

SUSTAINABLE SOLANO'S FARM TO SCHOOL TOOLKIT



**A GUIDE TO CREATING AN
ON-CAMPUS EDIBLE GARDEN
IN SOLANO COUNTY**

Griffin Academy's Edible Food Forest



Welcome!

Creating a school garden is a complex but rewarding experience. If you're curious about establishing an edible school garden on your campus, this guide is for you.

In this guide we will explain:

- the process of creating a garden at a combination high school-middle school in Vallejo, CA,
- issues we faced along the way,
- key stakeholders you should consider approaching,
- how to form a Garden Planning Committee and what questions you should ask,
- food safety basics,
 - before harvesting
 - during harvesting
 - during distribution
- how to legally incorporate food into your school's cafeteria or snack program
- additional resources
 - includes Solano-specific resources

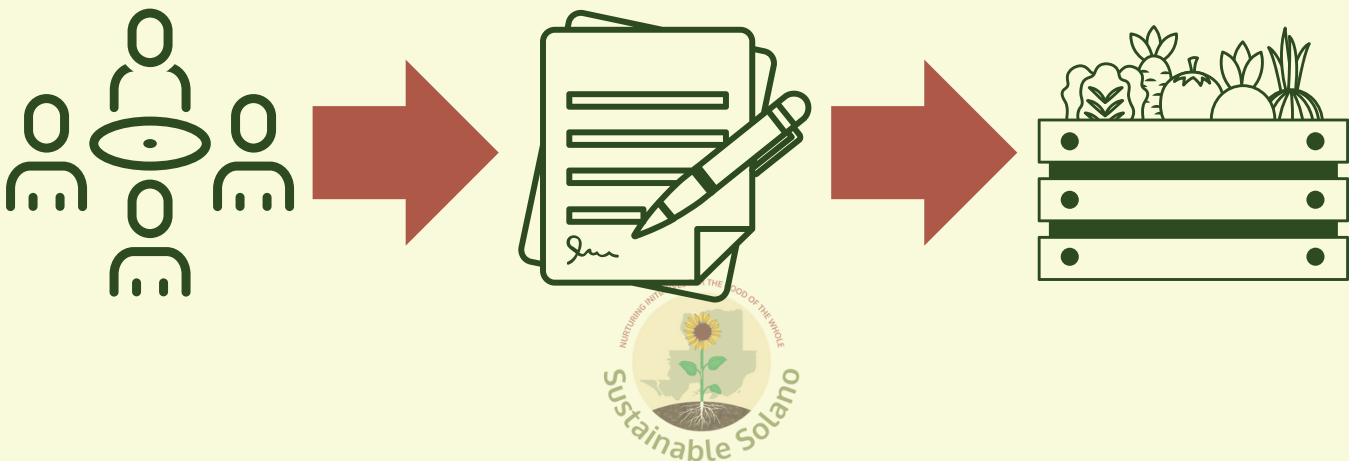


Getting organized

Before work could begin on the garden, details had to be worked out. Griffin Academy and Sustainable Solano determined who would be expected to contribute to the garden project, laid out clear boundaries and responsibilities and created a timeline working with a "Garden Planning Committee," or GPC. We invited educators on campus, administration, maintenance and grounds, and food service staff to attend the GPC. This allowed everyone to voice their opinions at once, and have a shared understanding of what is and is not possible.

All of this might not be necessary for your garden, but it is highly recommended that before work begins on the garden, the "concerned parties" agree on responsibilities and a location.

For more information about getting a planning committee started, check out the section of this toolkit entitled "Garden Planning Committee."



The Old Garden

Originally, Sustainable Solano had planned to assist the garden club at Griffin with revitalizing their old garden. We began by repairing several broken beds, getting new soil, and adding several berry bushes. Unfortunately after the first design was finalized, it was discovered that the school's garden would be removed to make way for a new cafeteria. After some negotiating with the school, the school proposed a new site for a garden.



**Original Garden
at Griffin**



The New Garden

This new location was next to the science classroom and was much more visible to students than the previous location.

This new location required a bit of prep work. A small group of volunteers arrived the week before the main public event and moved the garden beds from the old location to the new one. This allowed us to avoid pausing work while we moved the beds. By using a smaller group, everyone was able to participate in the process and have a task to do, rather than having to wait for a few people.

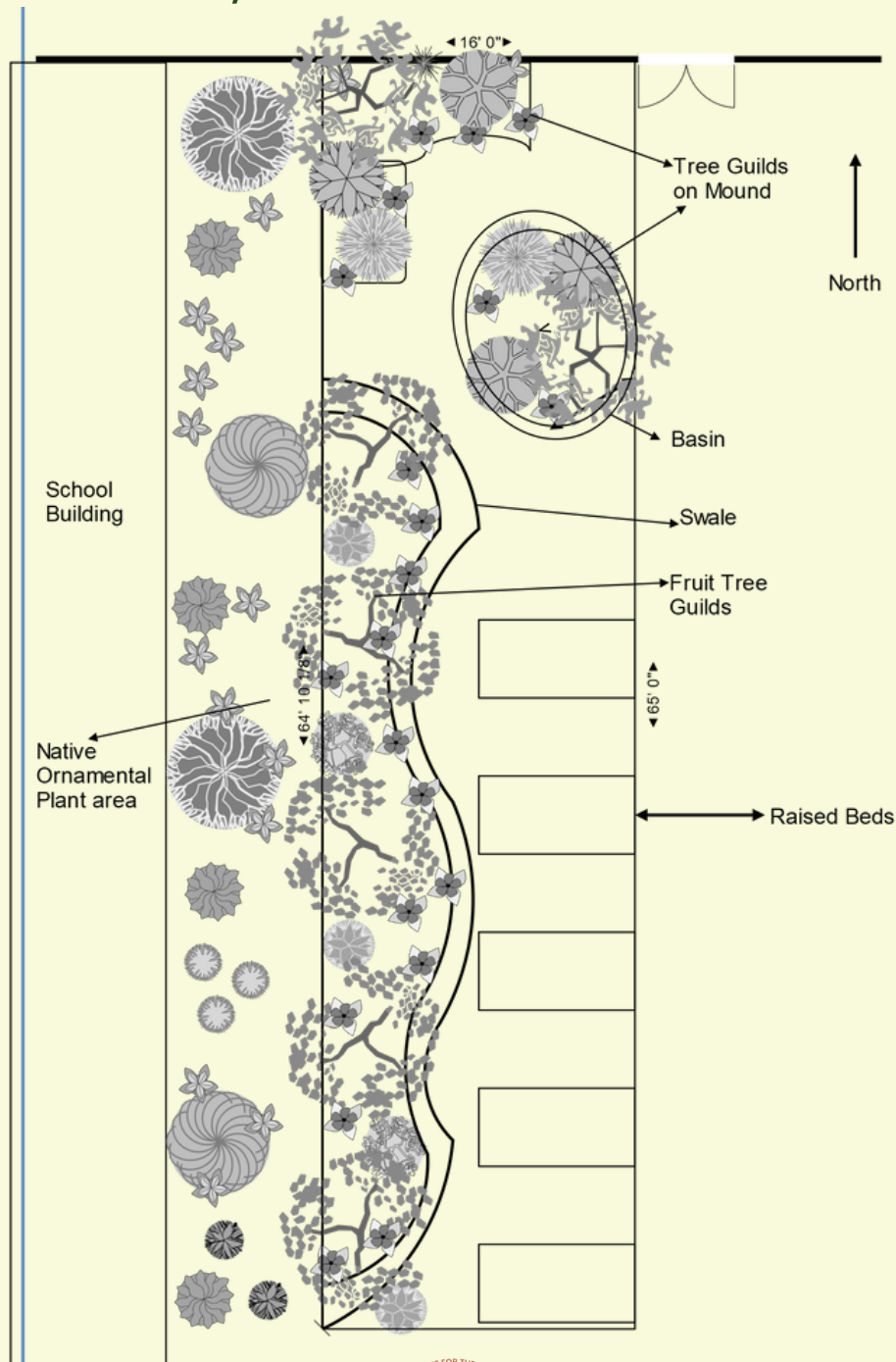


Before

**Future garden
location at Griffin**

The Plan

This design included six unique fruit trees, five repurposed garden beds, two berry guilds, and at least a dozen different additional plants, providing shade, wind cover, and nutrients



Day #1



Old beds were emptied and taken apart. The beds were then moved to their new location nearby, where the new garden would be.



These beds were filled with soil by volunteers. We found multiple wheelbarrows to be necessary to avoid bottlenecks in the work chain. Once the beds were filled, the prep day was over.

