Program Application: 83181992

Linked Pre-Application Form - DO NOT DELETE
You(th) Be the Change: Growing Resilience

Grant Amount Requested
$75,000.00

Organization Name
Acterra: Action for a Healthy Planet

Urban Grant Program Application Questions

Overview

Type of project (check all that apply)

Grant category (check all that apply)
Environmental Education

Project Location: Address / Neighborhood

What is the physical location of the project? If there is no physical location, please enter "N/A." If the project will be in multiple locations, please list all. Note: project location(s) must be within the Authority's jurisdiction.
The project will serve middle schools located in the East San José and Alum Rock areas of the City of San José, including schools such as ACE Inspire Academy, ACE Esperanza Academy, Escuela Popular, Ocala STEAM Academy, Aptitud Academy at Goss, and/or Bridges Academy.

Field trips and outdoor learning experiences will take place at the following community partner locations, all within or near the project area:
-Veggielution – 647 S King Rd, San Jose, CA 95116
-Garden to Table – 200 W Taylor St (next to Citibank), San Jose, CA 95110

All project activities will take place within the Authority's jurisdiction.

Project Location

Open Space Authority District of Project Location(s)(check all that apply)
Authority District 6, Authority District 7

Who does the project serve? Please indicate which Open Space Authority Districts are served (where do the people served by the program live) (check all that apply)
Authority District 6, Authority District 7

Project Abstract
Acterra's You(th) Be the Change: Growing Resilience project empowers middle school students in East San José through hands-on climate and food sustainability education. Using a standards-aligned curriculum and immersive field trips to local gardens and Acterra's San Jose Food Forest, students explore climate science, food systems, and environmental justice. The program prioritizes underserved schools and builds student leadership by supporting the creation of Green Teams that lead sustainability projects. This project fosters environmental literacy, youth empowerment, and long-term community resilience.

Project Planning

Describe the proposed project.
Acterra's You(th) Be the Change (YBtC): Growing Resilience project will expand climate and food sustainability education for middle school students in the East San José community. The program is designed to empower students—particularly those from under-resourced schools—to understand climate change, build a relationship with nature, and take meaningful action in their schools and communities.

Using our robust, standards-aligned YBtC curriculum, students will participate in lessons and hands-on field trips at Acterra's San Jose Food Forest (pending relocation to our partner Veggielution's site in San Jose) and at community gardens like Veggielution, transforming these local spaces into outdoor classrooms. Lessons will focus on climate science, food systems, environmental justice, and solutions, with a special emphasis on our newly developed food sustainability module.

The intended audience includes middle school students from schools such as ACE Inspire Academy (our current partner) and other schools like Escuela Popular, ACE Esperanza Academy, Ocala STEAM, Aptitud Academy at Goss, and Bridges Academy. These schools serve predominantly limited-income and minority students who often lack access to environmental education and field trip opportunities. By removing logistical and financial barriers, this project ensures equitable access to high-quality, hands-on learning.

In addition to curriculum and field trip experiences, students will be supported in creating and leading school-based Green Teams—student-led groups that implement sustainability initiatives such as composting programs, waste reduction campaigns, and healthy food projects. Through these teams, students develop leadership and collaboration skills while gaining confidence to take action in their school and broader community. Acterra provides toolkits, mentorship, and guidance to help students design and implement their projects.

The YBtC curriculum is aligned with Common Core and Next Generation Science Standards (NGSS), enabling teachers to meet academic goals while delivering culturally relevant environmental education. Teachers receive curriculum materials, training, and logistical support to embed this work into their classrooms beyond the life of the grant.

Ultimately, this project will prepare youth to understand local climate challenges, develop practical sustainability skills, and lead change in their communities—while strengthening connections among schools, families, and open space. This project builds upon the foundation of our previous Open Space grant, leveraging the partnerships established, the logistical knowledge gained, and the success of past programming to deepen impact. In this new phase, we are adding key elements such as student-led Green Teams and the integration of Acterra's Food Forest as an outdoor learning space.

Describe key project deliverables and estimated completion dates.
Key project deliverables:

1) Curriculum Delivery (Spring 2026 – Spring 2028): Deliver Acterra's six-module You(th) Be the Change (YBtC) curriculum—including the newly developed food sustainability module—to participating classrooms in East San José. The curriculum will be implemented in schools such as ACE Inspire Academy, Escuela Popular, ACE Esperanza Academy, Ocala STEAM Academy, Aptitud Academy at Goss, and/or Bridges Academy.

2)Field Trips (Spring 2026 – Spring 2028): Conduct 10 hands-on field trips at Acterra's San Jose Food Forest (pending relocation) and community garden sites like Veggielution and Garden to Table. These immersive experiences will reinforce classroom lessons through practical, outdoor learning.

3) Teacher Support (Ongoing): Provide curriculum materials, transportation coordination, and logistical support throughout the program. In addition, host one in-person professional development session for up to 20 teachers to build capacity for climate and food sustainability instruction, ensuring long-term integration beyond the grant period.

4)Student Climate Action Projects (Fall 2026- Spring 2028): Support the creation and launch of student-led Green Teams at participating schools. These teams will design and implement sustainability projects such as composting programs, waste reduction campaigns, and healthy food initiatives, promoting leadership and peer-to-peer learning.

5) Reporting & Evaluation (Duration of the grant, submitting semiannual reports and final report): Collect and analyze data on student learning, behavior change, climate pledges, and teacher feedback. Submit semiannual progress reports and a final report detailing outcomes and lessons learned to inform program improvements and share best practices.

Working with ACE Inspire Charter School over the past two years has shown us that while they serve public-school students from the East San José community, they face limited resources to make field trips happen. With this funding, we can remove those barriers, ensuring more students from these schools have the opportunity to participate in high-quality, standards-aligned environmental education and connect with nature in their own community.

Does this project require permission, permits, or other approvals? If so, please describe the status of these.
All activities will take place either on school campuses or at Acterra's San Jose's Food Forest or Veggielution community garden, sites where Acterra already has an established partnership in place. We also coordinate directly with participating schools and community gardens to secure access and schedule field trips. These partnerships ensure we have the necessary permissions for program delivery, and no additional local, state, or federal permits are needed.

What is the lifetime of this project? If applicable, describe plans for operating and maintaining the project in the future.
While this grant will support one full program cycle, the impact of the project will extend well beyond the grant period. Teachers who participate receive curriculum materials and training that allow them to continue teaching climate and food sustainability content in future school years, creating ongoing benefits for new groups of students. The You(th) Be the Change curriculum is designed to be flexible, standards-aligned, and easy to integrate, supporting long-term adoption in classroom settings.

In addition, we encourage the formation of Green Teams at each participating school. These student-led groups continue the work of the program by implementing sustainability initiatives such as composting, waste reduction campaigns, and school garden projects. By fostering student leadership and peer engagement, these teams help sustain environmental action across campus and into the broader community.

Students are also encouraged to stay involved with local community gardens and Acterra's San Jose Food Forest, where they can continue engaging with food, nature, and community-based climate solutions. This extended connection helps reinforce learning, supports intergenerational engagement, and nurtures long-term environmental stewardship.

Together, these elements ensure that the project leaves a lasting legacy through empowered educators, student leaders, and community partnerships.

Describe the project's readiness for implementation.
This project is fully ready for implementation. We have established partnerships with schools such as ACE Inspire Academy, Escuela Popular, and additional schools in East San José, like the ones mentioned above. We also have strong relationships with local community gardens, including Veggielution and Garden to Table, which serve as outdoor learning sites for our field trips.

Additionally, our San Jose Food Forest is currently in the process of relocating to Veggielution's site in San Jose due to the closure of Educare, its previous host site, following the loss of federal funding. Once the new location is secured and the site is reestablished—potentially during the grant period—it will serve as an additional field trip site, offering a dedicated, community-based space for hands-on environmental education.

Building on two years of successful programming supported by Open Space, we have refined our curriculum, field trip model, and logistics. During the initial years, we faced challenges such as high costs of bus rentals, increased field trip site fees, and general year-over-year inflation across all program expenses. Additionally, coordinating logistics with schools—including scheduling, permission processes, and transportation—required significant planning and relationship-building.

Thanks to this experience, we have developed streamlined systems and strong partnerships with school administrators and teachers, allowing us to serve students more efficiently and effectively. With these systems now in place and early implementation hurdles addressed, we are well-positioned to scale the program and reach more students immediately, maximizing the impact of this next phase of the project.

Project Budget

Budget Summary - Grant Request & Budget Summary - Matching Funds

Grant request: Personnel
$30,900.00

Grant request: Contracted Services
$0.00

Grant request: Supplies / Materials
$2,000.00

Grant request: Other Direct Costs
$27,100.00

Grant request: Indirect Costs
$15,000.00

Total Matching Funds
$0.00

Total Budget
$75,000.00

Please upload a detailed version of your budget by accessing the link below:
Acterra_Open Space UGP_Project_Budget_2025.xlsx

Materials and Budget Template (item #9) found here: https://www.openspaceauthority.org/programs/grant.html#Materials

Provide a brief budget narrative to explain the expenses listed in each of the budget categories (e.g. Personnel).
The total project budget supports the successful delivery of Acterra's You(th) Be the Change: Growing Resilience program, covering direct implementation, student support, and necessary operational costs.
-Personnel ($30,900): Covers staff time for planning and implementing the project, including curriculum delivery, coordinating field trips, teacher training, and school engagement.
-Supplies and Materials ($2,000): Includes educational and hands-on materials used during sessions and field trips to support interactive learning experiences for students.
-Bus Rental ($12,500): Funds transportation for approximately 10 field trips, covering round-trip bus service from participating schools to field trip sites.
-Field Trip Fees and Student Lunches ($10,000): Covers entry or activity costs for 10 field trips and provides lunch for all participating students to ensure equitable participation.
-Teacher Training – In-Person Costs ($1,000): Supports materials, lunch, and logistical costs for conducting in-person training sessions for up to 20 teachers.
-Teacher Stipends ($3,600): Provides $180 stipends for up to 20 teachers to recognize their time and commitment to the training and curriculum integration.
-Indirect Costs ($15,000): Helps cover necessary administrative and operational overhead expenses that support the execution and management of the grant.

