

SDC Campus Project and Proposal

Sustainable Housing, Agriculture, and Jobs for SDC
Sonoma County, California



Summary

The SDC Campus Project is the proposal of a group of local citizens to reuse and repurpose some of the existing buildings on the Sonoma Developmental Center (SDC) campus to create a community asset offering truly affordable cohousing and growing food in historic agricultural lands. We support the reuse of many of the existing office and maintenance buildings for use by nonprofits, small businesses, cultural activities, and light industry, thereby creating jobs for local residents.

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Project Description

“Priorities in the transfer process include the following: Demonstrate methods to build a sustainable community that provides a housing/jobs balance, enhances watershed management and groundwater supplies, provides renewable energy, substantially reduces CO2 emissions, and preserves cultural heritage.” – Sonoma Land Trust/ Transform SDC

One key intention of the SDC Campus Project is to develop housing that addresses the climate crisis by reducing greenhouse gas emissions. By providing some creative options for affordable housing, our plan enables people working in the Sonoma Valley, Eldridge, and nearby communities to live close to their place of employment. This concept is generally known as creating a housing/jobs balance, which reduces greenhouse gas emissions from vehicle miles traveled to and from work. In addition, agricultural crops are an integral part of easing carbon emissions. Plants become a carbon sink to pull down carbon dioxide from the air into the soil (sequestration). By partnering with Sonoma County, experienced nonprofits, agencies, and businesses, we can create a viable, self-sustaining community of residents and businesses. This will contribute to the State’s income to offset expenses at SDC, while addressing the extreme housing shortage.

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What is the SDC Campus Project?

THE SDC CAMPUS AND THE HOUSING CRISIS

California is experiencing an acute affordable housing crisis. The cost of land significantly limits the development of affordable housing. It is the intent of the Legislature that priority be given to affordable housing in the disposition of the Sonoma Developmental Center state real property. – California Government Code: GOV: Section 14670.10.5, Section 1 a (6)

Sonoma County's housing crisis has been well documented, beginning with the displacement of some 10,000 homeowners during the subprime debacle, then driven by a wave of vacation home acquisitions and apartment conversions to luxury rentals. This was further intensified by double-digit rent increases and topped finally by the loss of over 5,600 homes in the 2017 fires. We are all suffering from the effects: working young adults, families, and elderly paying half their income or more to keep a roof over their head, families doubled up, students couch surfing, people living in their cars, and people leaving the county for a more affordable life.

The agreement shall require that housing be a priority in the planning process and that any housing proposal determined to be appropriate for the property shall include affordable housing. It is further the intent of the state that priority be given to projects that include housing that is deed restricted to provide housing for individuals with developmental disabilities. – California Government Code: GOV: Section 14670.10.5, Section 1c (4)

We see in the SDC campus an important opportunity to address the needs of the large number of residents with incomes less than the Area Median Income (AMI). Developers state that building housing affordable in Sonoma Valley doesn't "pencil out." Housing consultants urge local governments to focus on "the missing middle," but to do so ignores the needs of a worker who earns \$15 an hour, or \$28,800 a year. We propose to house individuals or families with incomes lower than Area Median Income (AMI), with many in the 30% to 60% of AMI range, with rents no more than 30% of individual or family income. Already publicly owned, the SDC offers a unique opportunity to provide affordable housing that will "pencil out" for those who need it most, while stimulating the local economy, helping businesses to retain employees, enhancing people's lives, and providing income to the State and County.

CAMPUS HOUSING PROJECT

The SDC Campus Project proposes a co-living use of the residential buildings. Most SDC residential units consist of large bedrooms with a private half bathroom, a shower

down the hall, a kitchen, dining room, meeting rooms, offices, and a large gathering room. It may be possible to add showers in the existing bathrooms during remodeling. Utilities and Wi-Fi would be provided. This has become a solution to the affordable housing crisis around the country. The residential buildings at SDC provide an opportunity to offer housing for singles, elders, young families, students, veterans, vineyard workers, hospitality employees, and people needing temporary housing. By providing housing for people who work in the local community, traffic is reduced, lifestyles are enhanced, and the economy is improved. Business owners, nonprofits, and public agencies are finding it difficult to hire employees because of the workforce housing shortage. Access to this kind of housing will be a boon to the economy, creating truly affordable housing to the working community

THE INITIAL PLAN – A HOUSING SOLUTION AT SDC

“State-managed and County facilitated interim use plan and activity. FY 19-20 through site development and activity. Estimated Revenue: Unknown.” Priorities stated include “the County will work closely with the State to determine any feasible interim uses during the long-term planning process.” – Sonoma Land Trust/Transition Proposal for SDC, Key Component #3

We propose that some of the existing buildings be utilized for housing, job training and business uses during the development process, in addition to farming agricultural land, which would provide income to the State, offsetting the expenses of maintenance and providing the local community with much needed housing, jobs, and food.