Day #2



**Power tools
are great if
you can get
them and an
experienced
operator**

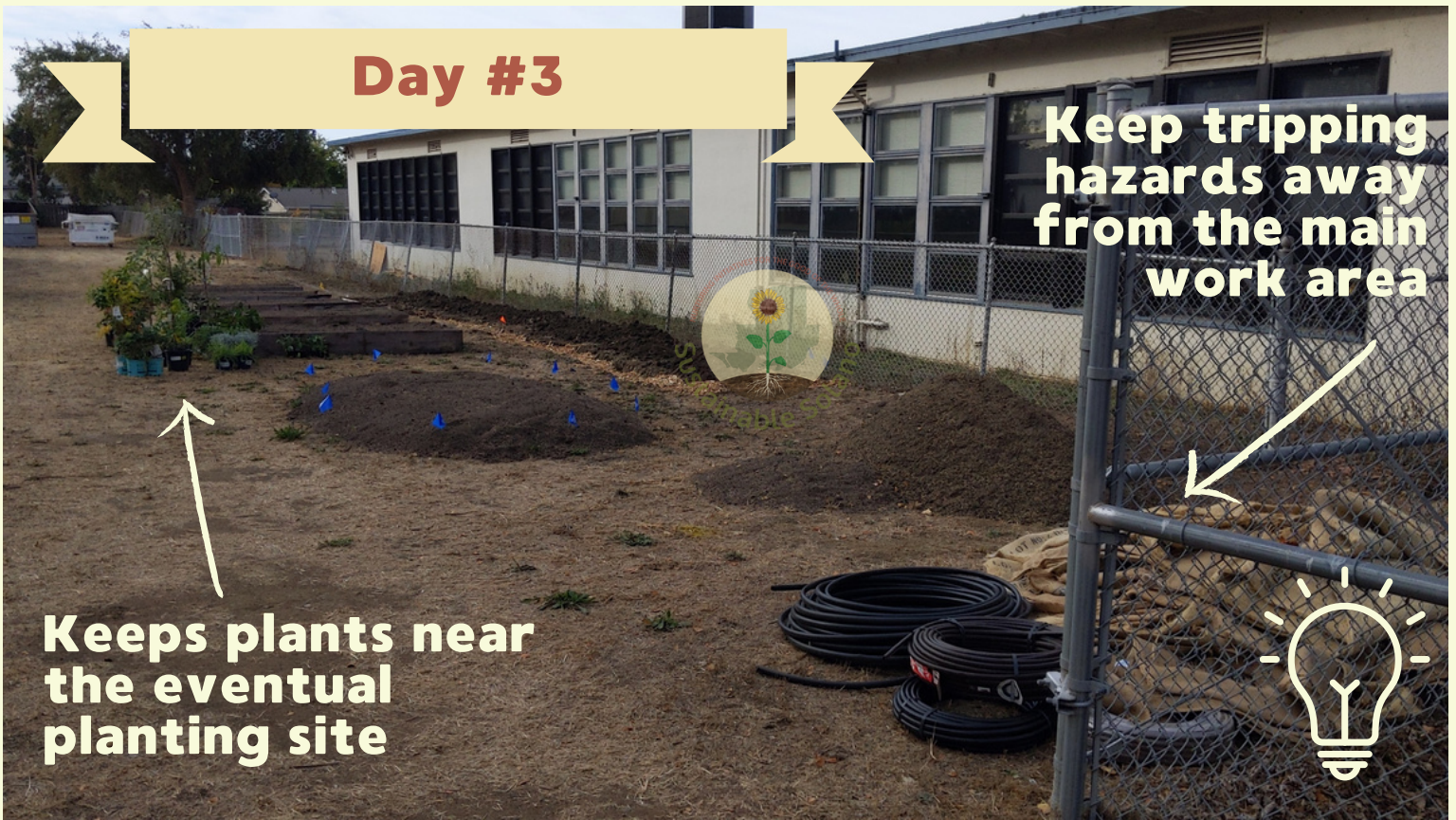
Before our first work day, Maintenance staff soaked the ground to make digging the swale a little easier. Even after several days of pre-soaking, a jackhammer was still needed to break up the ground and allow volunteers to get at the subsurface to build the swale. A volunteer with power tools they know how to use is a fantastic thing! The swale was dug using power tools, and soil was moved into place in the center of the site.

If you have a soil delivery arriving, put out colored flags to designate where the soil, mulch, or compost should be dropped. Do not rely on directions; a simple colored flag placed in a corner can save you time having to move soil extra distances.

Day #3

Keep tripping hazards away from the main work area

Keeps plants near the eventual planting site



For the planting day, we made sure to use the space we had available. Plants were placed in a central location and would serve as a gathering place. Items like burlap sacks (for sheet mulching) and polylines (for the irrigation) were placed off to the side to avoid creating a hazard. Materials should be placed so they don't obstruct pathways and the flow of work.

Planting day is a great day to include the children in simpler planting or mulching tasks, or some persons with limited mobility, since the many activities are low impact and others can be done while sitting.





When it comes to planting, encourage people to gather around in a circle. Discuss why each plant was chosen, encourage people to (gently) feel and smell the plants. These next few steps are often a fan favorite portion of the garden installation — avoid rushing if possible. Allow people space to ask questions and give them a chance to familiarize themselves with the plants before they go into the ground.



Utilize any and all tools that you have available. We found it very effective to fill a truck bed with wood chips and use that to transport the material across campus.

To help volunteers get an idea for the garden, have them stage the plants in their future location in the garden. This will help volunteers familiarize themselves with the design and overall plan for the garden. This will also allow for any last minute corrections or alterations to be made.



The Finished Garden



The final garden at Griffin will now be able to produce more food (est. 938 lbs total over the next five years) than the previous garden. This new garden also has a drip system that can be managed wirelessly, allowing for quick adjustments outside of school hours/days without the need to schedule a second visit.



A Best-case Scenario

A suggested timeline for planning and installing a school garden

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
GPC	Garden Planning Committee assembles, discusses plan, funding source.					Garden Planning Committee affirms plan, design, location, day of installation.				
Goals	Establish goals, create general plan							Evaluate success of garden, areas for improvement		
Regs			Identify how food storage will work, local regulations, how food will be used/distributed							
Supplies					Gather supplies, create design for garden, finalize plan for food					
Install					Install garden					
Prep					Add cover crop, prepare for summer and fall plantings					

Forming A Garden Planning Committee



Why?

When creating a school garden, you will need to interact with many people in order to make your project successful. Besides a core group of gardeners, you will have to work with faculty and staff to make your school garden a success. One of the best ways to do this is via a Garden Planning Committee (GPC). The purpose of creating a Garden Planning Committee is to ensure consistent communication and goals between anyone who may have a stake in the garden project.

A regularly scheduled meeting allows people to ask questions and have discussions in one place, ensuring the answers are communicated to everyone at once, rather than in a piecemeal fashion. Each situation is unique and requires a site-specific plan. Some projects will find these questions very easy and may have done much of this work already. Others may be unfamiliar with the process and will need to address each and every point. These plans are yours to utilize as you see fit.



It is important to make sure that each and every person involved in this project is up-to-date and informed about:

- *What is going on with the garden,*
- *What the garden's goals are and*
- *What any future plans may be.*

Schools and school districts are complex organizations, and you may not be able to have all interested parties at every meeting, but it is important to have key stakeholders at the early meetings so they grasp the basic vision of the project. Failure to have key members can result in slowdowns and issues.



Consider the following hypothetical:

The Food Service Director of a school refuses to attend the initial GPC meetings, since they have "no interest in anything until the harvesting stage." As a result, the GPC does not learn until several weeks into the project's design process that the school is unable to prepare hot meals on-campus. A decision like this would affect plant selection and garden design, and would set the project back several weeks. By incorporating key partners into the project early, we can avoid slowdowns and delays.

Person

Usual Duties

Can help with...



Principal

Signatory to contracts, day-to-day person management, conflict resolution, contract enforcement

Signing agreements, finding teachers with capacity to help, advice on who to contact



Superintendent /board members

Approve contracts, changes to campus, long-term plans for campus/schools, budget changes approval, generally controls some funds

Funding of a project, long-term planning, Approval of contracts, Conflict resolution



Teachers

Day-to-day champion, educating, leading classes, managing children, etc.

Day-to-day upkeep/use. Creating projects for students, educational components



Food Service Director

Handles cafeteria and food service, determines meal planning, food choices, etc.

Completing harvest in a food-safe manner. Ensuring all fruits and veggies are washed and processed correctly.



Maintenance / Grounds

Handles day-to-day school maintenance and landscaping, repairs

Approves garden design, procedures, tool storage. Installation concerns (e.g. calling 811, taking delivery of plants), issues with pests, cleanliness, potential changes to campus in the future, flood risk areas, determining best location, etc.





Students

Learning and growing

Day-to-day upkeep and utilizing the garden in other ways (i.e. relaxation)

After School Program

Manages student activities before/after school, finds students meaningful activities to grow and develop

Can help to coordinate students' time in the garden before/after school. Should work closely with on-site champion(s).

Educational Director

Determines curriculum of schools, how various programs will contribute to a student's education

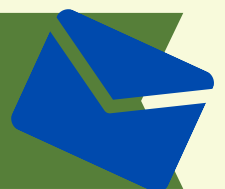
Can help to incorporate the garden into academic life. Helpful for ensuring the garden is fully utilized and part of school life.

Crucial, or "key," members of the Planning Committee are marked with a  icon.

Other persons of interest include: Parents and guardians, food producers (i.e. farmers or ranchers), school nurses, guidance counselors, staff members of nonprofits, researchers, local chefs, health care professionals, USDA extension agents, PTA/PTO members, local media, a school/district communications director, and also other schools/districts who have farm-to-school programs



When in doubt, reach out!



Key recommendations about forming a Planning Committee

Initial Conditions

- Identify the issue and determine a generalized solution to the problem. (e.g. *students are not eating enough fresh fruits and vegetables: so we should introduce more varieties of fruits to encourage students to eat more produce; students would like to see more of their favorite fruits in the cafeteria: so we should plant a berry guild*)
- Use pre-existing relationships to build trust among new members. Utilize personal and professional relationships whenever possible. (e.g. *the biology teacher is friendly with the maintenance staff, have them approach maintenance about creating a garden*)
- Outline a clear vision for the project — how will it be led? What does responsibility look like, and how can the team be held accountable? (e.g. *five students and three teachers will lead the effort to establish a tree grove on campus, they create a moveable timeline in the front office to show how close they are to finishing the project*)
- Obtain political support. Obtain the support of persons in the chain of command, going as high as possible (e.g. *approach superintendents and board members if the lower level staff isn't interested*).
- Locate funding. Funding from grants and other sponsors will help to keep the project solvent and allow it to function long term. (e.g. *the PTA provided a small stipend, paying for a community member to come weed the garden over the summer*)



Key recommendations about forming a Planning Committee

Process and Practices

- Use an external facilitator to avoid concerns about trust among members. *(i.e. Sustainable Solano acts in this role, coordinating between various groups in a school district and campus to avoid concerns about internal politics)*
- Designate a coordinator with a neutral and objective position. This will help to build trust amongst members. *(e.g. a coordinator should have the singular goal of getting the garden project created as closely to the group's plan as possible)*
- Design the meetings to share the leadership roles. Rotate the position of notetaker, meeting leader, etc.
- Spend time building a sense of trust amongst the members. Members should feel represented and comfortable in the group.
- Issue communications as a team. Distributing information as a team, rather than by the individual members helps to legitimize the committee to its members and the outside world. *(e.g. use a singular email chain to organize meetings to avoid leaving anyone out of a conversation. Sign off public communications as "The Sample School Garden Team", etc.)*



Key recommendations about forming a Planning Committee

Structure and Governance

- Membership structures should be flexible. Priorities and level of involvement with change over time. A rigid organizational structure will create issues as members transition into different roles (*e.g. students graduate and people change positions, no one person should be relied on too heavily*)
- Decisions must be made both formally and informally (*e.g. changes to a design should be adopted formally, but members informally decide to remove a clearly dead plant*)

Avoid letting one person manage the garden — distribute tasks and responsibilities as best as possible to avoid overloading or becoming too reliant on a single person.