This budget ensures comprehensive support for program delivery, equitable student participation, and long-term sustainability through teacher engagement.

Award Amount: The Board reserves the right to award partial funding on projects. If your project were to receive partial funding, what would this mean for your project?
If awarded partial funding, we would adjust the scale of the program to align with available resources while maintaining the core components of the project. This may include reducing the number of participating schools or field trips. We would prioritize serving the highest-need student populations and ensure that all participants still receive a high-quality, impactful experience. With our flexible program model and strong school partnerships, we are prepared to maximize the impact of any level of funding received.

Project Goals

Describe the specific problems, issues, or unserved needs the project will address.
Education is widely recognized as one of the most powerful tools for addressing climate change. In a 2024 address to the UNESCO Executive Board, UN Climate Change Executive Secretary Simon Stiell stated: "Education is key for the future. We need to train the next generation to address climate change in various fields. Climate education should be part of all school curricula." Yet despite broad agreement, climate education is still not a consistent part of middle school learning in California or across the United States. Research highlights the importance of addressing this gap. A study published in May 2025 in Taylor & Francis Online surveyed a diverse group of 10- to 13-year-olds in California and found that many students had limited understanding of the mechanisms of climate change, along with widespread misconceptions. The researchers concluded that children "have significant potential to become change makers… but only if they are given the opportunities to gain knowledge about climate change…and the proper tools to make changes."

This gap is especially unfavorable for students in communities like East San Jose, where climate-related challenges such as extreme heat, food insecurity, and air pollution are already impacting daily life. Without access to meaningful climate education, these students are left without the scientific foundation, practical skills, or sense of agency needed to address the environmental challenges shaping their futures.

Few programs in the region provide sustained, experiential climate education for middle schoolers. YBtC directly addresses this unmet need by combining classroom-based learning with applied experiences in gardens and food forests. The program makes climate science tangible and actionable—connecting big-picture concepts to daily behaviors like composting and reducing food waste, which have immediate and tangible impacts on the environment. Students not only gain knowledge but also practice behaviors that support climate resilience and community well-being.

Programs like YBtC enhance climate change education by helping students understand how climate change works and how they can be part of the solution through hands-on activities. This project ensures that the students most affected by environmental inequities are also the most empowered to lead on climate action.

How does this project serve the community?

Number of people served
320

Number of youth served
300

Number of programs provided
11

Other Grantee Goal #1 (optional)

Other Grantee Goal #2 (optional)

Impact

Describe the lasting impact of the project. Please include whether the program is open to the public and whether any materials developed will be available to the public.
This project will have a lasting impact by equipping middle school students with the knowledge, skills, and motivation to take action on climate and food sustainability—both during and beyond the program.

Students who participate in lessons and field trips gain a deeper understanding of environmental issues and be empowered to lead change through Green Teams that implement school-based sustainability projects. These student-led efforts often spark peer interest and community involvement, creating a ripple effect that extends the program's impact over time.

Teachers will also receive training and curriculum support, allowing them to continue integrating climate education into their classrooms year after year, reaching new cohorts of students. To further ensure long-term impact, Acterra's You(th) Be the Change curriculum is freely available to the public on our website, making it accessible to educators, families, and community groups, servingr 4,954 students last year. While the direct program is school-based and not open to the general public, its resources and student-led initiatives are designed to inspire and engage the broader community, contributing to a culture of sustainability that continues well beyond the grant period.

Climate Resilience

How does this project enhance and/or raise awareness about climate resilience? Please include any metrics that can be used to help quantity or understand the climate benefits of the project.
This project enhances climate resilience by equipping youth—particularly from communities disproportionately impacted by climate change—with the knowledge, tools, and agency to understand, adapt to, and act on climate challenges. Through lessons and field trips focused on climate science, food systems, and environmental justice, students learn how climate change affects their daily lives and how sustainable behaviors like composting, reducing food waste, and making plant-forward food choices contribute to local and global climate solutions. Wasted food is the third-largest global contributor to greenhouse gas emissions—primarily methane—and in the Bay Area, food accounts for 19% of total emissions, according to a study by the CoolClimate Network. By understanding these impacts, students gain the tools to make meaningful changes in their own lives and communities.

By supporting the creation of student-led Green Teams, the program fosters youth leadership and school-based engagement around sustainability. These teams design and implement projects—such as composting programs, food waste reduction campaigns, or school garden initiatives—that inspire climate-positive actions within their campuses. These efforts raise awareness among peers, families, and educators, creating a ripple effect that encourages long-term behavior change and builds climate resilience across the broader community.

In addition, the program supports teacher capacity-building and provides free public access to curriculum resources, ensuring the broader community continues to benefit from climate education beyond the grant period. Ultimately, this project helps build a more informed, empowered, and resilient next generation ready to lead on climate solutions.

Community Engagement / Stakeholder Support / Community Building

Describe the community support and/or community engagement process. Please upload any community support letters in the Documents Upload section below.
This project is rooted in strong community partnerships and meaningful engagement with schools, educators, and local organizations. We will continue working with schools we've previously partnered with—including ACE Inspire Academy, Escuela Popular, ACE Esperanza Middle School, Ocala STEAM, Aptitud Academy at Goss, and Bridges Academy—to reach students who have not yet participated in the program, including incoming 6th graders. These partnerships are built on mutual trust and shared goals around expanding access to environmental education.

We will also continue collaborating with local community gardens, including Garden to Table and Veggielution, where we have already successfully implemented field trips. These partners are familiar with our curriculum and program goals, allowing us to deliver high-impact, place-based learning experiences. Additionally, our San Jose Food Forest, currently in the process of relocating, is expected to move to a site at Veggielution, which will expand our capacity to engage students and eventually their families in ongoing community-based climate action.

Teachers play a central role in the program's success, and we work closely with them by offering curriculum-aligned resources and training. This helps build teacher confidence in delivering climate science content and ensures continuity beyond the life of the grant.

Overall, our work is grounded in collaboration. From co-developing field experiences with community partners to building long-term relationships with educators and school communities, this project reflects Acterra's deep commitment to community engagement and shared impact.

Underserved Communities

Describe how the project addresses open space needs for sensitive populations such as residents of park-poor neighborhoods, under-served, or disadvantaged communities, youth, seniors, persons with disabilities, or is located within an under-resourced community.
This project directly serves middle school students in under-resourced and environmentally burdened communities of East San José. Participating schools—ACE Inspire Academy, Escuela Popular, ACE Esperanza, Ocala STEAM, Aptitud Academy at Goss, and Bridges Academy—are schools where between 72% and 89% of students are economically disadvantaged, and have over 97% of minority enrollment, predominantly identified as Hispanic.

The neighborhoods these schools serve are within CalEnviroScreen 4.0-designated disadvantaged communities, with percentile scores ranging from 64 to 85, indicating high levels of need. For example:
-Census Tract 6085503110 (77th percentile overall) shows 96% linguistic isolation and 87% poverty.
-Census Tract 6085503601 ranks in the 85th percentile, with high scores for pollution burden (84%), linguistic isolation (95%), and poverty (78%).
These communities also score high in environmental vulnerability and low in educational attainment, further highlighting the need for accessible, place-based education opportunities.

Students in these neighborhoods often lack access to safe green spaces and environmental education, limiting their opportunities to connect with nature and build the skills needed to understand and act on climate challenges. This project not only brings students into outdoor spaces like Veggielution, Garden to Table, and the soon-to-be-relocated San Jose Food Forest, but also provides skill-building opportunities through student-led Green Teams that promote leadership, collaboration, and civic engagement.

By providing standards-aligned, culturally relevant climate education and experiential learning in open spaces, this project addresses the deep inequities faced by these communities—empowering youth to become advocates for sustainability and resilience in their own schools and neighborhoods.

Organizational Capacity

Briefly describe the organization and its ability to successfully implement this project. This might include successful past projects, key staff qualifications, financial resources, etc.
Acterra is a Bay Area-based environmental nonprofit with 55 years of experience delivering impactful, community-centered climate programs. Our mission is to bring people together to create local solutions for a healthy planet, with a strong focus on equity, environmental education, and climate resilience.

We have a proven track record of successfully designing and implementing youth education programs, including YBtC—our middle school climate education initiative. Since 2022, we have partnered with multiple San José schools to deliver YBtC programming, including field trips and teacher training, with support from the Open Space Authority and other funders. We have also partnered with community gardens such as Veggielution and Garden to Table, which are familiar with our curriculum and provide trusted outdoor learning spaces.

Key staff include experienced environmental educators and program managers who have led hands-on programs in schools and communities. Our team has developed, refined, and expanded the program based on real-world experience engaging with students, teachers, and community partners.