Much has been said about the condition of the buildings. The Wallace, Roberts & Todd (WRT) report says in the State funded overview of the buildings “Building Condition Overview: With few exceptions, the buildings at the Sonoma Developmental Center have been well-maintained and are in good or fair, serviceable condition.... In general, buildings are clean and well cared for, both inside and out.” Claims are made that there are lead and asbestos problems. This may apply to a few of the unused buildings, yet the facilities people at SDC have been careful to remediate any such problems in used buildings over the years, and those procedures will remain in place. Water is now being supplied by the County system (Sonoma Water), and there is technology to supply heat and cooling by electric heat pumps to individual buildings.

Our group has been working for two years to develop a plan for initial uses beginning as soon as possible. We have researched extensively the conditions and possibilities for reuse of the existing campus by studying the WRT report, touring the campus, inspecting the buildings, and collaborating with energy consultants. To leave these buildings unused and not fully maintained during the development process (potentially three to five years or more) or to demolish them, is not a responsible use of State resources and does not respect their historic legacy value.

AGRICULTURE AT SDC

“In the solution of great economic problems of the present age, I see a return to the soil.” – Jack London

SDC has a historic tradition of sustainable agriculture on the property for nearly 100 years, growing food for the residents and staff. Our community is now realizing the benefits of organic, healthy food that is grown locally. While there are several Farmers’ Markets in Sonoma Valley on various days, most people still buy their produce from grocery stores. The vast majority of that produce is transported hundreds and thousands of miles from the grower to the consumer. Energy to cool the products, gas to transport, plastic to wrap, and emissions into the atmosphere are eliminated by selling directly from the grower to the consumer near the agricultural field.

Sonoma Valley and County are fortunate to have a good number of organic farmers, young people, returning veterans, and more who need land to grow crops. Some of the historic agricultural land at SDC on the east side of the campus can be used for this purpose. This is not near the wetlands or wildlife corridor, which must be protected. In addition, some of the existing lawns can be converted to organic gardens. The land, the talent, hard work, and desire is there to renew the tradition of sustainable agriculture on the SDC Campus.

Food insecurity is a growing threat to people of lower income, elders, the infirm, families, and children. The mission of SDC has been to serve those in need. Using the land in this way carries on that tradition. Local agriculture is important to health, the environment (carbon sequestration), jobs, sense of community, and will aid in fire prevention. There are organizations in Sonoma County that can come together to make this community of housing, jobs, and agriculture a reality.

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SDC Campus Project Proposal

THE VISION

“To address the shortage of housing for Californians, Governor Newsom ordered the Department of General Services (DGS) and the Department of Housing and Community Development (HCD) to identify and prioritize excess state-owned property and aggressively pursue sustainable, innovative, cost-effective housing projects.”
– Governor Gavin Newsom, Executive Order on Affordable Housing

The SDC Campus Project has developed this proposal in accordance with Governor Newsom’s Executive Order on Affordable Housing.

The ultimate uses for the SDC campus will be proposed over the next few years by the study being organized by Sonoma County. The Wallace Roberts & Todd (WRT) Report and input from citizen study groups provide some insight into uses that could be appropriate, with consideration for the demand that exists in the county (in no particular order):

- 1) Individual neighborhoods to create community
- 2) Affordable, intergenerational housing for individuals and families
- 3) Professional and nonprofit offices in existing buildings
- 4) Medical clinic
- 5) Theater for the performing arts
- 6) Open space, wildlife corridor, recreation, and agriculture
- 7) Educational or institutional facilities.
- 8) Light, clean industry in existing buildings
- 9) Local public transit
- 10) Historical museum

The reuse of many of the existing residential buildings will fit well with these uses which provide a sense of community, local food sources, and a sustainable way of living, while respecting the historic campus and its spirit.

THE PLAN

The goal is to establish an environmentally and financially sustainable operation. This includes installing zoned electric mini-split heat pumps for heating and cooling in the buildings, eventually adding solar photovoltaic (PV) panels. It encourages use by residents of nearby space for organic farming of produce, and use of some of the historic agricultural lands for local organic farming.