Key recommendations about forming a Planning Committee

Contingencies and Constraints

- Collaboration should be bottom up, bringing on partners who are in the lower portion of the organizational pyramid, as well as upper members (*e.g. ask each Groundskeeper to attend, as well as the Director of Grounds and Maintenance*).
- Tackle power imbalances and build in resources to deal with them (*i.e. the planning committee is a democratic process, its purpose is to execute a group vision, not an individual one*).
- Recognize possible conflicts among members and stakeholders. Reframe disputes to appeal to all involved parties (*e.g. Groundskeepers do not want a compost pile, the students do: consider allowing the Groundskeepers to develop a work plan for the students that they would be satisfied with*)

The end result of the project may be different that what you had originally envisioned - do not let the desire for perfection stop you from doing something good. A collaborative vision will require compromise.



Key recommendations about forming a Planning Committee

Outcomes and Accountability

- Align individual and organizational goals to the goals of the Planning Committee.
- Organizations/individuals who prioritize their own goals over the groups can cause the project to fail.
- Document and track the effects of decisions.
- Examine what issues you have faced, and develop a plan to deal with them in the future.
- Regularly reassess the processes used and the outcomes delivered. Aim to ensure accountability and demonstrate the goals achieved through this collaboration.
- Demonstrate and communicate your results objectively to build trust among political and professional constituencies.

Table adapted from "Key Recommendations - Cross-Sector Collaboration: A Report From The Minnesota Farm To School Leadership Team"

Getting Started

1) Decide on your rough goals for the project.

- What do you want the project to look like once it's finished?
- Will this garden include more than just plants?
- Will there be plants just for pollinators?
- Will there be any composting on-site?
- Consider all of these questions — you may not have an answer before you start, but having a rough idea of what you want will be very helpful in explaining your plan to other people. (e.g. "We want to use the area by the track to grow pumpkins or melons and experiment with compost" is much more of a clear idea than "We want a garden on-campus.")

2) Create a list of people you will need to contact.

This list will change and grow, and you will need to revise it as the project progresses.

- List the person's name, their job title, where they work (e.g. Administrator, Teacher, Grounds, etc.),
- their contact information, and
- any notes you think may be important (e.g. "prefers phone calls").



3. Contact each person as you add them to the list, and ask if they have any suggestions for whom to include on the project.

If some of your contacts know each other, consider asking them to contact one another to recruit them (e.g. if a Champion Teacher knows the superintendent well, ask this Champion to "make the connection" for you and introduce you and your idea to this new party using a face they know and trust).

4. Contact everyone and find a date that works.

Utilize a Doodle poll or some equivalent to determine the best time for everyone to meet.

- *Tip:* Piggybacking off an existing event which has been scheduled is sometimes easier than asking people to attend a second event on another day.

5. Hold regular meetings.

- Regular meetings may sometimes be unnecessary, but allow for proactive planning, rather than reactive.



Laws and Restrictions



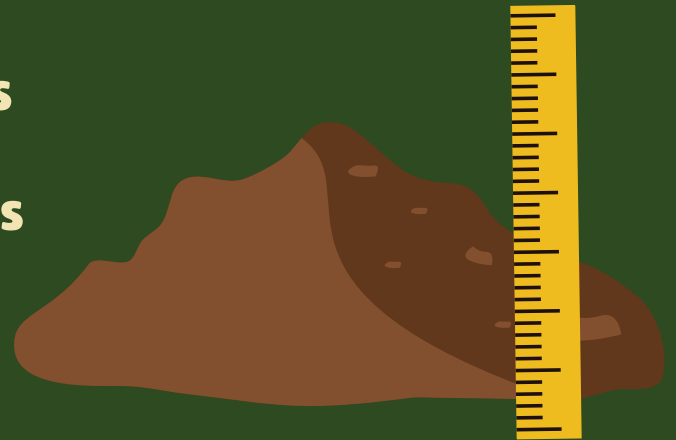
Rules and
regulations about
community
gardening in Solano
County



Statewide Compost Rules & Regulations

In California, a community composting program's compost pile cannot exceed either 100 cubic yards, or a 750 square foot area according to CalRecycle's guidelines.

Some cities and municipalities in Solano County defer to California's statewide rules on composting, which are very permissive. Many cities rely on CalRecycle to set the rules and regulations about composting.



Any business or family can participate in a community composting program, so long as their local regulations allow such a facility to be established.

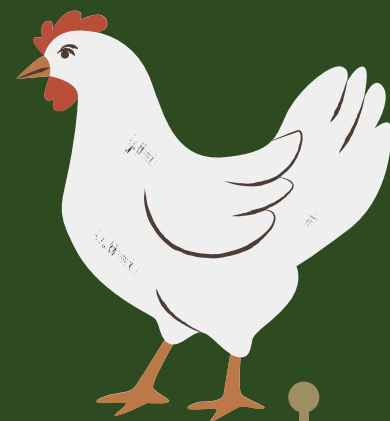


The California Code of Regulations says
"...Nothing in this section [18984.9] prohibits ... preventing or reducing waste generation, managing organic waste on site, or using a community composting site."

Cal. Code Regs. tit. 14 § 18984.9

Solano County Rules

Chickens are permitted in every city in Solano, and each city requires that an owner treats the chicken humanely and provides it with sufficient food, water and space to live comfortably. Roosters are prohibited in most cities.



There is a countywide provision in all municipal codes regarding letting fowl "run at large" (i.e., wander around the street): *"No person shall suffer or permit any ... fowl or rabbits owned or controlled by him to run or fly at large or go upon the premises of any other person..."*



All gardens that wish to use their produce in school kitchens or restaurants will need to complete the Solano County Department of Resource Management's "Culinary/School Garden Questionnaire" (included in the Resource Guide). For details about this form, please see the section "Health Division Compliance".



Benicia



Benicia has no explicit restrictions on community gardens in their municipal code. Rooftop gardens are permitted and are exempt from the city's public nuisance law. Parks and Recreation has the ability to install community gardens as "park facilities."

Chickens are permitted with the following restrictions:

- A single family home in a residential area may keep up to 10 chickens. These fowl must be at least "20 feet from any neighboring house" or home**
- For multifamily residences "a maximum total combination of six birds, fowl" are allowed, also subject to the 20-foot restriction.**
- Roosters or other fowl "which constitute a nuisance by their loud cries" are not allowed in the city.**

	Municipal Code
Fowl	§6.32.040
Garden	§17.62.040, §8.04.030

Maximum Chickens?

10

Dixon



Four chickens are permitted in Dixon, "so long as said premises are maintained in a manner that the animals kept on said premises are not declared to be a public nuisance" at which point a hearing will be held to determine if the offending party can keep their chicken(s). See code for more details.

Commercial hauling of organic waste is restricted, but for community compost sites the restriction on transporting waste is waived if the material is being transported safely. See code for more details.

City law reinforces the existing state requirements that the total sum of organic waste on site does not exceed 750 square feet or 100 cubic feet.



	Municipal Code
Fowl	§7.02.050
Compost	§9.06

Maximum Chickens?



4

Fairfield



Fairfield allows up to three chickens to reside on any lot. The birds must be kept in clean and sanitary conditions, and can be removed from the property if declared a public nuisance.

Residents are allowed to compost their waste and may transport it to a garden, but are not allowed to "employ or engage" any other waste hauler in collecting organic waste.

Regarding beekeeping: a permit is required. No more than two hives are allowed on any lot or parcel. The owner's name, address and location of all hives must be registered with the Solano County Agriculture Commission office.

Additional beekeeping restrictions are listed in the city code.

	Municipal Code
Bees	§3.42
Fowl	§3.22.1
Compost	§9.12
Garden	§25.166.103



Maximum Chickens?



3

Rio Vista



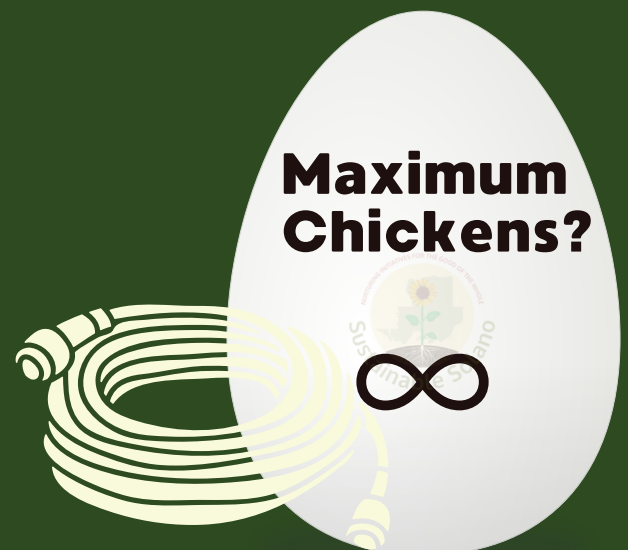
A person/business has the right to send their organic material to a community compost facility.