Our Senior Program Manager, Lily de la Espriella, brings extensive experience in environmental education, youth engagement, and curriculum design. She has led the implementation of the YBtC program from the start, developing field-based learning experiences, coordinating with teachers and schools, conducting trainings, and guiding students in leadership projects. Lily holds a B.A. in Environmental Studies from UC Santa Cruz, has a background in ecological research and science communication, and is a published co-author in the journal Ecology and Evolution. She is also proficient in Spanish, allowing her to connect more deeply with students and families in our priority communities.

Naomi Gates, our Program Associate, has played a key role in supporting our youth education program. She brings a background in public policy and community engagement, with a degree in Planning, Public Policy, and Management from the University of Oregon. Naomi served as an AmeriCorps Member with Acterra before her current role, and her focus on sustainable transportation and accessibility complements our equity-driven education work. She has demonstrated strong initiative and adaptability while supporting the delivery of field trips and school-based programming.

Together, Lily and Naomi bring hands-on experience successfully delivering the previous Open Space-funded project and are fully prepared to lead this next phase. They are supported by Genevieve Lucas-Conwell, Acterra's Director of Programs, who has a strong background in community organizing, program leadership, and climate justice. Genevieve has led nonprofit organizations locally and internationally, including work in AIDS education in South Africa and affordable housing advocacy in the Bay Area.

Acterra also has strong operational and financial systems in place to manage grants, track outcomes, and report on project impact. Our long-standing community partnerships, deep programmatic expertise, and infrastructure for implementation position us to complete this project and expand its reach. Letters of support from partners are included in the application to further demonstrate community trust and our ability to deliver.

Leadership & Innovation

Describe how this project employs innovative approaches or encourages collaboration and partnerships.
This project takes an innovative, equity-centered approach to environmental education by combining standards-aligned classroom learning with hands-on experiences in local open spaces, such as community gardens and Acterra's San Jose Food Forest. Through this hybrid model, students connect abstract climate science concepts to real-world actions like composting, sustainable food choices, and school-based sustainability projects.

The program's Green Team model is a leadership development component that empowers students to design and implement environmental initiatives in their schools and communities. These student-led efforts foster peer-to-peer learning, promote youth agency, and inspire broader participation—creating a ripple effect of impact that extends beyond the classroom.

The project also models cross-sector collaboration, partnering with public schools, charter schools, community gardens (Veggielution and Garden to Table), and local educators. These relationships deepen the program's relevance and impact, and ensure shared ownership in building climate resilience.

Acterra's ongoing collaboration with teachers —including training, co-planning, and follow-up support— helps embed environmental education into the curriculum and supports long-term systems change.

By delivering culturally relevant, place-based learning in environmentally overburdened neighborhoods, this project is advancing the field of environmental education and demonstrating a replicable model for empowering youth as leaders in climate resilience and community transformation.

Documents Section

Document Uploads (please combine into one file if possible)
Acterra_Letters of Support_Open Space Urban Grant.pdf

Additional files (if needed)
Acterra Climate Action Guidebook.pdf

Additional files (if needed)
Acterra_YBtC Curriculum Overview.pdf

Submitted Date - Internal

Summary Field:

Name: Average Score (no bonus)

Form: Staff Review

Summary Type: average

Field: Base Score Total

Decimal: 2

Currency: No

Description/Help Text: NONE

Short Name: NONE

Field Purpose: NONE

Filter:

- ALL:
  - isComplete | is | true

Summary Field:

Name: Total Count of Submitted Reviews

Form: Staff Review

Summary Type: count

Field: NONE

Decimal: NONE

Currency: No

Description/Help Text: NONE

Short Name: NONE

Field Purpose: NONE

Filter:

- ALL:
  - isComplete | is | true
  - Folder | is | Submitted

Program Application: File Attachments

Please upload a detailed version of your budget by accessing the link below:
Acterra_Open Space UGP_Project_Budget_2025.xlsx

Document Uploads (please combine into one file if possible)
Acterra_Letters of Support_Open Space Urban Grant.pdf

Additional files (if needed)
Acterra Climate Action Guidebook.pdf

Additional files (if needed)
Acterra_YBtC Curriculum Overview.pdf

Santa Clara Valley Open Space Authority | 2025 Urban Grant Program

INSTRUCTIONS

Please provide a detailed project budget. More information, including a detailed list of direct and indirect costs, is available in the Urban Grant Program Guidelines (http://www.openspaceauthority.org/urban). A sample budget is included in a separate tab.

The Budget Form in a separate tab in this document. The budget categories are listed below with a description of each field.

PROJECT	
Project Name:	The name of the project
Organization:	The name of the organization requesting funding
PERSONNEL	
Estimate employee and volunteer time directly related to the project. Hourly rates for employees can include salarly plus fringe benefits, payroll tax, etc, but can not include indirect costs. Note: please list position titles only.	
Position title:	Title of each employee working directly on this project. Note: please list position title only.
Description of Budget Item:	The amount of time (e.g. hours) and the hourly rate for each employee. Hourly rates can include salary plus fringe benefits, payroll taxes, etc, but can NOT include indirect costs. Please provide adequate detail to show how totals were calculated.
Grant Request:	The amount requested from this Grant (if applicable).
Matching Funds:	The amount funded through matching funds (if applicable).
Total:	This column will be automatically calculated.
CONTRACTED SERVICES	
Labor, supplies, and materials to be provided by consultants/contractors for project implementation.	
Item:	The item listed
Description of Budget Item:	Please provide a description of the item with adequate detail to show how totals were calculated.

Grant Request:	The amount requested from this Grant (if applicable).
Matching Funds:	The amount funded through matching funds (if applicable).
Total:	This column will be automatically calculated.

SUPPLIES AND MATERIALS

Supplies and materials that are directly related to the project.

Item:	The item listed
Description of Budget Item:	Please provide a description of the item with adequate detail to show how totals were calculated.
Grant Request:	The amount requested from this Grant (if applicable).
Matching Funds:	The amount funded through matching funds (if applicable).
Total:	This column will be automatically calculated.

OTHER DIRECT COSTS

Other direct costs that are directly related to the project. This might include travel, service fees for fiscal sponsorship, or newly-acquired equipment.

Item:	The item listed
Description of Budget Item:	Please provide a description of the item with adequate detail to show how totals were calculated.
Grant Request:	The amount requested from this Grant (if applicable).
Matching Funds:	The amount funded through matching funds (if applicable).
Total:	This column will be automatically calculated.

INDIRECT COSTS

Indirect costs are eligible for grant funding only for 501(c)(3) Nonprofits and are limited to 20% of grant funding. Indirect costs cannot be counted as matching funds.

Item:	20% Administrative overhead for Nonprofits
Description of Budget Item:	Any additional description
Grant Request:	The amount requested from this Grant (if applicable).
	The percent of grant funding
Total:	This column will be automatically calculated.

GRAND TOTAL	
Grant Request:	This column will be automatically calculated.
Matching Funds:	This column will be automatically calculated.
Total:	This column will be automatically calculated.
COST SHARE	
A minimum of 25% of grant request in matching funds is required. A project budget with less than 25% of the grant request in matching funds does NOT meet the grant requirements and will not be considered for funding.	
Matching Funds:	This column will be automatically calculated.
MATCHING FUNDS	
Please describe the source of matching funds listed above. This might include cash match (e.g. grantee's own funds, donations, grants, etc) or in-kind match (non-cash contribution such as volunteer time).	
Source:	The source of funding (e.g. In-kind contributions, Organization's contributions, Donations, Grant, etc.).
Description:	Any additional description.
kind)	Indicate whether the funding is cash or in-kind match.
Pending)	Indicate whether the matching funds are secured or pending.
Matching Funds:	The amount funded through matching funds.

Santa Clara Valley Open Space Authority | 2025 Urban Grant Program

PROJECT BUDGET

Highlighted cells are automatically calculated.

PROJECT				
Project Name:				
Organization:				

PERSONNEL

Estimate employee and volunteer time directly related to the project. Hourly rates for employees can include salarly plus fringe benefits, payroll tax, etc, but can not include indirect costs. Note: please list position titles only.

Position Title	Description of Budget Item	Grant Request ($)	Matching Funds ($)	Total
Director of Programs	20 hours @$115	$ 2,300.00		$ 2,300.00
Programs Senior Manager	220 hours @$75	$ 16,500.00		$ 16,500.00
Programs Associate	220 hours @$55	$ 12,100.00		$ 12,100.00
TOTAL PERSONNEL		**$ 30,900.00**	**$ -**	**$ 30,900.00**

CONTRACTED SERVICES

Labor, supplies, and materials to be provided by consultants/contractors for project implementation.

Item	Description of Budget Item	Grant Request ($)	Matching Funds ($)	Total
				$ -
TOTAL CONTRACTED SERVICES		**$ -**	**$ -**	**$ -**

SUPPLIES AND MATERIALS

Supplies and materials that are directly related to the project.

Item	Description of Budget Item	Grant Request ($)	Matching Funds ($)	Total
Materials for hands-on activities	$200 per field trip	$ 2,000.00		$ 2,000.00

TOTAL SUPPLIES AND MATERIALS		**$ 2,000.00**	**$ -**	**$ 2,000.00**

OTHER DIRECT COSTS

Other direct costs that are directly related to the project. This might include travel, service fees for fiscal sponsorship, or newly-acquired equipment.

