

## **Sustainable Piedmont**

CAP, BESO, LEDs and a few steep hills







## **Project Overview**

- Building Energy Savings Ordinance (BESO)
- Municipal facilities solar assessment and RFP
- Streetlight LED conversion assistance
- Post-top HPS streetlight inventory
- City-wide Greenhouse Gas Inventory
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  Residential Energy IIII Commercial Energy IIII Water & Washenaher IIII Sold Water
  Transportation & Mobile Source

- Public Works landscaping equipment electrification
- Climate Action Plan implementation
  - Updating composting and recycling contracts
  - Bike to Work day
  - · Community events (Paris to Piedmont)
  - Partnerships with community groups





### **Achievements**

- **Recouped over \$27,600** through energy usage analysis and realized over **\$1,000** in monthly savings
- Completed 2014 GHG inventory
- Supported a \$19,000 grant for electrification of City equipment
- Joined Covenant of Mayors/CDP
- Wrote **BESO code language**

## **Opportunities**

- Creation and implementation of CAP 2.0
- Post-top streetlight LED conversion
- Municipal solar adoption
- Join Alameda County CCA

- Development of 2030 GHG reduction targets
- BESO adoption
- Sustainability Committee establishment
- Greenhouse gas inventory for 2015



Hailing from Unincorporated, Wisconsin, Matt has finally found a way to combine his weird tie collection and training in environmental issues to make a positive impact on the world. When not thinking about sea level rise or microgrids, he'll likely be found gardening or canning things for the upcoming apocalypse. He's especially appreciative this fellowship has let him experience the many varied functions of a small local government and looks forward to being able to bring these experiences with him into his career.









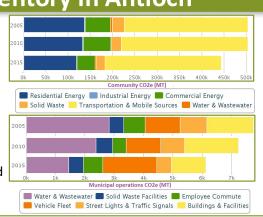
## **A Contra Costa Concerto**

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Energy Efficiency Program Implementation, Greenhouse Gases (GHG) Inventories, Idle Free Campaign City of Antioch, City of Pittsburg, Contra Costa County.

## **GHG Inventory in Antioch**

- Completed Antioch's 2015 community and municipal inventories.
- Updated 2005 and 2010 inventory to ensure the consistency of methods.
- 2005, 2010 and 2015 inventories to be approved by Antioch's city council.



## **Countywide Energy Efficiency**

- Managed an energy efficiency outreach effort for the BEST and the SmartLights program on behalf of the Contra Costa County and City of Pittsburg.
- Designed a letter and flyer combo for both programs and created a comprehensive mailing list using assessor's and business license data.
- Sent out the flyer and letter, using official letterheads, to 5000 Contra Costa businesses.



## Idle Free at Pittsburg schools

- Creating Idle Free zones at every school in the Pittsburg Unified School District.
- 8000 Idle Free flyers sent to parents.
- Installing Idle Free signs at every school in the district.
- Collecting data regarding idling, to measure the impact of the campaign.



## **Next Steps**

- Reviewing and updating the Antioch Climate Action Plan, using the inventories as metrics of success for implemented measures.
- Doing more energy efficiency outreach, using targeted data to reach even more businesses.
- The whole city of Pittsburg goes idle free? Other school districts throughout the bay are inspired, and also go Idle Free!



Amaury Berteaud, Bay Area Region. Originally from France, moved to Houston, Texas age 10. Moved to Montreal, Canada to study at McGill University. Earned a BSc with a major in environment. Moved to California to help build climate change resiliency. Hopes to continue working in the bay, in the energy efficiency and sustainability sector. When not saving the world one LED light bulb at a time, enjoys playing the accordion.







## Reducing Emissions from the Built Environment

Motivation through Information with Berkeley's Building Energy Saving Ordinance

## **Building Energy Saving Ordinance**

What is BESO?

BESO requires energy efficiency opportunity assessments

Financing and rebates are roadmap

More building owners invest in upgrades

Efficiency is valued in the market

Owners save on utility bills are achieved!