Gardens are subject to water-use restrictions codified in the municipal code.

- **No water use is permitted between 7am and 9pm.**
- **Even-numbered street addresses are permitted to water on Tuesday, Thursday, Saturday.**
- **Odd-numbered street addresses are permitted to water on Sunday, Wednesday, Friday.**

There is no limit on the number of fowl or chickens permitted in Rio Vista, but the animal may not be allowed to "run at large" (i.e., wander around the street). All hutches or coops from chickens must be kept clean and sanitary, and all animals must be well cared for. Fowl are not permitted to defecate on city property, unless the material is immediately cleaned up.

	Municipal Code
Fowl	§6.08.090
Compost	§8.12.030
Garden	§17.68.200



Suisun City



Suisun City has a limit of three chickens per property.

Community gardens are permitted (subject to review) in spaces zoned as "Civic" or "Park", and are allowed without a permit in areas designated as "Agricultural".

Gardens are prohibited in areas designated as "Open Space" since these are set aside for conservation.



	Municipal Code
Fowl	§6.05.092
Garden	§18.28.030

Maximum Chickens?



Vacaville

Vacaville has the most extensive list of rules and regulations regarding community gardening (called "urban agriculture" in the municipal code). Vacaville's code includes:



- Each garden must designate a "manger" as a liaison for the city.
- Gardens may only operate from dawn until dusk (without a minor use permit).
- "Use of mechanized farm equipment is prohibited." There is an exception for household gardening equipment and initial site preparation.
- The garden must be maintained to be free from "weeds and debris," soil amendments and compost may not "attract nuisance flies or support growth of flies."
- Compost bins may not be visible from the street/right-of-way, and must be a minimum of 20 feet from residential structures.
- Urban Agriculture Stands are permitted on the site of an urban agriculture use subject to the following regulations (see city code for more details).
- One chicken per 1,000 square feet, 9 maximum.
- See code for more details.

	Municipal Code
Fowl	§14.09.270.070
Garden	§14.09.270.190



Vallejo



Vallejo also has an extensive list of rules and regulations regarding community gardening (see VMC Chapter 16.314). The following are some of the rules that apply to gardens that are open to the public.

- Each garden must designate a "garden coordinator" as a liaison for the garden.
- Gardens may only operate from dawn until dusk or 7am – 8pm, whichever is more restrictive.
- Compost bins may not be visible from the street/right-of-way, and must be a minimum of 3 feet from other buildings. Waste may only be collected from the site itself and active garden members.
- Tools and equipment must be screened (hidden) from view when not in use. Sheds and other structures are allowed, but may not exceed 12 feet in height.
- One street-facing sign is allowed. This sign should contain contact information for the garden's coordinator and cannot contain any advertisement or sponsored material.

	Municipal Code
Fowl	§7.24.060
Compost	§16.314.02
Garden	§16.314



Solanano Summary

City	Chickens?	Chicken Code	Compost Code	Compost Restrictions?	Garden Code
Benicia	Yes (up to 10)	6.32.040	/	None	17.62.040, 8.04.030
Dixon	Yes (up to 4)	7.02.050	9.06	Affirms state code	/
Fairfield	Yes (up to 3)	3.22.1	9.12	Explicitly allowed	25.166.103
Rio Vista	Yes (no limit)	6.08.090	8.12.030	Yes	17.68.200
Suisun City	Yes (up to 3)	6.05.092	/	None	18.28.030
Vacaville	Yes (up to 9)	14.09.270.07 0	/	None	14.09.270.190
Vallejo	Yes (up to 10)	7.24.060	16.314.02	Yes	16.314



Health Division Compliance



**Rules and
Regulations
about food
safety in Solano**



Intro to Food Safety

Foodborne disease and illness are common but preventable through best practices. Solano County has food safety provisions in place for small gardens wishing to grow produce for on-site consumption.

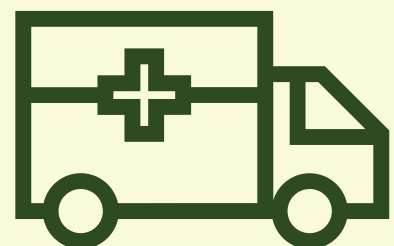
“Foodborne illnesses are a burden on public health and contribute significantly to the cost of health care. Each year foodborne illnesses sicken 48 million Americans (approximately 17% of people in the United States) and lead to 128,000 hospitalizations and 3,000 deaths”

*‘Foodborne Illness Acquired in the United States’
(<https://doi.org/10.3201/eid1701.p11101>)*

Before the garden can start to use its food in the cafeteria, the following document from the Department of Resource Management must be self-certified and submitted to the Department’s Environmental Health Division. A copy of this document is presented as a checklist below, with key points underlined. Examine this checklist before, during and after the development of the school garden to avoid unnecessary delays.

All 17 qualifications must be met, none of these requirements are optional. These requirements are primarily directed at growing, and not harvesting.

Once this checklist is completed and signed, submit it via email to either RMHelp@solanocounty.com or whomever is the current point person at the Environmental Health Department.



Solano Checklist

From the Health Division's checklist document:

“This agreement is intended to assure access to safe and healthy locally grown fruits and vegetables; and to assure awareness of the source of the food provided. ... Ensuring the safety of the food supply is critical to a healthy community.”

California Health and Safety Code §114021 reads:

“... foods used or sold in a food facility must be produced in accordance with applicable statutes and cannot be stored or prepared in a private residence. ...

“No resale or preparation for retail sale is allowed.

“This self-certification provides documentation of the signatories' understanding of critical factors that play a role in preventing the microbial or chemical contamination of produce, and their agreement to adhere to these requirements.”



Checklist Explained

What does this mean?

- Food cannot be stored or prepared in a private home.
- Food cannot be resold or prepared for retail sale.
- This certification acknowledges the garden manager fully understands the "*critical factors that play a role in preventing the microbial or chemical contamination of produce*" and that the garden will adhere to all these rules.

Sanitary Practices

10. Gardening and harvest equipment must be maintained in a clean condition and stored in a sanitary location. Dedicated equipment shall be solely used in the garden and not used for other purposes on the property.

11. Vegetation at the edges of vegetable patches should be minimized to prevent harborage places for rodents and nuisance insects.

12. The grounds surrounding the garden should be maintained in a manner such that pests are not attracted to the area. Plantings that conform with accepted agricultural practices such as flowers for pollination, or cover crops for erosion control are allowable if maintained for this purpose.

13. Workers/children should be restricted from entering and working in the garden after they have been working with animals, unless sanitary measures are put in place to prevent cross-contamination.

Worker Sanitation

14. Workers harvesting produce from culinary gardens must properly wash their hands before handling produce and be free of open cuts or wounds on their extremities.

15. Restroom facilities with warm water and soap must be readily accessible to anyone working in a culinary garden.

16. Workers should avoid cross-contamination of produce by ensuring equipment, gloves and other sources of contamination do not come into contact with produce after being potentially contaminated by compost or other materials.

Inspection/Notification

17. All garden facilities, equipment, operations and records shall be subject to inspection by the Solano County Department of Resource Management, Environmental Health Services Division at any time without prior notice.

I agree to adhere to the requirements listed above and agree to implement best agricultural practices in my culinary garden.


Signature: _____ Date: _____

Printed Name: _____ Phone: _____

3

Position/Title: _____

Garden Location: _____



SOLANO COUNTY
Department of Resource Management
 Environmental Health Division
 675 Texas Street, Suite 5500
 Fairfield, CA 94533
www.solanocounty.com

Telephone No. (707) 784-6765 Fax: (707) 784-4888

Tara Schmitt-Hewes, Director
 James M. Brooks, Assistant Director

CULINARY/SCHOOL GARDEN QUESTIONNAIRE

Garden Name: _____	
Garden Operator/Title: _____	Phone Number: _____
Garden Location: _____	
<small>(Attach a plot plan showing major structures, compost areas, restrooms, hand wash facilities, chemical and equipment storage sheds, exotic systems within 100 feet and the garden itself, etc.)</small>	
Do you have a Food Safety Plan? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Water Source: _____	
Fertilizer Used: _____	
Compost Used (include source): _____	
Pesticides Used (include pesticide, quantity, and application frequency): _____	
Herbicides Used (include pesticide, quantity, and application frequency): _____	
Are hand washing and restroom facilities with hot water available onsite: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Distance from garden: _____	
Are animals excluded from the growing area: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are any animals raised at this location: Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, identify animal type: _____	
If yes, how are the animals separated from the growing area? _____	
Do the same workers have access to the animals and produce growing areas: Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, how are you preventing cross contamination? _____	
Where is produce sold or used? _____	
Is produce washed prior to sale or use: Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, by whom? _____	
Is produce processed: Yes <input type="checkbox"/> No <input type="checkbox"/>	
If so, how and by whom? _____	
Comments: _____	

Ensuring the safety of the food supply is critical to a healthy community. California Health and Safety Code Section 114021 provides that foods used or sold in a food facility must be produced in accordance with applicable statutes and cannot be stored or prepared in a private residence. This agreement is intended to assure access to safe and healthy locally grown fruits and vegetables; and to assure awareness of the source of the food provided. No resale or preparation for retail sale is allowed. This self-certification provides documentation of the signatories understanding of critical factors that play a role in preventing the microbial or chemical contamination of produce, and their agreement to adhere to these requirements.

Water Quality

- Water used for irrigation must be obtained from a public water system or wells tested and shown to be free from pathogens (< 2.2 Coliform MPN/ml or "absent").
- Graywater or recycled water is not an approved water source for culinary gardens.
- Water run-off from other irrigation practices unrelated to the culinary garden or rainfall water run-off must be prevented from coming into contact with the culinary garden.