Item	Description of Budget Item	Grant Request ($)	Matching Funds ($)	Total
Rent of Buses	$1,250 per bus, one bus per field trip	$ 12,500.00		$ 12,500.00
Field Trip Fees and lunch for students	$1,000 per field trip for 10 field trips	$ 10,000.00		$ 10,000.00
Teacher Training (in-person) costs	$1,000 in-person event costs	$ 1,000.00		$ 1,000.00
Stipents for teacher participation	training	$ 3,600.00		$ 3,600.00
TOTAL OTHER DIRECT COSTS		**$ 27,100.00**	**$ -**	**$ 27,100.00**

INDIRECT COSTS

Indirect costs are eligible for grant funding only for 501(c)(3) Nonprofits and are limited to 20% of grant funding. Indirect costs cannot be counted as matching funds.

Item	Description of Budget Item	Grant Request ($)	Matching Funds ($)	Total
Indirect costs	Administrative and operational overhead expenses	$ 15,000.00	n/a	$ 15,000.00
TOTAL INDIRECT COSTS		**$ 15,000.00**	n/a	**$ 15,000.00**
PERCENT OF GRANT REQUEST		**20.0%**	n/a	n/a

GRAND TOTAL

		Grant Request ($)	Matching Funds ($)	Total
TOTALS		**$ 75,000.00**	**$ -**	**$ 75,000.00**

COST SHARE

				(%)
A minimum of 25% of grant request in matching funds may be required. This field is automatically calculated.				**0.0%**

MATCHING FUNDS				
Please describe the source of matching funds listed above. The total matching funds listed here should match the total matching funds listed under Grand Total above. This might include cash match (e.g. grantee's own funds, donations, grants, etc) or in-kind match (non-cash contribution such as volunteer time).				
Source	**Description**	**(cash or in-kind)**	**Pending)**	**($)**
No matching funds				
TOTAL MATCHING FUNDS				**$ -**

Santa Clara Valley Open Space Authority | 2025 Urban Grant Program

PROJECT BUDGET

Highlighted cells are automatically calculated.

PROJECT				
Project Name:	XYZ Project			
Organization:	XYZ Nonprofit			
PERSONNEL				

Estimate employee and volunteer time directly related to the project. Hourly rates for employees can include salarly plus fringe benefits, payroll tax, etc, but can not include indirect costs. Note: please list position titles only.

Position Title	Description of Budget Item	Grant Request ($)	($)	Total
Project Manager	and grant management	$ 10,000.00		$ 10,000.00
Volunteer Coordinator	scheduling.	$ 5,000.00		$ 5,000.00
Volunteers	and other project tasks.		$ 5,692.00	$ 5,692.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
TOTAL PERSONNEL		**$ 15,000.00**	**$ 5,692.00**	**$ 20,692.00**
CONTRACTED SERVICES				

Labor, supplies, and materials to be provided by consultants/contractors for project implementation.

Item	Description of Budget Item	Grant Request ($)	($)	Total
Evaluation Consultant	evaluation.	$ 1,000.00	$ 1,000.00	$ 2,000.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
TOTAL CONTRACTED SERVICES		**$ 1,000.00**	**$ 1,000.00**	**$ 2,000.00**

SUPPLIES AND MATERIALS

Supplies and materials that are directly related to the project.

Item	Description of Budget Item	Grant Request ($)	($)	Total
Training materials	volunteers @ $10 per person	$ 500.00		$ 500.00
Brochures	.55 ea	$ 1,100.00		$ 1,100.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

				$ -
				$ -
				$ -
				$ -
				$ -
TOTAL SUPPLIES AND MATERIALS		**$ 1,600.00**	**$ -**	**$ 1,600.00**

OTHER DIRECT COSTS

Other direct costs that are directly related to the project. This might include travel, service fees for fiscal sponsorship, or newly-acquired equipment.

Item	Description of Budget Item	Grant Request ($)	($)	Total
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
TOTAL OTHER DIRECT COSTS		**$ -**	**$ -**	**$ -**

INDIRECT COSTS

Indirect costs are eligible for grant funding only for 501(c)(3) Nonprofits and are limited to 20% of grant funding. Indirect costs cannot be counted as matching funds.

Item	Description of Budget Item	Grant Request ($)	($)	Total

Sample Budget

10% Administrative overhead for Nonprofits		$ 880.00	n/a	$ 880.00
TOTAL INDIRECT COSTS		**$ 880.00**	n/a	**$ 880.00**
PERCENT OF GRANT REQUEST		**4.8%**	n/a	n/a

GRAND TOTAL

		Grant Request ($)	**($)**	**Total**
TOTALS		**$ 18,480.00**	**$ 6,692.00**	**$ 25,172.00**

COST SHARE

				(cash or in-kind)
A minimum of 25% of grant request in matching funds may be required.				**36.21%**

MATCHING FUNDS

Please describe the source of matching funds listed above. The total matching funds listed here should match the total matching funds listed under Grand Total above. This might include cash match (e.g. grantee's own funds, donations, grants, etc) or in-kind match (non-cash contribution such as volunteer time).

Source	**Description**	**(cash or in-kind)**	**Pending)**	**($)**
Volunteer support for XYZ Nonprofit		in-kind	pending	$ 5,692.00
Grant from XYZ Foundation	Grant to fund evaluation consultant	cash	secured	$ 1,000.00

Sample Budget

TOTAL MATCHING FUNDS				**$ 6,692.00**

October 7, 2025

To the Open Space Urban Grant Program Review Committee:

On behalf of Veggielution, I am writing to express our enthusiastic support for Acterra's proposal to the Open Space Authority's Urban Grant Program to expand their You(th) Be the Change (YBtC) program. We are proud to serve as a partner in this effort to bring climate and food sustainability education to middle school students in East San Jose.

Veggielution's mission is to connect people from diverse backgrounds through food and farming to build community and promote equity in the food system. Acterra's YBtC program aligns closely with our values by providing under-resourced youth with meaningful outdoor learning experiences rooted in environmental justice, food access, and climate action.

As a key program partner, Veggielution has supported hands-on field trips where students can engage in sustainable agriculture practices, composting, food preparation, and discussions on food justice. We are also collaborating with Acterra to develop a new community food forest on-site—an exciting expansion that will serve as a permanent outdoor classroom and public green space supporting both education and community wellbeing.

We believe that every young person deserves access to safe, enriching open spaces where they can learn, grow, and lead. This project not only addresses educational gaps but also supports mental and physical health by helping youth connect with nature and their communities.

We fully support Acterra's proposal that advances our shared goals of equity, sustainability, and community resilience through urban open space.

Sincerely,

Shawn Gerth
Executive Director
shawn@veggielution.org
408-203-0168

Escuela Popular Family Learning Center
Maria Barrera, Instructional Leader Middle School
149 N. White Road, San Jose, CA 95127
Phone: (408) 275-7191
Cell Phone: (408) 628-7021
Fax: (408) 919-4499
www.escuelapopular.org

October 08, 2025

To the Open Space Urban Grant Program Review Committee:

As an Instructional Leader who has worked with Acterra's education programs, I am writing to express my strong support for their application to the Open Space Authority's Urban Grant Program.

This program has the ability to provide students with a rare and transformative opportunity to connect classroom learning with outdoor, real-world applications. Many of my students have limited access to open space and have never visited a community garden or participated in hands-on environmental education before.

Through Acterra's programs, they can learn about climate change and food systems, how their everyday choices impact the environment, and how to take meaningful action. This program has the ability to shift their confidence and understanding, and give them the tools they need to start on their sustainability path. Field trips to a local community garden can be particularly impactful—bringing concepts discussed in class to life.

It is critical that this program continues, both to serve new incoming 6th graders and to reach additional classes that haven't yet participated. Continued support will help ensure that more students from underserved communities gain access to open space learning and environmental leadership opportunities. I fully support Acterra's efforts to expand this important work and bring climate, food, and environmental justice education to more youth in our community.

Sincerely,

Maria Barrera
Instructional Leader Middle School
Escuela Popular
mariabarrera@escuelapopular.org | (408) 628-7021

Climate Action Guidebook

Acterra, in partnership with Stanford University Earth Systems Masters Seminar 2020

Acterra
ACTION FOR A HEALTHY PLANET

TABLE OF CONTENTS

Acterra ACTION FOR A HEALTHY PLANET

Acterra's mission is to bring people together to create local solutions for a healthy planet. We promote and support beneficial electrification; transportation innovation; food sustainability; sustainable business practices; and empowering our local communities. *acterra.org*

If you have any questions about the You(th) Be the Change Program or this guidebook please contact us at *ybtc@acterra.org* or visit our website *acterra.org/ybct*

Icons used are courtesy of Flaticon.com

TAKING ACTION

It can be overwhelming to think about how to take on climate change, but **there are solutions!** When you make changes in your school, your community, your family, or your personal life, you aren't just fighting against climate change. You're also fighting for a safer future for everyone.

These are actions to get started. Give some of them (or all of them!) a try, but don't feel limited to just these. Many actions can be part of more than one strategy, and they're all important changes. There are hundreds and hundreds of ways to stand up for making a better climate future.

One of the most important steps in taking action is making a commitment and staying accountable to your community. A pledge is a promise that you make to yourself and others to follow through on specific actions that help you reach your goals. Think about which of the following focus areas that are most important to you so you can design your own climate action pledge!