Berkeley's Building Energy Saving Ordinance (BESO) is an initiative of Berkeley's Climate Action Plan to reduce greenhouse gases by promoting energy efficiency. It requires building owners to complete comprehensive energy assessments. Registered energy assessors provide tailored recommendations on how to save energy and connect building owners with incentives and financing for energy efficiency upgrade projects.

#### **Fellow Contributions**

- Designed and managed database of building energy information
- Education & outreach to residents regarding compliance & upgrade information
- Engaged in analysis to improve multi-departmental processes
- Developed resources for website
- Contributed to long-term planning of assessments & policy strategy for deep emissions savings with regional and national partners
- Assisted in geospatial analysis of building energy data for ordinance evaluation
- Engaged in the nuanced field of energy efficiency to understand performance-based energy ordinances and their role in achieving climate action goals

and deep emissions savings



### **Emission Inventories**

Berkeley will be reporting community greenhouse gas emissions to the international Compact of Mayors platform recognizing local governments contribution to global climate policy and its implementation.





#### **Fellow Contributions**

- Compiled data for online SEEC ClearPath tool to convert inventory into standardized format
- Provided outline for transition to ClearPath as inventory tool for the City
- Gathered socioeconomic and policy information for Compact reporting

## BESO: The Road So Far (as of August 2016)

#### **ENERGY ASSESSMENTS**







**945** Applications for Compliance 191 High Performance Buildings





Caytie Campbell-Orrock graduated from Smith College in May of 2015 with a double major in architecture and engineering. She enjoys working with Bay Area communities for their advanced and forward-thinking climate policies. She is pursuing a career in sustainable urban planning, being passionate about sustainable transportation, climate adaptation, energy efficiency in the built environment, and the social impact of design and climate work.



Local Government **Commission** 





## City of Richmond Environmental Initiatives

North Bay Area Region, 2015-2016



## **Project Overview**



The City of Richmond is located in the nine-county San Francisco Bay Area in West Contra Costa County. The City is committed to addressing issues impacting environmental and public health. The project focused on two of the City's primary climate action initiatives: improving energy efficiency of City facilities; and implementing the City's zero waste programs.

**Energy Efficiency & Clean Energy** 

Benchmark, Report & Analyze City Facilities' Energy Performance

Community Sign-up Workshops for Free Home Solar Systems





**Zero Waste** 



Richmond High School
3 Stream Recycling Program



New Recycling Facilities Along Public Right-of-Ways & High-Use Parks

New Organics Recycling Program at Richmond's Community Centers





New Recycling Program at the 144 Unit
Affordable Housing Nevin Apartment Complex

## **Outcomes & Achievements**

- Benchmarked energy and resource consumption to reduce costs and improve energy efficiency at 10 Community Centers, 3 libraries, and 7 Fire Stations.
- Led outreach, developed promotional materials, and organized two community sign-up workshops for free home solar systems. A total of 62 households attended and 35 applications were submitted.
- · Implemented organics recycling in 3 Community Centers
- Coordinated informational recycling presentations for 2 Community Center Summer Youth Camps.
- Implemented recycling program at the 144 Unit Affordable Housing Nevin Apartment Complex.

## **Highlights**

- The Governor's Office of Planning and Research selected the City of Richmond for a Best Practices Pilot Project- Phase 1.
- Led City Council approval of \$415,000 recycling enhancement & public art project of 210 City trash bins starting October 2016.
- Designed and procured 7,700 multilingual reusable bags to promote recycling and foster civic pride
- The CDP selected the City of Richmond to be included as a case study in the CDP cities global report on financing/incentives for urban sustainability projects.



**Samantha Carr, Bay Area Region:** Samantha graduated from the University of Oregon, Eugene with a B.S. in Environmental Science. As a Richmond native, she is grateful for the opportunity to have completed her CivicSpark fellowship in the City of Richmond. She plans to continue working in the Bay Area on sustainability & environmental issues.