There are thirteen existing residential buildings on the east side of Arnold Drive, many that were evaluated in the WRT report as most usable with the least cost of upgrade. These buildings are the basis for the initial co-housing in this proposal. The majority of these residential buildings are laid out with large bedrooms with private half bathrooms, with a shower down the hall. It may be possible to convert one toilet in each pair to a shower during bathroom remodels. We anticipate these units being occupied by either individuals or families. For individuals, this will involve shared housing, cooking, dining, and living space (co-housing). For families, adjacent rooms with a common bathroom would be occupied. There are numerous small rooms that can provide space for residents to enjoy a library/reading room, yoga, music, tutoring/study, etc. A laundry room is in place.

While these buildings were built for food coming from a central kitchen, the food warming room in each building has sinks, counters, and adequate electrical capacity to be upgraded to support an all-electric kitchen. Residents can use the kitchen, and entities can volunteer or be funded to prepare meals for gatherings of residents.

Each building should be operated by an experienced housing management company or nonprofit organization solely established to manage the buildings. Rents can be set at a low level sufficient to cover setup and operating costs only. Any income beyond these costs should contribute to operating costs of the campus. This proposal uses the residential buildings on the east side of the campus. We hope that other buildings and space on the campus will also be used for residential housing at a variety of price levels, as well as for businesses and activities that serve and employ residents of Sonoma County.

SELECTION OF RESIDENTS

The project can start with one or two buildings and can grow as demand increases. Preference for this affordable co-housing cannot legally be given to Sonoma County residents exclusively; applicants from outside the County cannot be turned away. But marketing can be focused locally. Ideal residents would be individuals and families who are working in the surrounding communities of Glen Ellen, Kenwood, Santa Rosa, and Sonoma Valley. By providing housing to local workers, traffic congestion for commuters to local jobs and greenhouse gas emissions would be reduced. Many individuals and families in the county are employed yet cannot afford the going rents or tolerate a long commute. These will be the easiest to house at SDC and are the basis for our financial plan.



Cohen residential building at SDC

SELECTION OF BUILDINGS

Residential buildings should be near one another to facilitate managing their operation and interconnecting their solar PV systems. These are on the east side of Arnold Drive. There are thirteen residential buildings of styles H1, H2, or H3, built in the 1950s through 1962, all of which are rated 1 (one) by WRT for reusability, yet infrastructure condition will determine the ones to use first. Some have concrete shear wall construction, some multi-story wood, and some reinforced masonry, all with flexible diaphragm floors or ceilings. These are among the buildings most likely to be used for the long term, and housing is their most likely long-term use. These buildings require no or minimal strengthening for long term reuse. The building names are Cromwell, Poppe, Stoneman, Judah, Bemis, Corcoran, Cohen, Malone, Smith, Brent, Roadruck, and Bentley. The Lux building was also evaluated, but removed from consideration due to reported damage to its sewer facilities. Cohen and Malone are attached together and located near the trailers currently used as offices (with water and sewer in place). Cohen and Malone would likely be the first buildings to be developed for housing.

UTILITIES

All the energy required initially can be supplied by PG&E and existing electrical distribution infrastructure to operate heat pumps for all the heating, cooling, and lighting. Eventually solar PV panels can be installed on the building roofs and/or on ground-mounted racks for general electrical uses. These panels can be connected in a micro grid with backup batteries and tied into PG&E along with the rest of the site. The water distribution now comes from the County's Sonoma Water system, and the existing sewer lines are being surveyed by the County and State. Some of the damaged water supply and wastewater lines could be repaired for use, and upgrades will be required as the whole campus is developed. Wi-fi services can be provided by connecting to a cable or satellite service.

Electrical

The primary campus electrical power source is PG&E. The site has three diesel generators that automatically start up when PG&E power fails. The generators and distribution wiring are considered in good enough condition to continue use. We recommend that installing backup batteries and creating a micro electrical grid that can greatly improve reliability and reduce operating costs.

Power is distributed on the site at high voltage (for efficiency) and dropped to household voltage by transformers on pads located outside the buildings. There appears to be a single 2.4kv to 208/120-volt transformer for each building (or pair of buildings).

The hospital-grade lighting, receptacles, and switches inside the buildings are much higher quality than conventional residential devices, and most appear to remain useable. However, they were installed when the buildings were constructed and so any that have failed should be replaced. The existing lighting appears to be typical T-12 tube

fluorescent, compact fluorescent, and incandescent, suggesting that energy consumption can be reduced by at least 50% by converting fixtures to LEDs. Reducing lighting demand by this large amount will help to free up service panel capacity, which can then be allocated to accommodate other electrical end uses.