MEET MALLORY

Mallory is in 8th grade at Bullis Charter School. She says that one of the most important steps to a successful team is to "look for ways to engage your community!" She recently helped staff a booth at a local Arts & Wine Festival where parents and kids could pot plants and learn about the group's initiatives. The club earned over $300 that they can now use to support climate action projects. Mallory says that in a day and age where so many things are online, *"It's really important to talk with people face to face."*

Step 1: Join your school's climate action team, or make one

A **climate action team** is a group that agrees to regularly meet and work together to enact change on climate change issues. If one doesn't exist at your school, start by finding a group of people interested to join and a teacher or staff member who can support the new group.

Alternative: If you currently are a student that is only taking classes in a virtual format, consider creating a climate action team with your local community, family and friends. If you are unable to meet in person, schedule your meetings using online tools for communication.

Step 2: Launch a campaign for student change

Once you have formed or joined a climate action team, select a few focus areas that you can use to prioritize your projects. You'll find a few key areas listed below with ideas to get started.

Create informational posters to post around the school or public boards in your community. These might feature short explanations about the science of climate change, its impacts in your community, or tips for taking action.

Make your voice heard! Speak at a school assembly or a community meeting to introduce your climate action team and invite other students to join.

Talk to your friends, family, and community about climate change. People think issues are more important when others they care about show concern. It's how our brains work! Even adults can learn and change their minds — especially if you share your thoughts openly, honestly, and without judgement.

Taking Action (continued)

Make a video highlighting one of the issues you've learned about. See if your school's morning news show will broadcast it during the announcements or if the school website will host a link. You can also create a newsletter that can get emailed to everyone that is participating or interested in your climate action team.

Step 3: Talk to the adults

Your teachers and school staff can help you find spaces to meet, gather resources to launch your campaign, and organize meetings with school leaders like the principal to talk about the issues important to your team. If you are unable to get any help from your peers at your school, try contacting a local environmental nonprofit in your area.

Step 4: Get your friends and classmates to sign climate action pledges

A **pledge** is a promise for climate action that you, your friends, and your classmates can all sign. Working towards a goal together makes a bigger difference than doing it by yourself. Read on for more pledge details!

Keep track of how many students and teachers have signed a climate action pledge.

Step 5: Assess your impact and repeat!

Record and track your impact by using the "Your Progress" table found on page 14. Be as detailed as possible so that you do not miss any important information. Review your progress every month and critically think of ways to increase your impact even further.

FOCUS AREAS

There are a lot of ways to focus your pledge and campaign. Here are some ways you can concentrate on food, transportation, or organization.

FOCUS AREA: Watch What You Eat

WHY THIS HELPS: The food you eat should be healthy for you and the planet. By building a healthy diet around plant-based foods, you can start to cut back on your carbon footprint that comes from eating meat and transporting food long distances. When we prevent food waste, we also avoid wasting the energy that goes into making our food.

What is a carbon footprint?

Many of the activities that we do everyday like getting to school in a car or bus or using a computer either directly or indirectly create greenhouse gas emissions. Some activities produce more carbon emissions than others. Even if we can't see it, these emissions have an impact on Earth's atmosphere. The total amount of greenhouse gas emissions a single person creates is their ***carbon footprint***.

GET STARTED:

Plant-forward diet

Meat has a large carbon footprint, but other foods that come from animals do too. You can also shrink your carbon footprint by choosing alternatives to dairy and eggs. Check out some of the options below for substituting meat and animal products with healthy veggies and plant-based foods.

Although the percentages will vary from meal to meal, your planet-healthy and human-healthy diet should look like the plate to the right. Roughly half of what you eat should be fresh fruits and vegetables, with things like whole grains, plant-based proteins, and other plant-based food groups making up the other half. Notice that added sugars and animal-based foods like meat and dairy take up a very small percentage!

Image courtesy of Harvard T.H. Chan School of Public Health

MEET LEO

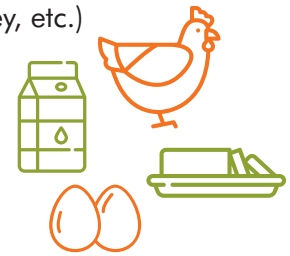
- Senior at Los Altos High School
- Leads a Green Team at his high school that grew from 10 people when he joined to 30 today
- Works with his school's Assistant Principal to get support for student climate projects
- His advice: "I would just say find how your passion fits into the scheme of environmental protection and try to help out in that direction, so you enjoy what you do." An example is a friend on his Green Team who likes art, and designed stickers to help their climate actions!

"You gotta build a sustainable culture in the community. We really make fun outreach activities, like Earth Week. We had meatless Mondays. So we just really tried to get everyone involved. We even had our own branded sticker designs! I guess the people who weren't initially interested in climate action see this fun stuff and they want to get involved. After getting involved, they get more and more attached to the initiatives we're trying to push as a club, and they just become a part of the team."

PLANT-BASED RECIPE SUBSTITUTIONS

Going meatless doesn't mean totally changing how you cook! Try replacing some of the animal products you use to cook with these plant-based substitutes.

Replace:	**With:**
Meat (Beef, Chicken, Turkey, etc.)	Mushrooms, Tofu, Roasted chickpeas
Cow's milk	Coconut milk, Soy milk, Oat milk, Almond milk, Hemp milk, Rice milk
Eggs for baking	Apple sauce, Chia seeds, Tofu
Butter	Oil



You can also get protein from plant-based sources. Here are some common sources of protein to help you maintain a balanced diet.

LEGUMES
- Lentils
- Kidney beans
- Black beans
- Pinto beans
- Chickpeas
- Green peas
- Edamame (Soy beans)

VEGETABLES
- Spinach
- Mushrooms
- Potatoes
- Brussels sprouts

WHOLE GRAINS
- Brown rice
- Quinoa
- Oats

NUTS
- Almonds
- Peanuts
- Cashews

SEEDS
- Sunflower seeds
- Pumpkin seeds
- Chia seeds

TRY THIS RECIPE: VEGGIE TACOS

Total time: 40 minutes
Yield: 4-5 tacos

Ingredients:

1 organic russet potato
1 organic green bell pepper
1 lime
2-3 cloves of garlic
4-5 cherry tomatoes
Cilantro
Tortillas
¼ cup of olive oil
¼ cup of vegan cheese
½ tsp of paprika
¼ tsp of cumin
¼ tsp of black pepper
¼ tsp of salt
1/8 tsp of chili power

Instructions:

1. Wash one russet potato and cut into small cubes, leave the skin on
2. Pour ¼ cup of olive oil into a skillet and set the temperature of your stove top to medium, medium-high heat
3. After heating the oil for one minute, place the cubed potatoes into the skillet and spread evenly. Let the potatoes fry for 5-7 minutes until one side starts to brown.
4. While the potatoes are frying,
    1. Mince 2-3 garlic cloves and set aside
    2. Cube one bell pepper
    3. Dice 4 -5 cherry tomatoes
    4. Slice 1 lime in half and then cut one of the halves into wedges
5. Flip the potatoes and fry them on their opposite side for another 5-7 minutes.
6. Pre-measure ½ tsp of paprika, ¼ tsp of cumin, ¼ tsp of black pepper, ¼ tsp of salt and 1/8 tsp of chili powder, mix into a bowl and set aside
7. Once all of your potatoes are turning brown (on all sides) and they've developed a nice crust on the outside, toss in your cubed bell pepper and let the potato and bell pepper mixture cook for another two minutes.
8. Add the minced garlic to your skillet and cook for another minute or two. Watch your garlic closely because it can burn quickly.
9. Toss in your pre-measured seasonings and mix evenly and place the potato fajita mixture onto a plate with paper towels.
10. Spread about ¼ a cup of vegan cheese over your potato fajita mixture and then squeeze half of your lime over the mixture.
11. Cover the mixture with another plate, trapping the heat in.
12. After 3-5 minutes, check on your potato fajita mixture and see if the cheese has started to melt. If it has, your mixture is ready to be plated.
13. Place one tortilla onto a plate and scoop a heaping spoonful of your potato fajita mixture to the center of the tortilla.
14. Add your diced tomatoes to the top of the mixture and sprinkle a small handful of cilantro leaves on top of the tomatoes.
15. Use the juice from the lime wedges that you cut earlier for your taco if desired

FOCUS AREA: Watch What You Eat (continued)

People around the world participate in **Meatless Mondays** as a way to start practicing a plant-forward diet. Pack yourself a lunch without meat or pick a meatless option in the cafeteria. If your cafeteria doesn't serve meatless lunches, try to organize a meeting with your school administrators to talk about adding a meatless option at least once a week.

You could also **meet with your local community, family and friends** and provide them grocery store lists that are plant-based focused. Research recipes for them to use and encourage plant-based options whenever you will be eating a meal together.

Participate in Acterra's Healthy Plate, Healthy Planet Programming

Acterra's *Healthy Plate, Healthy Planet* program is focused on the topic of food sustainability. To be more specific, this program is designed to help individuals adopt a plant-forward lifestyle and reduce food waste in order to reduce individuals' carbon footprint. Acterra believes in doing so, you can also improve health, feed more, save money, and embrace culinary freedom.

Acterra | HEALTHY PLATE HEALTHY PLANET

Encourage your parents or caregivers to join in Acterra's *My Healthy Plate, Our Healthy Planet* online community on Facebook. This community space is for people interested in food sustainability and who want to have access to resources, recipes, food waste tips, learn about local events and so much more. We welcome people of all ages, backgrounds and diets.

Acterra | MY HEALTHY PLATE OUR HEALTHY PLANET community

You can find out more about our programming, upcoming food related events and challenges, and find additional resources about food sustainability on our website: *Healthy Plate, Healthy Planet*.