## A ClearPath to Emissions Reduction

City of Hayward – Utilities & Environmental Services



## How close are we to meeting climate action goals?

As part of its Climate Action Plan (CAP), the City of Hayward completed a baseline greenhouse gas inventory in 2005, with an update in 2010. Data was stored in spreadsheets and obsolete software. Staff needed a way to bring the data up-to-date and report on progress towards the City's climate action goals.

The aim of the project was to modernize the City of Hayward's data collection and analysis process utilizing the Statewide Energy Efficiency Commission (SEEC) ClearPath platform.



- 2005 and 2010 inventories
- 2010 to 2015 utility data





Analyze and visualize data

- Created charts of aggregate data
- Pegged to CAP goals

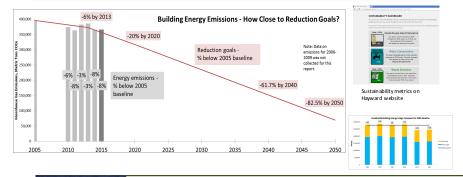
ClearPath screenshot

CDP Cities 2016 Information Reques

Report results

- CDP Cities
- Council Sustainability Committee

## Results



## **Project benefits**

#### Informed decision making

• Presented inventory report to the Council Sustainability Committee

#### Transparency

- Submitted 2016 carbon disclosure report to CDP Cities
- Provided metrics for display on City's new green portal

#### Saved staff time

- Streamlined data collection and analysis process
- Easier access to summary data for reporting



**Gilian Corral** joined CivicSpark to get her hands dirty with greenhouse gas emissions data in the name of climate action. She is happiest with a mocha and a new data platform to explore. With a background in community development and M.S. in Comparative Politics at the London School of Economics, she plans to leverage her AmeriCorps experience in the sustainability field as an analyst.









# Benicia Efficiency Initiative Engaging the City and the Business Community in Sustainable Operations





## **Project Overviews**

In 2014, City of Benicia's Economic Development Department received \$1,125,000 from the Valero-Good Neighbor Steering Committee Settlement. With this grant, the City created the Business Resource Incentive Program (BRIP) and began using these funds to conduct energy and water efficiency projects in the Benicia Industrial Park. These projects have included LED lighting upgrades, bathroom fixture upgrades, solar panel installation, and EV charging stations. In the wake of increasing water rates, Roman also helped created a subsidiary project called Every Drop Counts (EDC), which is an initiative to retrofit 300+ bathroom fixtures in the Industrial Park and restaurants in downtown Benicia to ensure more efficient use of water.

In addition to BRIP, Roman also facilitates Benicia's Internal Green Team and has been instrumental in developing projects such as Environmentally Preferred Purchasing Policy, Renewable Diesel Conversion, Compost Outreach Program, and managing the Green Business Certification Program. Lastly, Roman sits on the Benicia Community Garden's Communications Committee assisting in its effort to develop community cohesion projects and expand their scope to the county level.



(Right) Roman and BHS volunteer, Austin, connecting while installing a food forest equipped with rainwater capture and greywater systems that will produce hundreds of pounds of delicious food!

(Left) Roman presenting a \$10,000 check to Biagi Brothers for completing an LED installation in their warehouse that will save them \$42,000 and 50 tons of CO<sub>2</sub> per year!



### **Outcomes & Achievements**

#### **Annual BRIP Savings**

465.83 tons GHG 140,000 gal H<sub>2</sub>0 \$394,695/year

#### **EDC Demonstration Program**

180,000 gallons of H<sub>2</sub>0 \$2.207 water bill savings 1,508 GHG savings

- **FPPP Checklist Creation**
- Renewable Diesel Cost and Emissions Analysis Report
- GBP and EDCflvers
- Restaurant Outreach Folders
- Engaged 20 community members and professionals to complete 1 food forest install
- Submitted 5 blog posts to the BCG website

## **Project Goals and Next Steps**

With two months left in his contract. Roman has been working diligently to the following is a list of Project completion completion goals:

