stages, adding new sections to the garden as the funds become available or as new individuals bring special skills to the project.

Working with nature: Understand and apply ecological design

In the natural world, everything is interconnected. The elements in natural systems must work together rather than in competition. Let the natural features of your site guide your decisions, for example f an area is naturally moist, don't fight this; instead, plant moisture-loving species or create a small pond. Plant species that complement each other or support their intended purpose, a companion planting can be a natural method of discouraging pests. Let the soil structure dictate what species go where.

And don't forget to consider how people use the site. Restoring nature's place means we create a place for ourselves in it, not to harm nature but to learn, grow and be inspired.

For more about essential design strategies to help you plan your greening project, please see our full resource *All Hands in the Dirt: Designing and Greening School Grounds in a Changing Climate*. These strategies consider ecological functionality, plant-based learning, climate resilience, stewardship, multi-functional space and systems thinking.

Anticipating Safety Concerns and Vandalism

In developing school grounds, often the two greatest concerns expressed by parents and teachers are vandalism and safety. Here are a few design tips to discourage vandalism and promote safety:

- Avoid placing dense shrubs or small trees directly beside a path or seating area.
- Maintain an open area along both sides of trails or paths and choose plants not taller than 60 centimetres.
- To reduce access to hiding spots, choose thorny plants such as raspberries and rose bushes to line paths adjacent to wooded areas.
- Maintain open sight lines at trail intersections and at approaches to bridges, buildings and other possible hiding areas.
- Use stepped levels near wetlands and ponds.

People get excited by what they can see. During a long planning phase, a visual representation of the project, either a 3D model or a design, can be helpful in maintaining people's spirit and enthusiasm. On a practical level, you'll also find a visual representation helpful in finalizing decisions regarding the elements and layout of the project. Try using plasticine to make a 3D model or collages with cut-outs from magazine or actual photographs.

Develop an action plan

With goals and objectives in hand, you're ready to move to the action phase. Start by creating a large planning chart and make sure to include:

- ✓ Theme or issue (for example, planting, fundraising, publicity)
- ✓ Goals
- ✓ Objectives (broken up into short, medium and long-term actions)
- ✓ Tasks to be completed in the order in which they need to be accomplished
- ✓ Timeline to complete the tasks
- ✓ Individuals/groups responsible for completing the tasks.

Making Group Decisions

Developing an action plan requires careful, detailed thinking. You will need to establish a logical sequence of events and consider how each task will impact another. Think about the time it will take to complete each task, who will be available to do the work and when, and what the backup plan will be if certain things don't happen. Determine when outside expertise will be needed.

As you'll be making numerous decisions, it's wise to expect a little conflict between competing interests. Refer to the tips on consensus decision making and the participatory process in the section Getting Started of All Hands in the Dirt: Designing and Greening School Grounds in a Changing Climate. Be patient and allow plenty of time for this stage of the process.

Establishing Evaluation Measures

As part of the action plan, build in ways to evaluate how successful the project was in meeting its goals and objectives. The process needn't be highly technical or complicated; you simply need enough information to determine what is working well, what isn't, and what improvements can be made. Assign someone to the task, establish procedures for collecting the information, arrange for the results to be reported to the group, and adapt the project.

Presenting the Site Design and Action Plan

As the project heats up, it's time to reinvigorate those who showed an interest early on. Organize a meeting to present the site design. Advertise the meeting and invite local media to the "unveiling." Also invite all those who completed surveys and attended previous meetings. This is an exciting time as the project comes closer to become real. It's also a good time to recognize individuals for the time and effort they have given.

At the meeting, you will also want to introduce the action plan. Hand out copies of the plan and post a large summary version on the wall. Make it clear where openings remain for people to become involved.

For a month-by-month calendar of activities you can use in your planning, see the headline "A Year in the Outdoor Classroom" in Phase 4: Digging into Design in the full resource *All Hands in the Dirt: Designing and Greening School Grounds in a Changing Climate*.

Phase 5

Budgeting and Fundraising

Before you approach potential sources of funding, have a clear idea of what you need and the associated costs.

Depending on the nature of your greening project your costs may include:

- Reference books, design plans and maps
- Equipment (e.g. shovels, hoes, wheelbarrows, buckets, hammers, saws, rakes, nets, watering cans, trowels, weed diggers, gardening gloves, hoses, bushel baskets, heavy machinery for grading)
- Planting materials (e.g. wildflower plugs, potted plants, shrubs, trees, seedlings, seeds, mulch, lumber, nails, burlap, stakes, tree guards)
- Publicity and promotion (e.g. posters, flyers, presentation materials, digital or newspaper ads, newsletters and website fees)
- Transportation or delivery of materials to the project work site
- Professional consultation and technical support
- Maintenance and monitoring services
- Concept renderings
- Office supplies (e.g. paper, envelopes, postage photocopying)
- Other costs (e.g. permit fees, food and refreshments for meetings, art supplies for making banners, permanent signs and murals).

Setting a Budget

Start by reviewing your action plan to identify the costs associated with each phase of the project. Consider the following steps as you develop your budget:

- Refer to your action plan to estimate costs for each phase of work.
- List required resources in the order they will be needed.
- Assign priority levels to each item—from essential to optional.
- Consult catalogues and potential suppliers to research product and material costs.
- Comparison shop to find the best prices, quality, and product options.
- Obtain quotes from at least three suppliers to ensure fair pricing.
- Plan ahead for large plantings, such as wildflowers.
- Contact local nurseries in the winter to arrange for custom growing of specific species.
- Look into *contract growing*, as it often reduces costs and ensures plant availability at the right time.