Plant a Garden

Check out a few of your local organizations below to get started!

Name	Location	Contact Info
Collective Roots	East Palo Alto	(925) 771-2990 *https://www.freshapproach.org/collectiveroots/*
Living Classroom	Los Altos/Mountain View/Palo Alto	*living-classroom.org*
Healthy Planet USA	Bay Area	*https://healthyplanetus.org*
Compost Giveaway from Rethink Waste	Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos and San Mateo	Emi Hashizume: *Ehashizume@rethinkwaste.org* Adele Halili: *Ahalili@rethinkwaste.org* *https://rethinkwaste.org/shoreway-environmental-center/compost-giveaway/*

FOCUS AREA: Watch What You Eat (continued)

By growing and harvesting a few food items in a backyard or school garden, you reduce the fossil fuels and energy needed to transport your food a long way from farms across the world.

Take only what you can eat

Wasting food is just like wasting the energy used to grow it and put it on your plate! When serving yourself food, only take as much as you can eat so that you don't end up throwing away good food. Use a smaller plate so you don't take too much. *SaveTheFood.com* has more great ideas to avoid wasted food.

Start a compost bin or learn more about how your school composts

When we cook a meal at home, we may end up with food scraps—like eggshells, vegetable roots and skins, and even coffee grounds—that aren't trash but also don't make it into the final dish. These scraps still contain nutrients that, when composted, can be used as a fertilizer to make soils healthier. Collecting food scraps in a compost bin can help reduce food waste so that less organic material ends up in a landfill. Don't see compost bins in your cafeteria? Ask your administrators about how to order some for your school.

Rethink waste
South Bayside Waste Management Authority
A Public Agency

To learn more about the composting process, Rethink Waste is currently offering virtual tours of their Shoreline Facility. You can have your parent or legal guardian register you for a tour by visiting *Rethink Waste Public Tours* webpage, or you can have your teacher schedule a virtual tour for your whole class by visiting *Rethink Waste School Tours* webpage.

FOCUS AREA: Do Smart Transportation

WHY THIS HELPS: Gasoline is made from fossil fuels and releases carbon into the atmosphere when it's burned. When you use less gas, you are also cutting back your carbon emissions.

GET STARTED:

Participate in Acterra's Karl Knapp GoEV Programing
Acterra's Karl Knapp GoEV program is focused on accelerating the shift from fossil fuels to a renewable energy economy by providing local citizens with hands-on opportunities to experience the benefits of electric vehicles.

Acterra GoEV The Karl Knapp GoEV Program

Attend Acterra's GoEV related events, such as our EV Financial Incentives Clinics, where you can learn about financial assistance opportunities that help make electric vehicles more affordable for consumers. Invite your friends, family and community members as well!

View ***The Road Map To Going EV***, which contains 5 steps to "going EV." Help your family or community members with these 5 steps so that they can be ready to get an electric vehicle.

Learn more about electric vehicles by reading this *Plug-In Electric Vehicle Hand Book by the U.S. Department of Energy*.

Peninsula Clean Energy offers at home electric vehicle test drives and rental rebates for electric vehicles for those that live in San Mateo County.

PENINSULA CLEAN ENERGY

Walk or Bike
If you already walk or bike to school, practice, or lessons, congrats! You've already taken a major step. If you've never tried before, start by talking to an adult about it. If walking or biking the whole way isn't an option, you could try just the last few blocks, or if you don't want to go alone, you could ask a trusted adult or friend to try it with you.

Take Public Transit
If your town has public transportation or school buses, consider using them instead of riding in a car. Public transit cuts down the number of cars on the road because it provides an alternative to driving, so it also helps to reduce carbon emissions.

Carpool to School
Not everybody can walk or bike when they need to go somewhere. If you are driving, try finding someone you know who can carpool with you.

Ask your local representatives to support walkable/bikeable routes
Some towns don't have great walking or biking routes, so even if you want to walk or bike to school, it wouldn't be safe to do so. If that's the case in your town, try getting together with a group of friends and asking local representatives to support safer walkable and bikeable routes. Check out the "Organize" focus area to get ideas about how to do this!

MEET KESHAV

Keshav is a sophomore at Los Altos High School. He worked with other students to establish the first Green Team at the school when he was in 8th grade. One of the projects he's working on now is presenting a document to the school board with suggestions for eco-friendly building codes. For anyone looking to get involved in a climate action team, Keshav suggests not to take on too much and choose projects that you can have fun doing. *"Just put in your best effort!"*

FOCUS AREA: Do Smart Transportation (continued)

Turn off the car when no one is driving
By reminding the adults in your life to turn off the car's engine when they're waiting somewhere—like when they pick you up!—you also save money by wasting less gas.

FOCUS AREA: Get Involved Locally/Organize

WHY THIS HELPS: When people speak up together and tell governments or businesses what changes they want and why, they can make major changes that individuals alone can't. Organizing with friends or classmates can push your school, sports team, or local government to take action.

GET STARTED:

Ask your local representatives to pass laws for climate action
Even if you can't vote, you can still make policy changes. Ask your mayor, city council, and county representatives if they have a plan for cutting carbon emissions, protecting your area from sea level rise and extreme weather, and making climate justice part of their policies. Use this *Public Comment Template* as a guide for when you are going to contact a local representative or speak at a city council meeting.

> Tip: If you are asked to give a live public comment, find out how much time you have in advance to speak. Practice reading your comment with the goal of using as much of that time as possible without going over the time limit.

Petition for change
Can your local businesses and public areas make changes for climate action? Showing them that lots of people care is a great way to make change as a community. Use websites like *change.org* to create virtual petitions that can easily be sent to others. Collect signatures, send emails, and talk with local owners about supporting climate action with you.

Show up at local events
Set up a booth or station at local or virtual events or festivals in your community to let other people know about your efforts. They may be inspired to join you!

Acterra hosts many virtual events that are welcome to all age groups. Check out *Acterra's event page* to see what events we currently offer and that interest you!

Talk to your friends, family, and community about climate change
People think issues are more important when others they care about show concern. It's how our brains work! Even adults can learn and change their minds — especially if you share your thoughts openly, honestly, and without judgement.

Get involved with other youth!
Join a local activist group such as the Sunrise Movement. The Sunrise Movement is a youth movement dedicated to stopping climate change and creating jobs in the process. On the *Sunrise Movement's* national website, you can find training, petitions, and a history of their actions. Or, you can participate in a more localized group, such as *Sunrise Silicon Valley*, which is formed in 2020 as a merger between the Sunrise Palo Alto, San Jose, and Stanford hubs.

MEET HAYDEN

Hayden is in 8th grade at Bullis Charter School. He's been involved with his school's environmental club since 6th grade. He's interested in ways he can make broad-scale change. *"I want to talk to someone in the California Legislature or someone from Congress, and I want to see if I can make a difference beyond just Silicon Valley."* He had the opportunity to travel to Madrid and write a White Paper on climate change, he went and presented to the United Nations. Hayden suggests thinking about the impact of anything you work on. *"If you will spend the time and energy to make something happen, then you should make sure that it's important to someone."*

SUNRISE
SILICON VALLEY

The Sunrise Silicon Valley group has accomplished so much for this region. For instance, they have led an educational livestream on the Green New Deal, which can be found *here*. They've also spoken at the virtual Earth Day 2020 Strike with Peninsula Peace and Justice Center, hosted youth town halls and phone banks for the Georgia runoff elections, hosted climate debates for district senate and city council candidates, and they have worked on and provided feedback on Palo Alto's Sustainability and Climate Action Plan.

To get involved with Sunrise Silicon Valley or to ask any questions, you can email them here: *siliconvalleysunrise@gmail.com*

Photo courtesy of Sunrise Silicon Valley

FOCUS AREA: Get Involved Locally/Organize (continued)

You can use this official *Acterra Climate Action Pledge* to write out the pledge you are willing to make. You can use this template to get your friends, classmates, and teachers to sign climate action pledges too!

MAKE A PLEDGE

I, _____, pledge to _____

_____.

I am signing this because I care about _____.

Date _____

Signature _____

A GOOD PLEDGE is **SMART: Specific, Measurable, Achievable, Relevant, and Time-Bound**

EXAMPLE PLEDGE: I pledge to participate in Meatless Mondays by packing my own lunch or buying lunch without meat every Monday for the next 3 months.

- **Specific:** A specific pledge is more likely to be successful than a broad one. This pledge is specific because it's focused on Monday lunches.
- **Measurable:** In order to determine how successful your pledge is, it should be something measurable. You can measure this pledge's impact by keeping track of your Monday lunches.
- **Achievable:** Make sure your pledge is realistic! Promising to give up all meat forever might be tough, but by picking something you feel is possible, like Meatless Mondays for a few months, your pledge is more likely to be successful.
- **Relevant:** Is your pledge working towards your overall goal? This pledge works towards the goal of reducing greenhouse gas emissions by focusing on meat consumption.
- **Time-Bound:** If your pledge is time-bound, you are more likely to stick with it. You can also evaluate how it went at the end of the time period. This pledge is for three months, so it is time-bound.

MEET AARTHI

Aarthi is in 8th grade at Bullis Charter School. She has found it important to build a strong network of people who are passionate about the same issues. She encourages students in her school's environmental club to "join organizations that have already been created, because sometimes it's easier than starting from scratch." It's also been helpful to create connections with experts in the field who can offer advice and help with projects.