- Earmark all BRIP funds and conduct closeout report
- Extrapolate EDC to 300 fixtures
- Publish article celebrating BRIP success in Western Cities
- Convert the totality of Benicia's Diesel Fleet to Renewable Diesel
- Certify 1 Green Business and stimulate chain reaction
- Integrate EPPP checklists into online finance system
- Amend Climate Action Plan to include food measures
- Establish Drop-off points for residential compost



Roman is a recent graduate of Santa Clara University where he studied environmental and political science. Since then, he has worked as an arborist, been involved in youth development with the Student Conservation Association, and engaged in NGO coordination with the Sustainability Institute in Stellenbosch, South Africa. Going forward, Roman intends to pursue field-based ecosystem research and iournalism.









## **Keeping Sonoma Sustainable**

County of Sonoma, Energy and Sustainability Division



## **Projects of the Energy and Sustainability Division**

## **Green Business Program**

Certified 14, small to medium sized businesses for meeting the Green **Business Program** Standards. The Green **Business Program works** to help businesses adopt environmental practices that are sustainable and profitable



## **Employee Commute Program**

Organized outreach events and surveys for the employee alternate ()ne commute program







### **Sonoma County Tool Lending** Library

ENERGY

Coordinated trainings and outreach for contractors in the Sonoma County Energy Independence Office,

### City of Healdsburg **Residential Water Audits**

Conducted water audits for City of Healdsburg Residents as well as

disseminate resource conservation information



## Results

Through the Sonoma County Green Business Program I helped the Sonoma County business community to collectively save:

- 10,856,900 lbs of CO2 with a total savings of \$18,456.73. That's the equivalent of: Planting 261 Acres of urban trees
- 7,359,973 kWh with a total savings of \$745,712.41. That's the equivalent of: Powering 675 house for an entire year
- 14,366,217 gallons of water, with a total savings of \$45,181.75. That's the equivalent of: 41 bathtubs of fresh drinking water per hour

## **Volunteer Engagement**

I assisted Farmster, a non-profit project working to bring youth into agriculture, by developing curriculum and training of young people in a leadership program of the Leadership Institute for the Ecology and the Economy, to learn more about and permaculture Principles and small-scale farming skills

Tool Lending Library





Lauren Lum graduated from Regis University in Denver, Co in 2015 with Bachelor's of Arts Degrees in Peace and Justice and Environmental Studies. She is interested in resource conservation, environmental justice and agriculture. After CivicSpark she hopes to continue to work for and with others to preserve the environment.



Local Government **Commission** 





## Emeryville Climate Action Plan 2.0



Developing and implementing the Climate Action Plan (CAP) 2.0 for the City of Emeryville

## **Project Overview**

The City of Emeryville is a small city in the East Bay region with a mix of residential and commercial sectors. My project goal was to update the CAP to meet the new state mitigation goals for 2030 and 2050 as well as incorporate more recent technological and climate policy development. Over the past 11 months, I developed a CAP 2.0 under the Compact of Mayors guidelines that includes:

- Mitigation and adaptation goals for 2030, accepted as city resolutions
- Accompanying mitigation and adaptation actions/initiatives to meet the 2030 goals
- Long term carbon neutral city goals and strategies for 2050
- Community and municipal greenhouse gas (GHG) inventories
- Resources on climate change and other sustainability issues



## **Highlights from Project Progress**

- Developed 5-year City Sustainability Action Plan through REV Circle
- Developed City sustainability & emergency planning websites
- Completed GHG inventory reporting to Compact of Mayors
- Compiled research on building energy savings ordinances
- Secured partnership with ABM Building Solutions for voluntary energy audit program for commercial buildings
- Drafted environmentally preferable purchasing policy
- Created climate resilient street tree list

### **Next Steps**

I will be presenting the CAP 2.0 to the City Council in September. where we are expecting it to be approved. Emeryville's CAP 2.0 process is currently being captured as a case study for OPR's Best Practices Pilot Program Phase 1. The next City of Emeryville CivicSpark Fellow will be assisting in implementing the CAP with the City of Emervville Environmental Services intern.