Exotic Systems

- Gardens shall not be planted over or within 10 feet of a exotic system or leach field.

Animals

- Efforts shall be maintained to exclude animals, including domestic animals, from the growing area.
- Animal waste may not be used in culinary gardens.

Pesticides

- Pesticides, if used, shall be applied on or around culinary gardens in accordance with the Healthy Schools Act where applicable and in all cases shall follow all directions for use as found on the registered pesticide label.

Compost

- Compost applied to gardens must be fully composted.
- Compost applied to gardens may not be made from material that includes manure, food scraps containing animal products (meats, dairy, bones, fats/oils) or dead animals unless the compost has been obtained from an approved commercial source.

2



Checklist – Basics

Include the name of the garden, the name and telephone number of a contact person, and the address where the garden is located.

Attach a plot plan showing

- major structures,
- rain barrels,
- compost areas,
- restrooms,
- hand wash facilities,
- chemical and equipment storage sheds,
- septic systems within 100 feet and
- the garden itself.

Utilize a program like PowerPoint to develop a simple map, or produce one by hand. Scale is generally not important in this case.



Checklist – Water

Section 1:

Water Quality

- Water used for irrigation must be obtained from a public water system or wells tested and shown to be free from pathogens
 - (< 2.2 Coliform MPN/ml or “absent”).
- Graywater or recycled water is not an approved water source for culinary gardens.
- Water runoff from other irrigation practices unrelated to the culinary garden or rainfall water runoff must be prevented from coming into contact with the culinary garden.
- Gardens shall not be planted over or within 10 feet of a septic system or leach field.

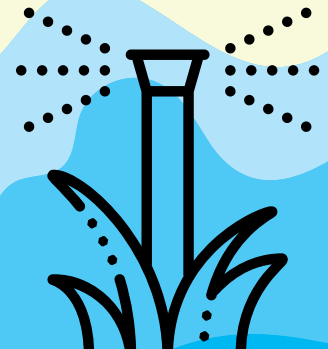
Plain language translation:

Water Quality

- Water used for irrigation must come from the tap or rainwater
 - If the water is from an agricultural well that water must to be tested to ensure it is free from pathogens (wells must have a reading of less than 2.2 Coliform MPN/ml).
- Graywater or 'recycled' water cannot be used if the garden will be producing food.
- Water runoff from sprinklers and streets must be prevented from coming into contact with the culinary garden.
- Gardens cannot be planted over or within 10 feet of a septic system or leach field.

Are rain barrels allowed?

Rain barrels are allowed and should be indicated on your diagram of the garden.



Checklist – Pests

Section 2:

Animals

- Efforts shall be maintained to exclude animals, including domestic animals, from the growing area.
- Animal waste may not be used in culinary gardens.

Plain language translation:

Animals

- Absolutely no manure may be used in a culinary garden.
- Take measures to prevent animals from entering the growing area, including dogs, cats, chickens, squirrels, etc.



Checklist – Pesticides

Section 3:

Pesticides

- Pesticides, if used, shall be applied on or around culinary gardens in accordance with the Healthy Schools Act where applicable and in all cases shall follow all directions for use as found on the registered pesticide label.

Plain language translation:

Pesticides

- Consult the Healthy Schools Act before applying any pesticide. When applying a pesticides, only use ones labeled for use in vegetable gardens, and follow the directions provided.



WE RECOMMEND AGAINST “ROUNDUP” AND OTHER GLYPHOSATE-BASED HERBICIDE

Several studies have strongly indicated glyphosate can adversely affect honeybee populations, causing death or severe harm to them and potentially other pollinators. Additionally, the use of glyphosate on a school campus *without written authority and notification from the school* may be considered illegal.

We do not recommend the use of glyphosate-based herbicide in your garden due to its adverse effects on local pollinators.

Sources are listed in the Resource Guide



Checklist – Compost

Section 4:

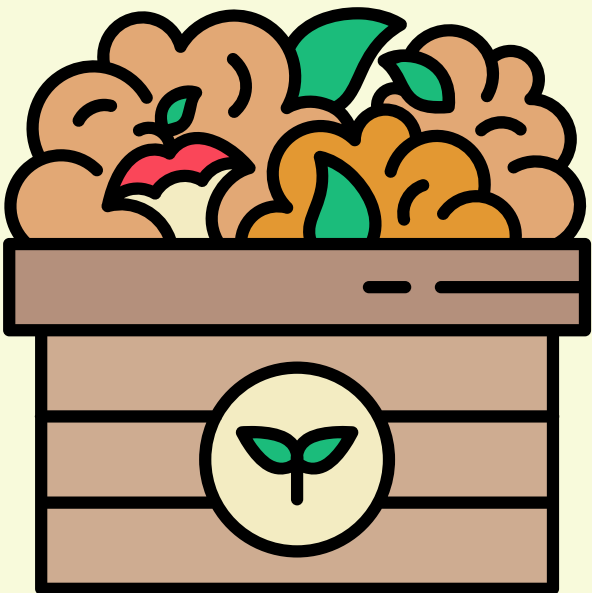
Compost

- Compost applied to gardens must be fully composted.
- Compost applied to gardens may not be made from material that includes manure, food scraps containing animal products (meats, dairy, bones, fats/oils) or dead animals unless the compost has been obtained from an approved commercial source.

Plain language translation:

Compost

- Compost applied to gardens must be fully composted.
- Compost created on-site cannot contain manure, dairy, meat, or bone scraps.
- Compost purchased from a commercial compost dealer may contain these products, provided the material has fully decomposed.



Checklist – Sanitation

Section 5:

Harvest Sanitation

- Gardening and harvest equipment must be maintained in a clean condition and stored in a sanitary location. Dedicated equipment shall be solely used in the garden and not used for other purposes on the property.
- Vegetation at the edges of vegetable patches should be minimized to prevent harborage places for rodents and nuisance insects.
- The grounds surrounding the garden should be maintained in a manner such that pests are not attracted to the area. Plantings that conform with accepted agricultural practices such as flowers for pollination, or cover crops for erosion control are allowable if maintained for this purpose.
- Workers/children should be restricted from entering and working in the garden after they have been working with animals, unless sanitary measures are put in place to prevent cross-contamination.

Plain language translation:

Harvest Sanitation

- Harvest equipment must be kept clean and stored in a sanitary location.
- Dedicated equipment will be used in the garden and will not be used for other purposes.
- Minimize unnecessary foliage to prevent rodents and nuisance insects.
- Plantings such as flowers for pollination, or cover crops for erosion control are allowable if maintained.
- Workers/children should be restricted from entering and working in the garden after they have been working with animals (unless sanitary measures are put in place to prevent cross-contamination).



Checklist – Sanitation

Section 6:

Worker Sanitation

- Workers harvesting produce from culinary gardens must properly wash their hands before handling produce and be free of open cuts or wounds on their extremities.
- Restroom facilities with warm water and soap must be readily accessible to anyone working in a culinary garden.
- Workers should avoid cross-contamination of produce by ensuring equipment, gloves and other sources of contamination do not come into contact with produce after being potentially contaminated by compost or other materials and working in the garden after they have been working with animals, unless sanitary measures are put in place to prevent cross-contamination.

Plain language translation:

Worker Sanitation

- Workers must properly wash their hands before handling produce and have no open cuts or wounds on their hands and/or arms.
- Restroom facilities with warm water and soap must be readily accessible to anyone working in a culinary garden.
- Workers should avoid cross-contamination of produce by ensuring equipment, gloves and other sources of contamination do not come into contact with compost or other materials.



Checklist – Inspection

Section 7:

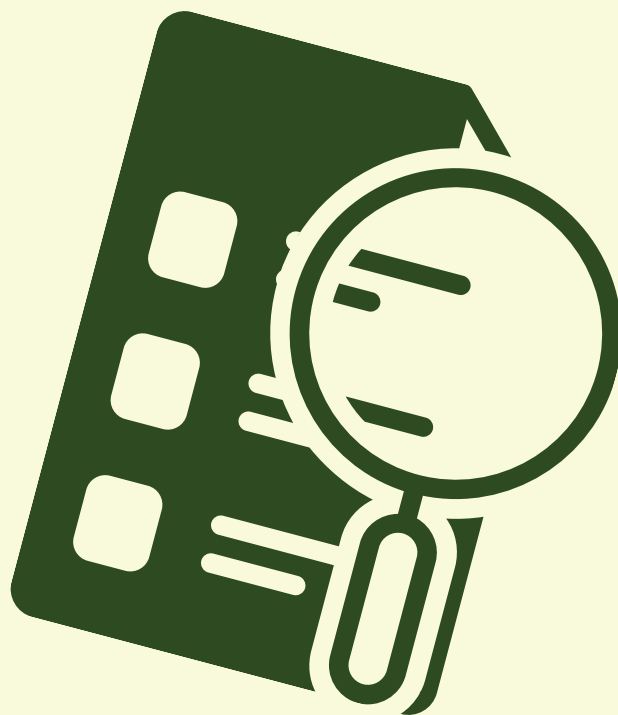
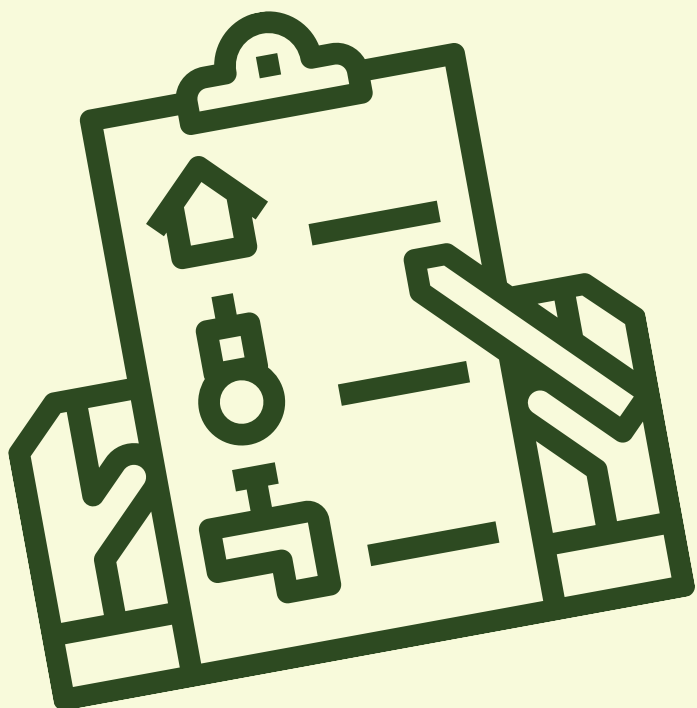
Inspection

- All garden facilities, equipment, operations and records shall be subject to inspection by the Solano County Department of Resource Management, Environmental Health Services Division at any time without prior notice.