The receptacles appear to be standard 3-prong 120-volt types, suggesting that the grounding is to code.

Electrical Upgrade Considerations

It should be straight forward and cost-effective to use the existing PG&E power, tie the solar inverters (and/or micro-inverters) to the existing service panels, and ultimately tie the solar arrays to transfer switches connecting the back-up battery systems to the building circuit breaker panels.

Assuming this project will grow to several buildings, those in close proximity should be tied together to optimize load sharing and back-up battery cost control. In 2018, Santa Rosa Junior College was awarded a \$4.9 million dollar grant from the California Energy Commission to build a demonstration micro-grid at the Santa Rosa Junior College Campus. The SDC Campus Project should seek to secure similar funding.

Water and Sewer

SDC is currently receiving water from the Sonoma Aqueduct, operated by the Sonoma County Water Agency (Sonoma Water). For future use, the formerly independent SDC domestic water supply appears more than adequate for the campus' needs, recognizing that the water system has deficiencies that will need correction as the whole site evolves. The distribution piping has some challenges for long-term use. However, at present, it appears that the pipes that connect the new distribution pipes to these buildings require minimal attention to continue supplying all of the needs.

The SDC sewer system delivers sewage to the Sonoma Valley County Sanitation District system, also operated by Sonoma Water. This collection system is operational but will need phased replacement for long-term use. Assuming some of the existing campus buildings will be part of the long-term campus, and the buildings we have selected being in the best condition, it is reasonable to treat these buildings as useable for immediate affordable housing. In the interim years while the County plan develops, some routine maintenance and repair costs are anticipated. The SDC storm drain system will need replacement as the long-term plan for use of the site is established, but it is assumed to work adequately as is for immediate use.

Heating and Cooling

Heating and cooling of the buildings will be done with newly installed high-efficiency electric heat pumps. Each wing of these buildings has sets of two bedrooms with a shared toilet/sink, each of which will be configured to use a new ductless, variable

refrigerant flow (VRF) system. In such “mini-split” or “multi-split” systems there is an inverter-driven compressor mounted outside and copper tubing carrying compressed fluid to one or more indoor evaporator/condenser units. The indoor units will be wall-mounted in each of the rooms and common rooms. Additional interior fans may be provided as needed to improve air distribution and ensure adequate ventilation. This zoned, high-efficiency design approach will also avoid disturbing any old asbestos insulation (mainly associated with the original hydronic systems) that may be encountered.

Heating of domestic hot water (DHW) will be done with one new, high-efficiency electric heat pump hot water heater (HPHW) dedicated to each building wing. These new storage type systems will be plumbed to feed into the existing hot water distribution pipes. New branch-circuit wiring will be added to accommodate these new loads, as necessary.

HAZARDOUS MATERIALS

The WRT Report confirmed that asbestos and lead paint are the only significant hazardous materials likely to be encountered inside the occupied spaces of these residential buildings. Where present, these hazards would be most common in either wall paint or floor tiles. In this form, hazardous conditions would only become a problem when the walls or floors are cut into for remodeling. Accordingly, all such work will be performed only by personnel skilled and certified to work safely with such hazardous materials. As long as no such modifications are made by unskilled personnel, a sealing coat of encapsulant paint will be a satisfactory plan. Any damage to floor tiles in the past was handled by a licensed asbestos management contractor, properly disposed of, and replaced by the maintenance team at SDC. This will be the future procedure.

Abandoning the obsolete central hydronic systems and converting to zonal heat pump space heaters and water heaters will allow the old boiler rooms to be bypassed. These unoccupied basement rooms can then be sealed off and entered only by skilled personnel who are trained to encapsulate and/or remove the asbestos they contain.

AGRICULTURE

It is our intent that agricultural activities be pursued by local farmers and residents. WRT identifies seven areas on the east side of the campus that we propose to be considered for agricultural use. Of these, areas 1 and 7 appear usable for food crops that are practical for immediate use. Reuse of lawns for gardens can be considered. (See map on back page.)

TRANSPORTATION

The plan is that many of the people who choose to live in these affordable facilities will eventually be employed on site, but others will likely be employed in either Sonoma Valley or Santa Rosa, making a commute necessary. Although WRT says these roads have capacity for more cars at existing levels, those who are backed up during rush hour, which runs from about 2:30 to 7:00 p.m., would disagree. As the campus fills in, it seems likely that a shuttle bus evolving to municipal service will be important.