Hoi-Fei Mok, PhD is an environmentalist, artist, and change-maker based in the Bay Area, CA. They work at the intersection of environmental sustainability, social justice, and art, and envision new ways to build a just and ecologically sound community.







## **A Tale of Two Cities**

San Francisco Bay Area Region: City of Dublin & City of Union City



### **Overview**

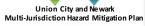
#### **Project Partners**





#### **Fellowship Projects**







#### **Volunteer Project Partners**







**Above:** Speaking with a business owner about the Styrofoam ban.

## **Dublin Achievements**

• Benchmarked City facilities using EPA's Portfolio Manager.

ClearPath

Union City Recycles

- Inventoried GHG's for Municipal and Community Emissions via ICLEI's ClearPath.
- Certified and provided outreach to businesses for the Green Shamrock Business Program.
- Developed ordinance and outreach materials for the Styrofoam and expanded plastic bag bans.

## **Union City Achievements**

- Developed ordinance materials and provided outreach to over 200 businesses in the City for the Styrofoam ban.
- Identified climate change vulnerabilities and adaptation strategies for the Local Hazard Mitigation Plan update.
- Participated in regional adaptation planning discussions and workshops.
- Benchmarked City facilities using EPA's Portfolio Manager.



Anthony Primer graduated from the University of Hawaii at Manoa in 2015 with a BA in Interdisciplinary Studies with a focus in Sustainability. He is passionate about engaging the public in understanding climate change related risks and how to address these risks. After CivicSpark, Anthony plans to pursue a career in climate change adaptation and resiliency.







## **Climate Action Plan Implementation**

A

City of Oakland's Environmental Services Division

## Municipal Zero-Net Energy Buildings

As the electrical grid is expected to become cleaner in the future, emissions from space and water heating will become more important to address. Ideally, natural gas heating equipment in buildings would be replaced with electrical equipment, such as air-sourced heat pumps. However, this strategy is not currently cost competitive due to the low cost of natural gas. Zero-net energy (ZNE) buildings offer an alternative strategy, as the improved energy efficiency coupled with the installation of on-site renewable energy generation create a cost effective space for natural gas phase-out.

For the City of Oakland I prepared a number of materials related to retrofitting existing municipal facilities to ZNE. This included a high level scoping for such retrofitting projects and a re-writing of municipal construction standard operating procedure to include ZNE principals. Cost and Energy Saving Scoping for ZNE Retrofit

> Scoped 117 municipal buildings for ZNE based on potential solar yields and energy consumption

Developed a financing fact sheet for ZNE retrofitting projects for municipal buildings Construction Standard and Procedure Document

> Standards document to include ZNE principles and best practices to reduce emissions

Procedural document structured on a holistic approach for efficient building design and construction

## **EV Chargers In Multifamily Buildings**

While 53% of Oakland housing units are multifamily, only 5% of home electric vehicle (EV) charging happens in these buildings. In order to help ease installation of EV chargers these buildings, I developed an informational city webpage targeting multifamily owners, operators and residents.



## Benchmarking Ordinance

Benchmarking ordinances mandate commercial and multifamily buildings above a certain size to track and disclose their energy consumption to local municipalities. I collected and analyzed community-wide building stock data for Oakland that will be necessary for designing effective benchmarking ordinances.





#### Benjamin Johnson Silverman – Bay Area Region, City of Oakland

M.S. in Environmental Policy and Sustainability Management from The New School in NYC. Former Co-Chair of The New School's University Student Senate where he crafted the University's fossil fuel divestment policy. Previously interned with the NYC Mayor's Office of Sustainability working on institutional greenhouse gas emission reductions.