When making changes at school, "sometimes it's hard to actually get in contact with the administration because they're super swamped with other things." So Aarthi's environmental club tries "to stay in constant contact with them, so that we get on their radar."

Aarthi suggests setting achievable goals and knowing your capacity. *"Know how much you want to go in. If it's just a small amount of participation, then make sure you know that and make sure you achieve that. And that's great, as long as you achieve it. If you want to go all the way in, make sure you set a goal and achieve that."*

YOUR PROGRESS

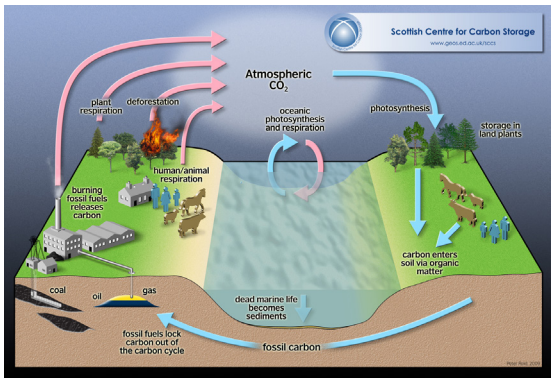
Good luck! Use this table to track your progress as you try out climate-saving strategies.

Focus Area	How Did You Get Started?	Did you do it?	Notes / How did it go?	Next step(s)
Example: Get Involved Locally/ Organize!	Talked to friends, family about climate change	✓	I posted a photo on Instagram of my climate action poster. My uncle has never talked about climate much before, but he commented that my concern made him think about supporting more climate action locally!	Create a time to meet with my uncle to brainstorm ways that he can support local climate actions. Make a short presentation for him so that he is aware of local climate issues.

REFERENCE MATERIALS

Climate Change Science

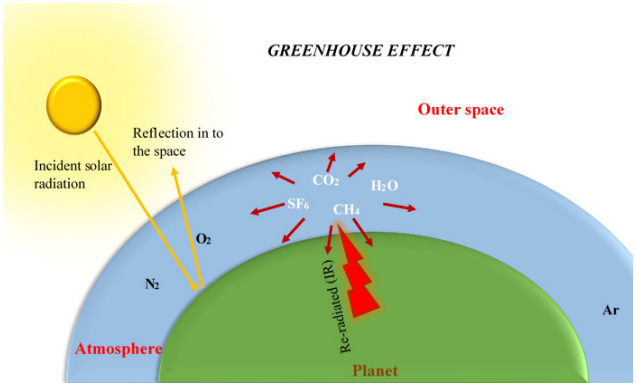
The carbon cycle is a natural process. Carbon moves between the atmosphere, land, and ocean as different living things take carbon in when they breathe, or release carbon when they die or produce waste. It can arrange itself in lots of different ways. Carbon is in the tip of your pencil as graphite and in the air you exhale as carbon dioxide.



Many things—the ocean, plants, soils, animals, and more—remove carbon from the atmosphere and store it. For example, trees do this through photosynthesis.

Humans affect the carbon cycle. When we burn fossil fuels, like oil or coal, we're actually burning dead plants and animals that never decomposed. This releases their carbon into the atmosphere. When we cut down trees, we release some of the carbon stored there and prevent them from storing new carbon. When we develop new buildings or expand agriculture, we affect how much carbon soils can store.

The greenhouse effect traps heat in the earth's atmosphere. When the sun radiates energy, some is immediately reflected back into space, some is absorbed by the earth's surface, and some is reflected back into the atmosphere more slowly as heat. Heat is then trapped there by greenhouse gases such as carbon dioxide, water vapor, methane, and ozone. This warms the atmosphere and helps make our planet somewhere warm enough to live.



Humans are changing the carbon cycle by burning fossil fuels and adding carbon dioxide and other greenhouse gases to the atmosphere. As carbon builds up in the atmosphere, the greenhouse effect becomes more and more intense and global temperature rises.

CLIMATE CHANGE FAQS

What's the difference between climate change and global warming?

Global warming refers to the earth's rising surface temperature, which is caused by carbon and the greenhouse effect. Climate change is broader. It is the long-term change in average weather and includes side effects of global warming, like drought, flooding, and wildfires.

Climate naturally varies over time. How do we know humans are changing the climate now?

Earth's climate has changed many times over the past millions of years, but never as quickly as it is changing today. We know that carbon dioxide causes higher temperatures, and humans have been adding lots of carbon to the atmosphere for the last two hundred years by burning fossil fuels at high rates.

But sometimes it's really cold during the summer! Does that mean the atmosphere isn't warming?

The consequences of global warming can be difficult to predict. On average, the Earth will become warmer, though that doesn't mean everywhere will become warmer. But places that aren't warming as much will still experience the effects of climate change! Climate is what you expect, and weather is what you get.

Impacts of Climate Change

There are many impacts of climate change. Small changes in the global temperature can also make big changes in how and where rain falls, food grows, diseases spread, ecosystems survive, and people live. In the Bay Area, drought, wildfires, and sea level rise are all problems that climate change makes worse or causes.

Drought

Drought happens when there isn't enough precipitation in a region. Sometimes, droughts take decades to develop. They can be very difficult to predict.

California has faced several severe droughts. Without enough rain and snow, the state's agriculture suffers, and so do people and communities. Because California produces so much of the country's fruits and vegetables, this has nationwide effects. A lack of water also means that wildfires are more likely.

Climate change can increase the frequency of droughts. As weather patterns change and rates of precipitation decrease, droughts will become more common. Warmer temperatures also cause surface water to evaporate faster and make droughts worse.

Sea Level Rise

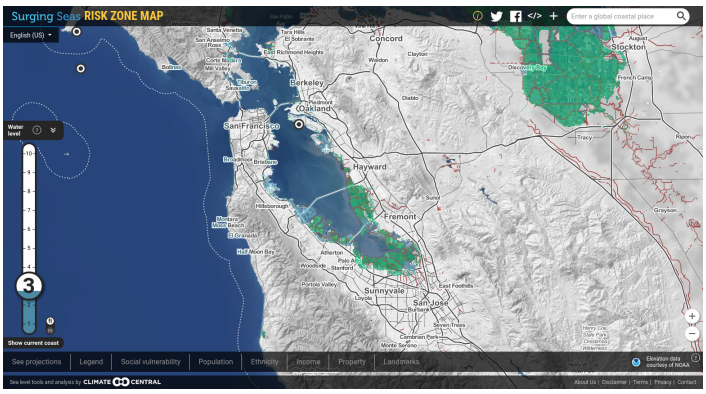
97% of Earth's water is in our oceans. That leaves only 3% that is freshwater—but two-thirds of that freshwater is frozen in ice caps and glaciers. As we continue to emit greenhouse gases and the atmosphere warms, the frozen freshwater will melt. This is causing the sea level to rise.

In the United States alone, nearly five million people live within four feet of the high tide level, which means that they can expect more flooding as water levels rise. Children born today will likely see the ocean rise between one and four feet in their lifetimes!

Dive Deeper: Sea Level Rise

Many major global cities are only a few feet above sea level. These communities are especially vulnerable to the impacts of sea level rise.

As the global temperature rises due to climate change, the earth's ice melts. Some of it bobs in the ocean as blocks of sea ice, some rests on top of mountains as glaciers, and some is frozen on top of land as ice sheets. Ice resting on top of landmasses like Antarctica and Greenland melts, warms up, and takes up more space in the ocean. This causes a huge increase in the sea level. One estimate suggests that if all the ice frozen in sheets and glaciers on Earth melted, sea level would rise by 216 feet. That would mean cars crossing the Golden Gate Bridge would be at sea level!



Map Courtesy of Climate Central, https://ss2.climatecentral.org/#10/37.5941/-122.1316?show=satellite&projections=0-K14_RCP85-SLR&level=3&unit=feet&pois=hide

Mitigation means reducing greenhouse gas emissions to prevent sea level rise in the first place. But it can take years and even decades to reduce the impacts of global warming on melting ice. Sea level rise has already forced millions of people to leave their homes and move away from the coast to safer areas.

Adaptation means protecting communities from the impacts of climate change, like rising sea level. Barriers like seawalls, elevated roads, and tidal gates protect structures from high tides. Natural defenses, like sand dunes or wetland areas can also reduce the impact of storms. Engineers can flood-proof existing structures to reduce costs after a flood.

Communities must work together to decide how to divide their limited resources. It can be much harder to determine the value of historical sites, threatened species, or cultural practices in dollars. But preparing for sea level rise calls for dedicated civic action from community members like you to speak up about what's important to them.

SEA LEVEL RISE FAQS

Does melting sea ice contribute to sea level rise?
Sea ice acts like ice cubes floating in a glass of water. When the ice cubes melt, your glass of water doesn't overflow. In the same way, melting sea ice in the ocean doesn't contribute to sea level rise, but ice sitting on top of land, like glaciers, does.

What if countries reduce their greenhouse gas emissions in the next few years? Would we still have to worry about sea level rise?
Even if we stopped emitting greenhouse gases around the world today, it would still take generations for Earth's climate to stabilize. In the meantime, huge volumes of water will flow into the oceans leading to sea level rise, especially for coastal and island nations. It is important to prevent climate change when we can, but we also need to adapt so that people and places can continue to thrive.