FINANCES

Costs of preparing Cohen building (Assume Malone is the same.)

Installation of heat pump system	\$50,000
Kitchen upgrade to be a full kitchen.....	15,000
Additional door locks added or changed.....	2,000
Painting inside	20,000
Replacing light bulbs, receptacles and switches	500
Insulating windows with inserts.....	20,000

Total...\$107,500

Unknown costs are plumbing repairs, sewer line repairs, and window enlargement, if needed. Some labor for upgrades and painting can be donated by community members. The cost to upgrade the two buildings will need to be obtained from multiple sources including, grants, and donations.

Monthly Operating costs for Cohen building (Assume Malone is the same.)

Live in superintendent - free rent plus salary.....	\$3,000
Water and sewer usage	2,000
Payment to State of CA for Operations and Maintenance.....	2,000
Electricity for lighting, stove, washer/dryer, heat pumps.....	2,500
Insurance costs estimate.....	500
Minor repairs.....	500

Total Operating Cost.....\$10,500

Monthly Income from Cohen building (Assume Malone is the same.)

Rents for each bedroom: \$800 x 14	\$11,200
Rents for 5 small bedrooms: \$400 x 5	2,000
Rents for 3 office spaces in one wing: \$650 x 3	1,950

Total Income.....\$15,150

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SDC Campus Project Board

Bonnie Brown (Co-chair) is an organic gardener and owner of an architectural etched glass business for thirty-five years. She has renovated five older homes and been a landlord in Sonoma Valley for twenty-two years. Having lived in substandard housing as a student and single mother, her priority is a truly affordable community for our workforce with jobs in the area, farming of organic food, and local transit.

Frank Windes (Co-chair, Treasurer) was an electrical engineer at IBM for thirty-three years. He has been a Sonoma resident for twenty-nine years. As a member of Sonoma United Methodist Church, he serves on the Finance Committee and the Board of Trustees and participates in the Spiritual Action Group and the Sonoma Valley Housing Group. Frank enjoys singing with the Sonoma Valley Chorale.

Jerry Bernhaut (Secretary) is an environmental attorney, currently residing in Santa Rosa. He was a forty-year resident of Sonoma Valley. He is a member of California River Watch, Forest Unlimited, Sonoma Valley Climate Coalition, and Transition Sonoma Valley.

Michelle Dench (Communications Director, Advisor) is a mom, financial advisor for the past fifteen years, and community builder. She is a CFO/Program Director for a nonprofit in Sonoma. Michelle has been a financial advisor, investment manager, and educator, helping startup businesses and community projects in Sonoma County.

Dave Ransom is a retired journalist who lives in Santa Rosa and goes to the Methodist Church in Sonoma, where he is a member of its Spiritual Action Group. He is also a member of the Sonoma Valley Housing Group (which he has represented on the council of the countywide Alliance for a Just Recovery), as well as of the Sonoma Valley (Immigration) Action Coalition.

Ann Wray is a retired English teacher who has lived in Sonoma Valley since 1970. She is a nature enthusiast and is an organic gardener. She is a member of Sonoma United Methodist Church and its Spiritual Action Group, Finance Committee, and Fundraising Committee. She serves on the Board of Sunshine Preschool and also belongs to the Sonoma Valley Housing Group.