## **Leading the Charge in Napa County**

Sustainable Napa County - Electric Vehicle Infrastructure Study



## **Project Overview**



Sustainable Napa County (SNC) is a non-profit, non-governmental organization that works with Napa Valley business, agriculture, nonprofit, and government stakeholders on improving their environmental and economic sustainability; for example, SNC partners with PG&E through Napa County Energy Watch to provide businesses with an energy usage review and to identify reduction opportunities. As a CivicSpark fellow, I acted as project lead on SNC's Electric Vehicle (EV) Infrastructure Study to achieve the following goals:

- 1. Identify how EVs could benefit Napa County in terms of energy usage, GHG emissions, and economics
- 2. Assess the existing EV charging infrastructure in Napa County
- 3. Answer questions from local government staff about installing and operating EV charging stations
- 4. Discern what actions would be required to significantly increase the use of EVs in Napa County

I also represented SNC at various community outreach events and on the Napa Valley Clean Air Coalition, where I worked to engage local volunteers in implementing the Bay Area Idle Free program at Napa schools.

## **EV Infrastructure Study Deliverables**



Online map & thorough database of EV charging stations in Napa County



Report on why & how local businesses & governments should install charging stations



Presentation of findings & guidelines to city & county staff

## **Community Events**

#### Town of Yountville CAP Workshop

- Discussed transportation-related GHGs
- Gathered feedback from residents on personal & government actions

#### Napa Earth Day Festival

- Gathered survey responses on benefits & concerns about owning an EV
- Collaborated with local Napa Ford dealership to have an EV on-site





Margot Stert, Bay Area Region – Margot graduated from the University of California, Los Angeles in 2015 where she earned a B.S. in Environmental Science with a minor in Geography / Environmental Studies. She is from Upland, California, and is looking to continue working in the Bay Area on sustainability, climate action planning, and environmental matters.









## **Scaling Climate Action: City, County, Region**

City of Walnut Creek, Sustainable Contra Costa, Association of Bay Area Governments (ABAG), Institute for Local Government (ILG)



## **Project Partners**







Going Green Together





## **Energy Efficiency for Businesses**

- Served as the Volunteer Coordinator for Sustainable Contra Costa's energy efficiency outreach to small businesses throughout the County.
- Recruited 5 volunteers for both the Senior Energy Efficiency Specialist and Energy Efficiency Intern positions.
- Convened 4 meetings with East Bay Energy Watch program administrators for SmartLights and Business Energy Services Team (BEST), and Contra Costa County to coordinate outreach efforts.





## **Bay Area Beacon Program Assistance**

- ❖ Increased 72 local governments' awareness of the Beacon Program. Stakeholder presentations and calls were set up with interested agencies.
- 4 cities joined and will earn Beacon Awards this year: Emeryville, American Canyon, Mill Valley, Richmond. Oakland will join in late 2016.
- Compiled sustainability best practices from each of 10 categories.
- Initiated discussions between ABAG Resilience Program and ILG to facilitate knowledge exchange surrounding climate action efforts.

### **Walnut Creek CAP Implementation**

Community Choice Energy: Council voted to join MCE in March. Held 6 public workshops and outreach focus group meetings.

**CAP Tracking**: Updated 2014 and 2015 CAP performance indicators.

**SunShares**: Designed local outreach plan. Organized 2 free workshops.

**Communications**: Revamped 'solar' webpages with more resources on financing and rebates. Produced monthly green e-newsletters.



**Clifford Wang** is a CivicSpark Fellow in the Bay Area region. Born and bred in the East Bay, Clifford graduated from UC Berkeley with a BS in Environmental Sciences and a minor in Energy and Resources. He aims to mainstream the sustainability mindset, witha particular emphasis in renewables and sustainable land use. In his free time, he enjoys exploring urban landscapes, running, and dabbling in languages.









## An Educational Approach to Saving Water

## **Public School Water Assessment Program**

San Mateo County Energy Watch (SMCEW) and the Green Star Schools (GSS) Program



## **Project Overview**



**SAN MATEO COUNTY** 

Green Star Schools The GSS Certification Program recognizes teachers in San Mateo County who have integrated waste management education into their core curriculum. GSS also provides online resources and technical assistance toward certification, and will soon launch certification pathways for water, transportation, energy and food.