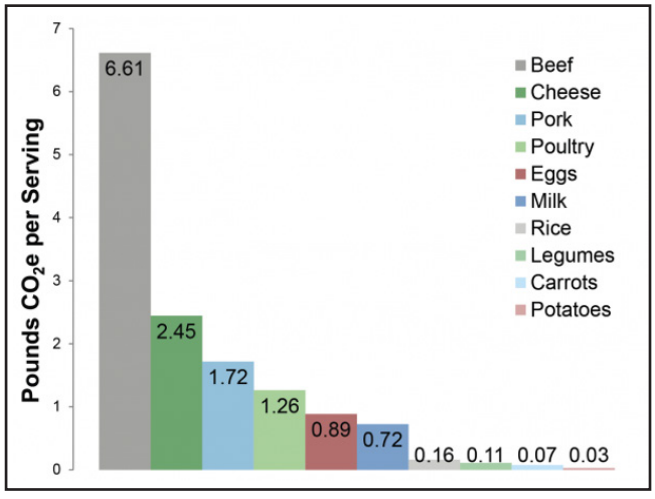
Dive Deeper: Food and Agriculture

Growing our food, transporting it, and keeping it fresh takes lots of energy and resources. Each of us has the power to reduce our carbon footprint by making smart choices about what ends up on our plate.

Before the seeds are even planted, developers often cut down forests to make new farmland. Removing trees releases carbon dioxide and prevents them from storing more carbon.

Creating meat from animals produces far more greenhouse gases than farming plant-based foods. Farmers use energy and water to grow food for these animals to eat, but those crops never make it to the grocery store. Cows produce the most carbon dioxide of the meat options you might regularly see. Choosing to eat less beef is a great first step to reducing your carbon footprint from meat.

Pounds OF CO2 Equivalent per serving
(4 OZ. meat, 1/2 C. asparagus & carrots, 8 OZ. liquids)



Center for Sustainable Systems, University of Michigan. 2020. "Carbon Footprint Factsheet." Pub. No. CSS09-05.

Once the crops and animal products are harvested, they still have to be shipped to a final destination. Most crops don't grow year-round. But food is shipped across the world every day so that we can have our favorite foods whenever we want them. Once our food arrives, the store must use energy to keep it refrigerated and fresh until we walk in ready to buy it for our family.

One of the best ways to reduce the carbon footprint of our diet is to buy food grown locally. Local food creates fewer emissions because it doesn't have to travel as far. Try visiting your local farmer's market! It might surprise you how much food grows nearby throughout the year.

Once the food makes it all the way to your plate, do your part to reduce food waste. About 40% of all food is wasted in America. Some of that comes from grocery stores throwing away good produce that looks bruised or lumpy—even though it's still perfectly delicious!

You can get started creating a sustainable diet by talking to friends and family about where your food comes from and how it gets to you. Always ask your doctor and parents before changing your diet. Start with a few small steps: give up meat one day a week, only take as big a helping as you can eat, and pick the ugly apple at the store. Then you can work with others in your community to source locally-grown food, shift to a plant-forward diet, and support farmers that take care of the environment. Make your meals count!

FOOD AND AGRICULTURE FAQS

I thought greenhouse gases came from things like burning gasoline in a car engine—how do animals make greenhouse gases?

Cows are notoriously gassy—as their stomachs break down food, they belch methane, which is an even more potent greenhouse gas than carbon dioxide. Greenhouse gases also come from burning fossil fuels to power things like the tractors, lights, and electrical systems that make farms run. Everything that cows eat has to be grown, processed, and transported. That leads to even more carbon emissions! Increasing demand for meat around the world is also causing forests to be cut down to make room for clear land to raise cows.

Dive Deeper: Climate Justice

Today, climate change has already impacted most people on the planet. But not everybody is impacted by climate change in the same way. **Climate justice** is about standing up for the people that climate change hurts the most—especially for communities that also face other injustices and hardships.

In the last 200 years, wealthy countries like the United States used energy from fossil fuels to build a society where most people can access electricity, drive from place to place, and eat food grown on the other side of the world. World leaders realized in the 1980s and 1990s that human carbon emissions were a problem. But it was trickier to decide who was responsible for fixing the problem.

The U.S., China, and India are three of the countries that burn the most fossil fuels. But the U.S. still releases the most carbon per person and has emitted the most in total over time. That's because the U.S. used lots of fossil fuels to develop our modern lifestyles, with roads, cities, airplanes, and major industries. It would be really hard to give up everything that comes from fossil fuels—and luckily, we don't have to. Renewable energy, like wind power or solar power, means that we can still make energy and power cars without hurting the climate.

In the Bay Area, lots of neighborhoods and communities are fighting for climate justice locally. For example, some areas already flood during large storms and these areas will continue to flood and will flood even more with sea level rise. Climate justice groups in East Palo Alto and around the Bay Area are fighting for policies that protect families and give everybody a voice when it comes to making tough climate related decisions.

CLIMATE JUSTICE FAQS

How can I fight for climate justice?
In the Bay Area, there are dozens of climate justice groups and many, many strong leaders. If you notice people being ignored in climate decisions, use your voice to take a stand. Environmental problems affect everyone, but if some people are affected more because of where they live or what they look like, that's not o.k.

Does climate justice have to do with the justice system and laws in government?
Not always, but it can! Good laws can defend people, and sometimes climate justice is actually required by law. However, good laws don't work if people don't know their rights. Everybody in California has the right to live, work, and play safely.

CURRICULUM OVERVIEW

Acterra's You(th) Be the Change Program empowers middle school students to learn about climate science and solutions both globally and locally — and take action!

YBtC focuses on educational programming and enrichment that enables students to:

1) Share the fundamentals of climate change science and its localized impacts
2) Consider complex human-ecological systems and solution tradeoffs
3) Apply critical thinking and analytical skills to interpret scientific data sets
4) Communicate scientific concepts in written and oral presentation formats
5) Apply techniques and instrumentation to solve problems in their community
6) Connect with other student leaders to strengthen networks for resilient communities

If you would like to learn more about the **lesson's content** continue reading below.

SESSION 1 & 2

Session 1: Climate Change Science

TOPICS COVERED:

1. Carbon cycle
   a. Carbon sinks, stocks, pools, and sequestration
   b. Human changes to the carbon cycle
2. Greenhouse gases and the greenhouse effect
3. Global warming vs climate change
4. Scientific evidence for climate change
5. Carbon Footprint Quiz

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
MS-ESS3 Earth and Human Activity
HS-ESS3-6 Earth and Human Activity

Session 2: Impacts of Climate Change

TOPICS COVERED:

1. Impacts of increased global temperatures
2. Drought
3. Change in weather patterns
4. Sea level rise
5. Current and future impacts of climate change on the Bay Area
6. Climate Action Plans
7. Sun S'mores! activity

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
MS-ESS3 Earth and Human Activity

SESSION 3 & 4

Session 3: Sea Level Rise

TOPICS COVERED:

1. Causes and mechanics of sea level rise
2. Climate change adaptation vs mitigation
3. Global threats and impacts relating to sea level rise
4. Local threats and impacts relating to sea level rise
5. Adaptation options for the Peninsula, South Bay, Bay Area and other communities predicted to be impacted by sea level rise
6. Sea level rise reflection activity

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

MS-ESS3 Earth and Human Activity
MS-ETS1-2 Engineering Design

Session 4: Agricultural Systems and Food Choices

TOPICS COVERED:

1. The carbon footprint of food
2. Impacts of agriculture on climate change
3. Sustainable agricultural systems and practices
4. Environmental impacts of food choice and food waste
5. Composting
6. Recipes and resources for sustainable eating
7. Plant-based cooking activity

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

5-LS2 and MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
MS-ESS3 Earth and Human Activity

SESSION 5 & 6

Session 5: Climate Justice and Communication

TOPICS COVERED:

1. Defining environmental justice, climate justice, and activism
2. Disproportionate impacts of climate change on low-income communities and communities of color
3. Youth involvement in climate justice and climate activism
4. Local environmental and climate justice organizations
5. Communication activity - effective communication to peers on complex scientific topics

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

MS-ESS3 Earth and Human Activity
HS-ESS3 Earth and Human Activity
HS-ETS1-3 Engineering Design

Session 6: Climate Change Solutions

TOPICS COVERED:

1. Personal choices that can help reduce climate impacts
2. Large scale solutions for climate change
3. Local climate change mitigation and adaptation
4. Climate action pledges

ALLOTTED TIME FOR LESSON:

60 minutes

NEXT GENERATION SCIENCE STANDARDS:

MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
MS-ESS3 Earth and Human Activity

FOLLOW UP

Acterra's Climate Action Guidebook

TOPICS COVERED:

1. Taking Action
2. Focus Areas
    a. Watch What You Eat
    b. Do Smart Transportation
    c. Get Involved Locally/Organize
3. Make a Pledge
4. Your Progress
5. Reference Materials
    a. Climate Change Science
    b. Impacts of Climate Change
    c. Dive Deeper: Sea Level Rise
    d. Dive Deeper: Food and Agriculture
    e. Dive Deeper: Climate Justice

Acterra ACTION FOR A HEALTHY PLANET

Acterra is a SF Bay Area 501(c)(3) nonprofit that's been bringing people together to create local solutions for a healthy planet since 1970. We promote and support beneficial electrification; transportation innovation; food sustainability; sustainable business practices; and empowering our local communities. To learn more about Acterra, visit *acterra.org*.

If you have questions about the You(th) Be the Change Program or this curriculum overview please contact us at ybtc@acterra.org or visit acterra.org/ybtc