Plain language translation:

Inspection

- All garden facilities, equipment, operations and records can be inspected by the Solano County Department of Resource Management, Environmental Health Services Division at any time without prior notice.





Best Practices During Harvest

Tools for Harvesting

There are a few basic tools you need for any harvest:

- Harvest containers for students to collect produce
- A single main harvest container to weigh and collect washed produce

Acceptable harvest container:

food-grade containers, plastic tubs, ice cream buckets, and plastic shopping baskets.

Not acceptable harvest container:

wicker baskets, cloth or burlap bags, used plastic bags, garbage bags.

- A scale for weighing produce
 - a simple kitchen scale or produce scale is fine
 - Postal scales can work well in a pinch

Optional:

- Shears for cutting vines
- Gloves for prickly plants
- For prep-sink: sanitizer (if required)
- For prep-sink: soap and a clean brush

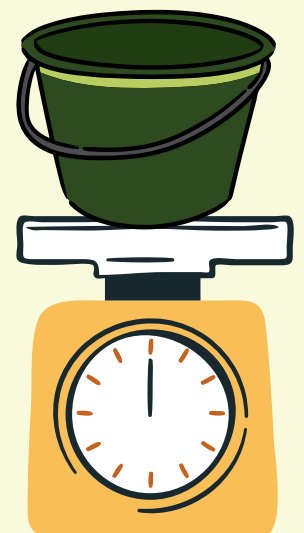
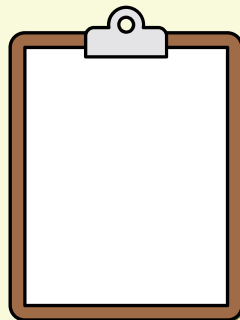


Preparing for Harvesting

A safe harvest requires a little bit of planning and attention to detail, but anyone can do it! Follow the steps below to ensure each harvest is a safe and productive one

BEFORE THE HARVEST:

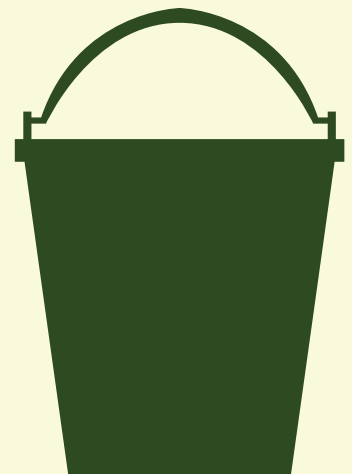
1. Gather the harvest containers, scale, and paperwork.
 - a. In advance, run harvest containers through the dishwasher or wash the containers in a three-compartment sink.
 - b. Print and prepare the **Produce Tracker and Harvest Day Log**.
2. *(If applicable)* Turn on the potable water to the garden sink or to the hose.
 - a. If there is a garden sink, the sink should be cleaned and sanitized before use.
 - b. Before harvesting, clean the garden sink and table surfaces with soapy water, rinse and sanitize.
3. Survey the school garden for vegetables to pick.
4. Weigh the empty harvest tub, record the tub weights for each student's container.



Harvesting

PREPARING FOR HARVESTING WITH STUDENTS:

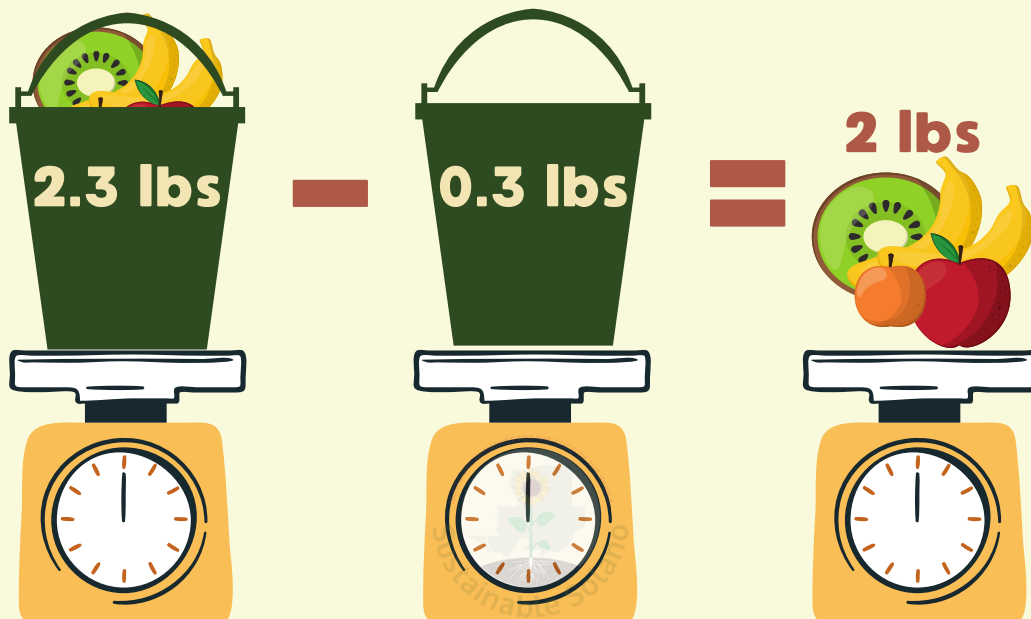
1. Gather a small group of students from the classroom.
2. Verify that none of the students are showing any signs of illness or have recently missed school because of an illness.
 - a. If a student was absent for an illness at any time in the last 48 hours, they shouldn't participate in the harvest. Find other garden activities for them.
3. Students and leaders wash their hands with soap and water in the classroom sink or bathroom.
4. Take students out to the garden and show them what vegetables are ready to be picked (check out the resources section of this toolkit).
5. Distribute cleaned containers to the students.



Harvesting and storing

HARVESTING

1. Start to pick the produce according to ripeness.
2. Wash vegetables in the harvest containers, under potable running water in the sanitized garden sink or under a hose to remove large visible signs of dirt.
3. Allow vegetables to drain.
4. Weigh the washed vegetables.
 - a. (Weight of tub + veggies) - {weight of tub} = [weight of veggies]
5. Transfer to the clean harvest tub.
6. Record the following information in the harvest log:
 - a. Date and time of harvest
 - b. Weight of the vegetables
 - c. Names of leader and students involved in the harvest
7. Take vegetables to the kitchen. Staff should recheck weight and verify accurate quality and quantity.
8. Rinse produce under running water, scrub as necessary.
9. Allow produce to air dry on a sanitary surface.
10. Place produce in storage.
11. Place harvest log in binder.



Distribution

(if applicable)

DISTRIBUTION

Harvest as close as possible to pick-up time. Many leafy vegetables store poorly.

1. *(if applicable)* Clean any reusable distribution containers.
2. Harvest produce as above, do not place in storage.
3. Once produce is dry and the Produce Tracker and Checklist have been filed, prepare your work area.
 - a. Clean the sink area.
 - b. Clear, wash and sanitize the area where food will be bagged.
4. Ensure all hands have been washed again. Wash and sanitize the work surfaces.
5. Place more robust fruits and veggies into the distribution container.
6. Place delicate fruits and veggies in a protective container or at the top of the distribution container.
 - a. You can use clean jars, clean reusable plastic containers, single-use plastic or cardboard containers like take-out food boxes.
 - b. Reusable containers must be cleaned and sanitized before reuse.
7. "Seal" and place all the bags into cold storage until pick-up time.
8. Remove and distribute the bags in bunches, rather than removing them from cold storage all at once.