In 2008, the Pacific Gas & Electric Company partnered with the City/County Association of Governments to form an Energy Watch team in San Mateo County. The Energy Watch team serves local governments, small businesses, non-profits, low-income residents, schools, and farms by providing energy efficiency services like free audits, incentives, and public dasses and training.

SMCEW completed a successful energy benchmarking program for school districts, utilizing PG&E's Portfolio Manager to track and analyze the data. They wanted to establish a similar water benchmarking program, seeing landscape method and benchmarked water the cost of his training and to irrigation as a potential major water saver. use for 12 school districts.

A ClimateCorps fellow realized that Portfolio Manager was not optimal for analyzing water data. Auditing approach instead. He so they developed their own water use efficiency scoring

CivicSpark fellow Kyle Ramey proposed a less technical Water arranged a cost-sharing program with NGO's to cover assess one school for ~\$2,000.



Megan trained to audit school facilities and landscapes. Megan found that most facility managers were not responsive and the auditing process was costprohibitive to conduct alone. She partnered with GSS to delegate auditing to school Green Teams.

## **Legacy with GSS**

- To certify their classroom, teachers must engage students to complete a background worksheet on where water comes from and how it's used
- To certify their school, teachers and students must form a Green Team
- The Green Team must audit the whole school and generate an annual Action Plan to educate all students in water conservation



### **Results and Deliverables**

5 schools audited and 5 water savings-cost analysis reports generated, including recommendations for improvements

Potential average annual school savings of \$2300 and 185,000 gal

Map of overlapping boundaries between 23 school districts, 150+ schools, and 16 water agencies; had not existed

Portfolio of water incentive programs offered by each water agency, available for use by schools



Megan Waters, a Bay Area Fellow, graduated from Princeton with a degree in Politics and Environmental Studies. Her experience spans both the non-profit and private sectors. ranging from youth and college coaching to resource conservation and transportation planning and finance. Megan is interested in creating public-private partnerships to reduce GHG emissions and increase access to employment and academic opportunities.







## **Building Community Resilience**

Water-Energy Community Action Network — San Joaquin Valley (WE CAN — SJV)



## **Project Overview**

The Water-Energy Community Action Network — San Joaquin Valley (WE CAN – SJV) aims to build **Water Strong Communities** by increasing access to water-efficient practices, highlighting local champions of water-efficient landscapes, and helping to grow local businesses that support turf alternatives.

WE CAN — SJV has three components:

- 1. Landscape Upgrade Rebates: Targeting end-user residential outdoor water use in disadvantaged communities in the cities of Fresno, Clovis, and Reedley. WE CAN SJV pays \$1/square foot for a maximum of \$1,000 for turf conversion projects. WE CAN SJV also pays up to \$2,000 in irrigation efficiency and graywater systems projects.
- **2. Job Training**: Providing essential workforce training and re-education for those whom will be maintaining the renovated landscapes once established: local independent landscaping contractors and laborers.
- **3. Community Outreach and Engagement**: Highlighting the environmental and economic benefits of water-efficient landscapes. Activities include a publicized turf conversion demonstration event to launch WE CAN SJV.



## **Water-Energy Nexus**

Outdoor water use accounts for approximately 60% of total household water use in the cities of Fresno, Clovis, and Reedley. By incentivizing homeowners to shift from non-climate appropriate landscape designs and plant materials to Central Valley-appropriate drought tolerant species and designs, WE CAN — SJV seeks to reduce greenhouse gas emissions through the associated energy use of residential water use.

Over the 20-year lifecycle of the landscape upgrades associated with the WE CAN project, the anticipated total savings are as follows: 1,936.6 million gallons of water; 2,547,752kilowatt hours; and 514,646 kilograms of carbon dioxide emissions.