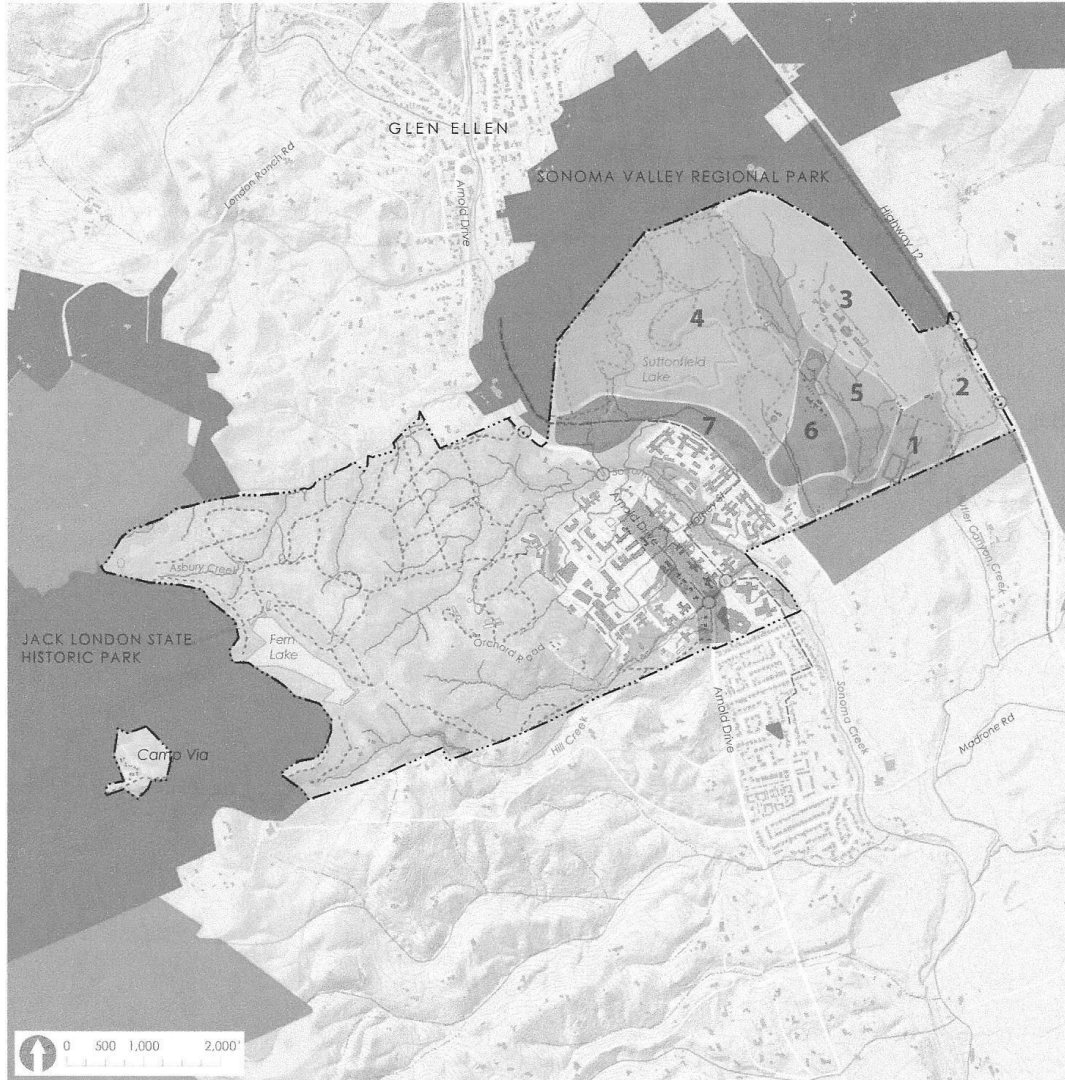
Norm Wray has lived in Sonoma Valley since 1970, forty-four years adjacent to SDC. He is a forty-year general contractor and a member of the Methodist Church, involved with the Spiritual Action Group, Sonoma Valley Housing Group, and Board of Trustees. He was a longtime volunteer at the Willmar Center for Bereaved Children in Sonoma. He has studied in detail the causes of the banking and housing crises and is an advocate for Public Banking.

Tom Conlon (Advisor) is an expert in energy-efficiency. His clients have included Pacific Gas & Electric, the California Energy Commission, the Electric Power Research Institute, and The World Bank (Jamaica). He has founded several “green” businesses, including one acquired by Autodesk in 2008. He is a journeyman electrician and certified Home Energy Rater. Tom has served on the Sonoma County Climate Action 2020 Stakeholder Advisory Group and on the boards of the Business Environmental Alliance, Rotary Club of Sonoma Valley, and Transition Sonoma Valley.

Seth Dolinsky (Advisor) has a long history in land management, agriculture, and community organization. A landscape contractor specializing in Regenerative Land Management, he has a BA in Environmental Science and a Horticulture degree. Seth is the Executive Director of the local nonprofit Sonoma Springs Community Hall and has launched the Sonoma Valley Agricultural Cooperative. He has worked for local farms Oak Hill and Paul’s Produce, the Sonoma Community Center, and Sonoma Ecology Center. His vision for SDC is for a vital, healthy community living in harmony with the surrounding landscape.

For more information on this project and the group, contact Bonnie Brown at: bonniebrown42020@gmail.com

Figure 9-6
AGRICULTURE



Source
USGS, GreenInfo Network,
Sonoma Ecology Center