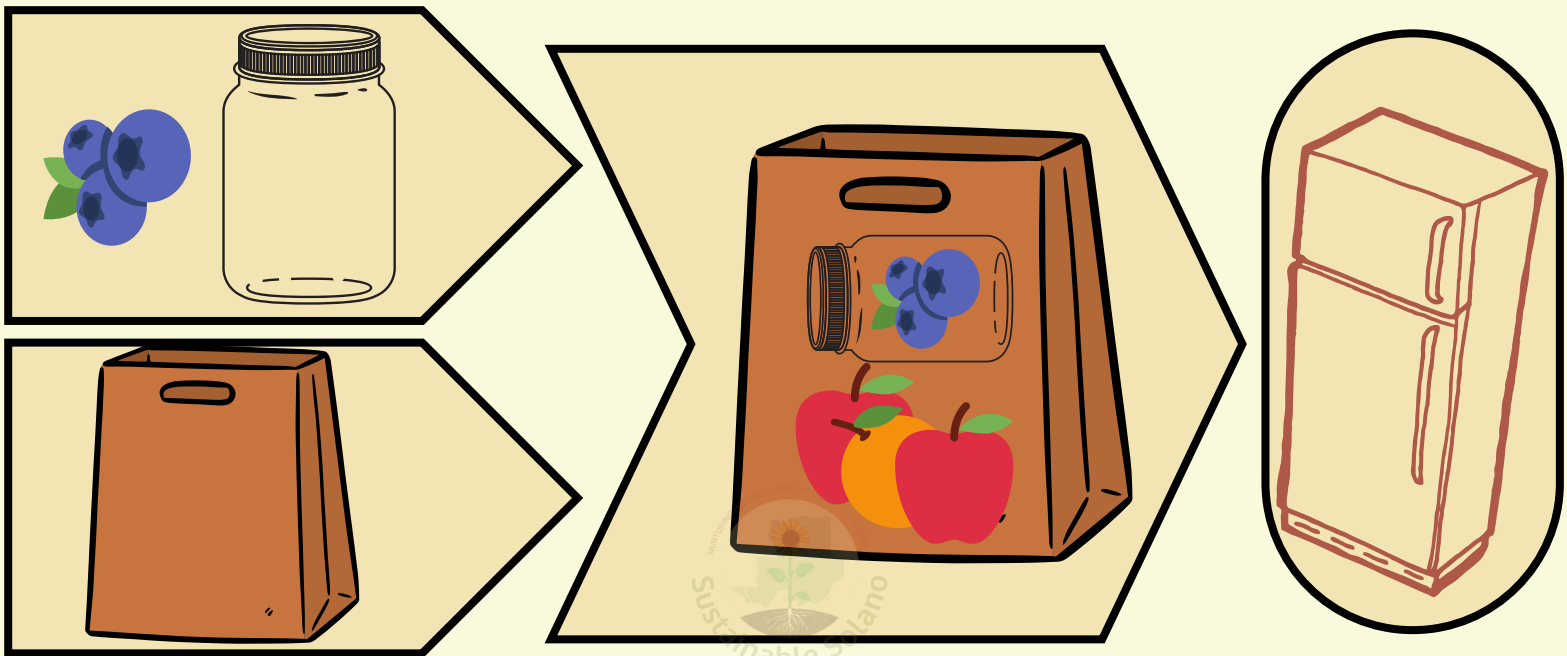
Check out "Make Food Safety a Priority for Your CSA" from the resources section of this toolkit.



CSA-Style Distribution

CSA STYLE DISTRIBUTION

1. Clean and sanitize the workspace.
2. Assemble workstations.
 - a. **Bag unfolding station:**
 - i. Needs: bags, distribution bags, gloves (optional)
 - b. **Delicate food prep station:**
 - i. Needs: robust containers, delicate fruits/veggies, gloves (opt.).
 - c. **Main bag assembly:**
 - i. Needs: unfolded bags, washed fruits and veggies, plus prepped delicate fruits and veggies, gloves (opt.).
 - d. **Cold storage crew**
 - i. Needs: method to transport bags safely, stapler/tape, full bags, pickup list (optional)
3. Have students wash hands again.
4. Begin assembly.
5. Once bags are finished and stored in cold storage, clean the space and wash hands again.



Harvest Day Checklist

Today's date: _____ Safety Supervisor: _____ Kitchen Supervisor: _____

Pre-Harvest	Yes	No	N/A
No pesticides were used on school garden products.			
Only properly composted soil amendments were used in the food production areas.			
There is no evidence of animal damage, animal manure or vandalism in the area to be harvested.			
Harvest Practices	Yes	No	N/A
All harvest containers have been cleaned, sanitized and air-dried prior to use.			
None of the garden helpers are showing signs of illness or have recently be absent because of illness.			
All garden helpers have thoroughly washed hands with soap and clean water.			
Any garden helpers who have a cut or injury on their hands have disposable gloves to wear.			
If a garden sink is available, it has been cleaned and properly sanitized before use.			
All harvested produce has been washed under potable running water to wash away any visible signs of dirt.			
Washed produce has been drained and weighed in a clean harvest tub.			
All garden produce is recorded on harvest log along with names of volunteers, date, and time of harvest.			
After washing, produce was taken to the school kitchen for further cleaning and storage.			
A food service staff member signed a Produce Tracker and Checklist as a receipt of garden produce.			

HARVEST LOGS SHOULD BE FILED AND KEPT FOR AT LEAST ONE YEAR.

Notes:



Sample Harvest Day Checklist

Today's date: 5/12/22 Safety Supervisor: Tianna Kitchen Supervisor: Anita Name

Pre-Harvest	Yes	No	N/A
No pesticides were used on school garden products.	✓		
Only properly composted soil amendments were used in the food production areas.	✓		
There is no evidence of animal damage, animal manure or vandalism in the area to be harvested.	✓		
Harvest Practices	Yes	No	N/A
All harvest containers have been cleaned, sanitized and air-dried prior to use.	✓		
None of the garden helpers are showing signs of illness or have recently be absent because of illness.			✓
All garden helpers have thoroughly washed hands with soap and clean water.	✓		
Any garden helpers who have a cut or injury on their hands have disposable gloves to wear.	✓		
If a garden sink is available, it has been cleaned and properly sanitized before use.	✓		
All harvested produce has been washed under potable running water to wash away any visible signs of dirt.	✓		
Washed produce has been drained and weighed in a clean harvest tub.	✓		
All garden produce is recorded on harvest log along with names of volunteers, date, and time of harvest.	✓		
After washing, produce was taken to the school kitchen for further cleaning and storage.	✓		
A food service staff member signed a Produce Tracker and Checklist as a receipt of garden produce.	✓		

HARVEST LOGS SHOULD BE FILED AND KEPT FOR AT LEAST ONE YEAR.

Notes:

compost should be applied next week, will check tomorrow if all the materials are acceptably composted



Sample Produce Tracker

Today's date: 5/12/22

Food Safety Supervisor: Tianna

Harvester	Produce	Quantity	Guild or bed
patrick	lemons	12	north
tianna	peaches	9	mound
holman	celery stalks	4	south
shene	chamomile	16oz	south
paul	mint	9oz	bed #3
nick	apples	11	north
scott	oranges	12	north
liz	strawberries	30	bed #2
amanda	artichoke	2	mound

Kitchen Supervisor: anita name

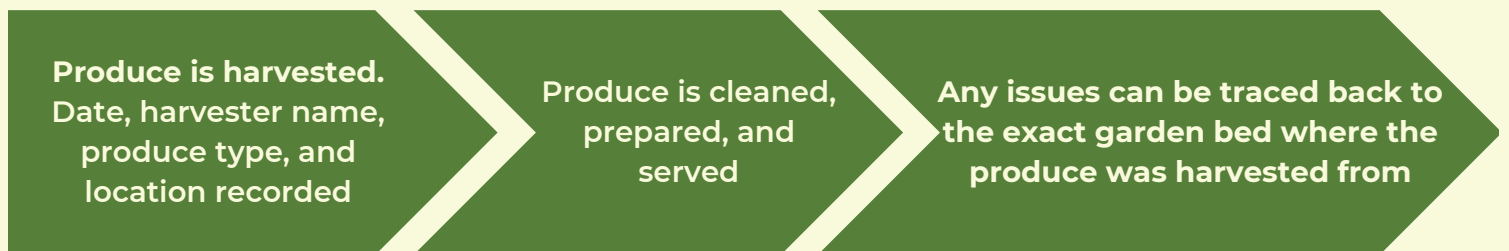
Produce cleaned by: anita name

**SIGN ABOVE TO INDICATE PRODUCE HAS BEEN CLEANED AND STORED
HARVEST LOGS SHOULD BE FILED AND KEPT FOR AT LEAST ONE YEAR.**

Why make a map?

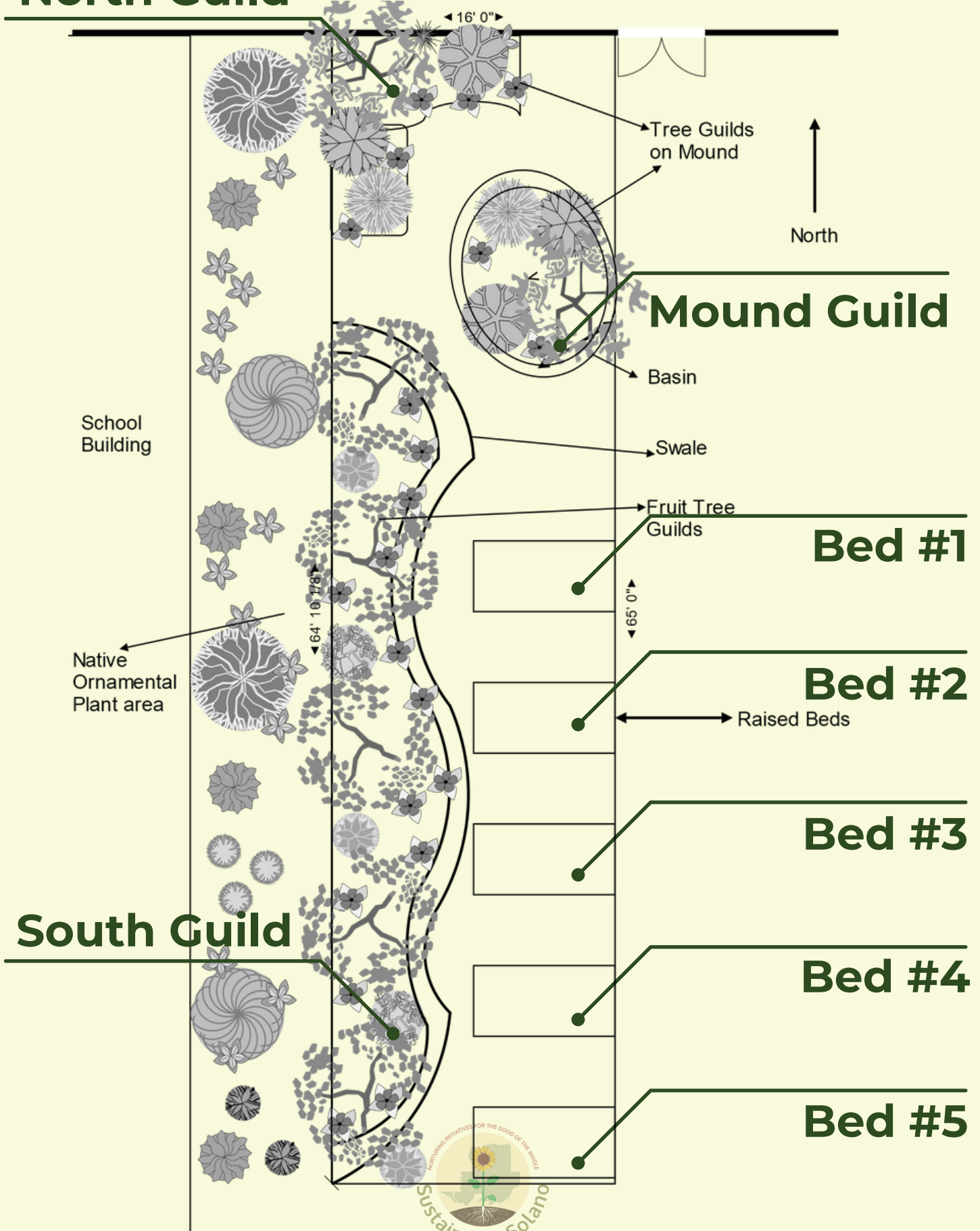
Produce traceability is an important link in protecting public health. It allows anyone concerned to quickly and accurately identify the source of contaminated fruit or vegetables believed to be the cause of an outbreak of foodborne illness. Creating a map of your food forest ensures that you're taking garden safety into account.