### **Community Mobilization**

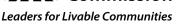
To support the launch of WE CAN — SJV, Mitchelle established the **Community Resilience Internship Program**, a 10-week pilot program for college students to gain hands-on experience in addressing regional sustainability challenges. The project impacts include:

- 120 homeowners engaged in disadvantaged communities in the cities of Fresno, Clovis, and Reedley to promote water conservation incentives through door-to-door engagement
- 375 hours of volunteer service committed by 7 students over the course of 10 weeks



Mitchelle De Leon, CivicSpark AmeriCorps Fellow — San Joaquin Valley Region Mitchelle completed his B.S. in Economics at California State University, Bakersfield. After CivicSpark, he plans on scaling up the WE CAN community mobilization model in partnership with LGC's CivicSpark Water Action Fellowship.









## Ready, Set...PLAN!

City of Gustine



## **Project Overview**

Gustine, a small town in Merced County, expressed interest in creating a Climate Action Plan in the near future. With little capacity support, they turned to Rebecca to explore that process and prepare them to undertake it.





### **Rebecca's Achievements**

- Creation of a comprehensive community-scale greenhouse gas inventory using SEEC ClearPath to be used in setting clear, measurable sustainability goals and monitoring progress towards reduced emissions
- Extensive research of existing Climate Action Plans and other related climate policies, codes, and laws to inform best practices and recommendations for Gustine's consideration in formulating its own sustainability strategies

### What's Next for Gustine?

- Using SEEC ClearPath's forecast module to set an emissions reduction target
- Developing a Climate Action Plan to meet target by evaluating emissions reduction strategies and going through a public and environmental review process
- Implementing Climate Action Plan policies
- Tracking progress



A Sacramento native, Rebecca True graduated from CU Boulder with studies in the environment, public health, and sustainable development. Her study abroad classes in Sweden piqued her interest in urban planning and CivicSpark has only strengthened Rebecca's commitment to public service and smart growth. She is looking forward to pursuing a Master's degree in planning in fall 2017.







## **Central Valley Narrative**

San Joaquin Valley Region - Fresno



## **Project Overview**

- 1. WECAN San Joaquin Valley
- The Water-Energy Community Action Network (WECAN) program comprises of 3 main components: rebates for local residents in the Fresno area to reduce their outdoor water use, a qualified water-efficient landscaper (QWEL) training, and a series of community events geared toward educating the public on smart water use practices.
- 2. San Joaquin Valley Air Pollution Control District's Charge Up! Incentive Program
- This incentive program gives San Joaquin Valley businesses funding to install public-access electric vehicle charging stations. Throughout the latter half of the year, I assisted businesses with the application process and provided them relevant information and resources regarding electric vehicle chargers.
- 3. Employment Training Panel (ETP) Water-Strong Communities Trainings
- Provided low-cost training seminars to water professionals across the state of California to update them on state regulations, provide them with up-to-date tools and resources that help them meet water conservation requirements, and educate them on best practices.

## WECAN - San Joaquin Valley

This year, I was in charge of conducting outreach for this program and establishing partnerships, all in the hopes of increasing our engagement with the community and saving water in the Fresno area. I went door-to-door, made hundreds of phone calls, sent emails, had in-person meetings, and now, at the end of the service year, the ball is rolling in the right direction. I've successfully secured two partnerships with local businesses who are doing outreach for us and bringing us potential rebate applicants. Through this, I've learned a lot about the motives that drive people in disadvantaged areas, and learned how to frame any message for any audience in a way that speaks to their needs.

## **Charge Up! Incentive Program**

My role in this program has been crucial. Most businesses do not have the time to do the necessary research on EV chargers, go through the application process, and still have time to do their normal work. Therefore, my guidance and expertise with these chargers has allowed these businesses to comfortably move forward with the program and eventually provide free or low-cost charging to EV drivers in the San Joaquin Valley. So far, two businesses have received a contract to install a total of four EV chargers, and four other businesses are currently undergoing the application process. Because of my help, Fresno's EV charging grid will be much more complete, especially in the downtown areas where EV chargers are sparse and needed.



Trevor Wilson, San Joaquin Valley Region

2015 Michigan State University graduate with a degree in International Relations. I will be pursuing a dual-master's degree program with the University of Malta and James Madison University starting in early September in which I will live and study in the country of Malta for nine months.