Finding sources of support

The golden rule of fundraising is to "ask before you buy". Many schools have had a long list of items they couldn't afford, but when they sent out a notice about their greening project accompanied by a wish list of items, they started receiving offers. The donations included everything from wooden fencing around a pond, to boulders and plant materials, to design expertise and machinery for heavy digging and moving.

Potential sources of funding:

- Corporate donations
- Government grants
- Private donations and lending
- Credit unions
- Community and private foundations.

As for in-kind donations, you can approach community health centres, service clubs, and universities and colleges.

Be sure to carefully document all sources of funding — whether cash donations or in-kind support — in terms of time, expertise, materials and equipment. Use this information as a tool when writing funding proposals and building donor recognition programs.

Write a funding proposal

Research and identify potential funders who align with the nature of your work. Focus only on those whose funding priorities, value and mission are compatible with your project. Clearly describe how your project aligns with their criteria, refer specifically to the vision, goals and objectives of your project.. Emphasize the benefits of the project to the natural environment and to the community. Include project timeline with key milestones and attach provide any supporting documentation to strengthen your proposal, such as, media releases, newspaper articles featuring the project, photographs and promotional brochures.

Be specific in your request about which portion of the project you are requesting funds for. Proposals with vague, lump-sum totals, and unclear breakdowns tend to be less successful.

Thank supporters

Recognizing your supporters is an integral part of a successful fundraising process. Show your appreciation by giving small gifts, recognition them in newsletters or other channels and host a celebration specifically for them.

Don’t get discouraged if you don’t receive the support you were expecting right away. It takes time to build momentum. As the community becomes increasingly familiar with the benefits of the project and the dedication of its participants, support for the effort will increase. If you are turned down for funding from one source, go on to the next. Seek feedback on ways your proposal could be improved. Once you have secured some funding and support, try again with those who initially refused. And recognize when you have raised enough money to get started with the hands-on work!

Phase 6

Getting ready for planting day and sharing the results

Before the big day, hold an orientation session for participants to ensure that they have all the information they need to carry out the tasks successfully, including proper planting methods.

To ensure that the plants, paths and ponds end up where they were supposed to and in the way they were intended, it is worthwhile to organize participants into teams and to assign specific and rotating duties to each team.

Team tasks could include digging holes, carrying water, laying mulch and, planting. Another way to organize teams is to assign them to a particular planting area and have them complete all the tasks in that one part of the site. If the whole school is to be involved, rotate the involvement of different classes over the course of the day. Some schools have found it best to train older students during the morning, then have them act as leaders along with parent volunteers during the afternoon to guide younger students.

Prepare for planting day

As for any event, a bit of organizational prep will ensure the day runs smoothly. Depending on the age group of the students and the size of the event, you'll want to have lots of teachers and parent volunteers on hand who can work with the students to keep things manageable. Prepare for your event day by addressing the following five tasks:

1
Mark the planting areas

2
Consider the weather

3
Choose a group spokesperson

4
Create a display area

5
Designate a support team

Publicize the event

Publicize your planting days well in advance. Get the word out through community papers, organization newsletters and the community events section of the local newspaper. Distribute flyers and brochures, display posters on bulletin boards in stores and libraries, and post announcements on your website (if you have one) and the websites of local groups.

Maintaining your site

Once your site has been planted you will need a maintenance strategy to help your site flourish. Involve the community by establishing maintenance teams for specific tasks on an ongoing basis. Or each team could be responsible for all maintenance tasks of the area for a limited length of time; in some schools, families or individuals volunteer to care for the site for two-week periods. It's a good idea to have at least one person overseeing the maintenance plan to ensure that the work is getting done. Involving students in ongoing maintenance offers rich opportunities for them to learn about cycles of life and growth and to foster respect and caring for the earth.

Realize the outdoor classroom

There are a variety of resources available to help teachers with hands-on activities and more are being written to connect with the learning outcomes of the various provincial curricula. Helping teachers become more comfortable and creative in an outdoor setting may be simply a matter of providing some training with outdoor educators or local specialists from conservation authorities, or other similar groups.

Linking classroom activities to the ongoing monitoring and maintenance of the school grounds is a practical and effective approach. Activities that model this linkage could include charting the growth rates of the various plant species; drawing activities that show the intricate network of veins on a leaf; life cycle studies of the various insects that find habitat in the natural setting; and the storytelling and creative writing that contemplate a butterfly's extraordinary annual migration journey.




Share the story

Adopting one of the school's bulletin boards to communicate what's happening in the outdoor classroom can be a great way to keep students, teachers and visiting parents up to date on the garden. "Did You Know?" sections can be used to stimulate teaching ideas, while a "Helping Hands" section can list items or services that are needed to achieve planned activities. A few schools have even put up weatherproof outdoor bulletin boards to keep the neighbouring community abreast of the latest developments on the school grounds.

Building traditions

Undoubtedly one of the most powerful elements of greening school grounds is the change that occurs in cycles — from the daily and seasonal to the annual and beyond. The power of a changing landscape is that it captures the imagination and stimulates the mind while simultaneously stirring the emotions. Celebrating annual events is a marvellous opportunity to connect the school community to the local landscape.

Many schools are now hosting seasonal festivities, such as spring and fall festivals. Spring celebrations have featured such events as planting, tastings of wild edible salads, tea and maple syrup, and storytelling. Fall festivals have included dyeing cloth with colour extracted from wildflowers, nut cracking, flower pressing, sweet grass braiding and preparing harvest feasts of vegetables, fruits and herbs. Other annual events have been more practical: spring cleanups and pathway refurbishing.

For all of you who undertake to improve your school grounds, we hope you find enjoyment through the process. As so many schools have demonstrated, your efforts will be greatly appreciated by the students and by many others who will get caught up in the spirit of making a positive contribution.

Good luck with all your efforts. May your roots grow deep.

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