Use a program like Slides or Power Point to create a map of your garden, and label each bed and mound with a name or number. Distribute this map to students, or provide small signs in the garden itself to make tracking easier.



Sample Garden Map

North Guild



Resource Guide



Thank you!



Holman Pettibone - for his commitment to getting answers when we needed them

Tianna DeSilva - for her commitment to getting this garden established

Shene Wells - for showing up each and every chance she could

Nick Driver - for his support

Roxann Lynch-Burns - for her direction and willingness to help

Jennifer Leonard - for her support


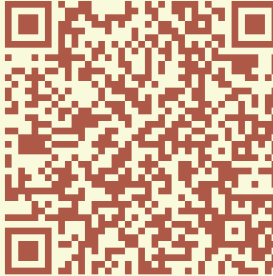



Our October volunteers - for their dedication and assistance

Jr's Tree Service - for their donation of woodchips



This project was made possible by a USDA FNS Farm to School Grant.

Education Related

Name	URL	Archive URL
Citizen Science on the Farm, CitSci (UC Davis)		archive.ph/p3FqI
K-8 Next Generation Science Standards in the Garden, Life Lab		archive.ph/olhIF
Youth-focused Citizen and Community Science for Educators, CitSci (UC Davis)		archive.ph/RtAM6
Cultivating Joy & Wonder: Educating for Sustainability in Early Childhood Through Nature, Food, and Community, Shelburne Farms		archive.ph/M0dFY
Discovering Our Food System, Cornell Extension		archive.ph/2lpL1



Sanitation and organizational skills

Local Food Organizational Toolkit, Iowa State University



archive.vn/v6Bsv

Harvesting and storing vegetables, Iowa State University



archive.vn/jjHIV

Guide to Using Liquid Sanitizer Washes, Iowa State University



archive.vn/seGt5

Make Food Safety a Priority in Your School Garden, Iowa State University



archive.vn/k4xcR

On-farm Food Safety: Cleaning and Sanitizing Guide, Iowa State University



archive.vn/D9atH



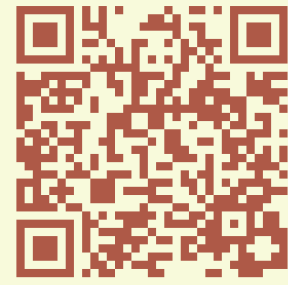
Food Safety and other organizations

Top 13 vegetables to donate to food pantries



archive.vn/WvDhi

Make Food Safety a Priority for Your CSA



archive.vn/XyihZ

Make Food Safety a Priority at Your Farmers Market Booth



archive.vn/oehH2

Edible School Yard Project



archive.ph/Fxlko

Garden to Cafeteria Toolkit, Slow Foods USA



archive.vn/GqveU

Cultivate Charlottesville Impact Report, Cultivate Charlottesville



archive.vn/gGkMY

WE RECOMMEND AGAINST “ROUNDUP” AND OTHER GLYPHOSATE-BASED HERBICIDE

Several studies have strongly indicated glyphosate can adversely affect honeybee populations, causing death or severe harm to them. Additionally, the use of glyphosate on a school campus *without written authority and notification from the school* may be considered illegal. We do not recommend the use of glyphosate based herbicide in your garden, due to its adverse effects on local pollinators.

- **Addressing Pesticide Applications Near Schools and Child Care Facilities**
 - https://www.cdpr.ca.gov/docs/enforce/pesticide_applications_near_schoolsites.htm
- **Honey Bees, Bumble Bees, Carpenter Bees and Sweat Bees**
 - <https://extension.okstate.edu/fact-sheets/honey-bees-bumble-bees-carpenter-bees-and-sweat-bees.html>
- **Roundup causes high levels of mortality following contact exposure in bumble bees**
 - <https://doi.org/10.1111/1365-2664.13867>
- **Effects of a commercially formulated glyphosate solutions at recommended concentrations on honeybee (*Apis mellifera* L.) behaviours**
 - <https://www.nature.com/articles/s41598-020-80445-4>
- **Is glyphosate toxic to bees? A meta-analytical review**
 - <https://doi.org/10.1016/j.scitotenv.2021.145397>





Production Calculator

1	A	B	Year 1		Year 2		Year 3		Year 4		Year 5+	
			C	D	E	F	G	H	I	J	K	L
2	Plants	Number of plants	lbs/ plant	Total	lbs/ plant	Total	lbs/ plant	Total	lbs/ plant	Total	lbs/ plant	Total
3	Fruit Tree High yield		0		0		10		20		60	
4	Fruit Tree Low yield		0		0		5		10		35	
5	Vines		0		0		7.5		15		30	
6	Shrubs high yield		0		1		3.5		6		8.5	
7	Shrubs low yield		0		1		2		6.5		6.5	
8	Herbaceous plants low yield		0.35		0.625		0.625		0.625		0.625	
9	Herbaceous plants high yield		0.5		0.75		1.05		1.05		1.05	
10	Ground covers		0.375		0.75		0.75		0.75		0.75	
11	Root Crops		0.375		3		3		3		3	
12	Year total											
13	Lifetime total											

Enter the number of plants in your garden in Column B (B3-B11).
 Multiply C3 by B3. Enter this number in D3. Repeat with E3 and B2. (e.g. multiply I10 by B10, enter this into J10.)
 Quick tip: copy this chart into Excel. In D3, type "=SUM(C3*\$B2)" select the D3 to D11, and press Ctrl+D. Copy and paste D3 into F3 and repeat.

Solano Summary

City	Chickens?	Chicken Code	Compost Code	Compost Restrictions?	Garden Code
Benicia	Yes (up to 10)	6.32.040	/	None	17.62.040, 8.04.030
Dixon	Yes (up to 4)	7.02.050	9.06	Affirms state code	/
Fairfield	Yes (up to 3)	3.22.1	9.12	Explicitly allowed	25.166.103
Rio Vista	Yes (no limit)	6.08.090	8.12.030	Yes	17.68.200
Suisun City	Yes (up to 3)	6.05.092	/	None	18.28.030
Vacaville	Yes (up to 9)	14.09.270.070	/	None	14.09.270.190
Vallejo	Yes (up to 10)	7.24.060	16.314.02	Yes	16.314






City Codes

City	Code Link	QR Code
Benicia	https://www.codepublishing.com/CA/Benicia/	
Dixon	https://www.codepublishing.com/CA/Dixon/	
Fairfield	https://www.codepublishing.com/CA/Fairfield/	
Rio Vista	https://library.qcode.us/lib/rio_vista_ca/pub/municipal_code/	



City Codes

City	Code Link	QR Code
Suisun City	https://library.municode.com/ca/suisun_city/codes/code_of_ordinances	
Vacaville	https://www.codepublishing.com/CA/Vacaville/#!/	
Vallejo	https://library.municode.com/ca/vallejo/codes/municipal_code?	



Harvest Day Checklist

Today's date: _____ Safety Supervisor: _____ Kitchen Supervisor: _____

Pre-Harvest	Yes	No	N/A
No pesticides were used on school garden products.			
Only properly composted soil amendments were used in the food production areas.			
There is no evidence of animal damage, animal manure or vandalism in the area to be harvested.			
Harvest Practices	Yes	No	N/A
All harvest containers have been cleaned, sanitized and air-dried prior to use.			
None of the garden helpers are showing signs of illness or have recently be absent because of illness.			
All garden helpers have thoroughly washed hands with soap and clean water.			
Any garden helpers who have a cut or injury on their hands have disposable gloves to wear.			
If a garden sink is available, it has been cleaned and properly sanitized before use.			
All harvested produce has been washed under potable running water to wash away any visible signs of dirt.			
Washed produce has been drained and weighed in a clean harvest tub.			
All garden produce is recorded on harvest log along with names of volunteers, date, and time of harvest.			
After washing, produce was taken to the school kitchen for further cleaning and storage.			
A food service staff member signed a Produce Tracker and Checklist as a receipt of garden produce.			

HARVEST LOGS SHOULD BE FILED AND KEPT FOR AT LEAST ONE YEAR.

Notes:

