

A TOOLKIT FOR FARMLAND CONSERVATION

ROBERT REDFORD CONSERVANCY FELLOWS

How to Use the Toolkit

This agricultural land loss mitigation toolkit provides residents, policymakers, and environmental justice organizations with well-sourced research and template language to inform agriculture land conservation efforts in the Inland Empire Region (IER) and beyond.

Compiled by student fellows from Pitzer College's Robert Redford Conservancy for California Sustainability, the research in this toolkit can help in upcoming sustainable development initiatives that prioritize agricultural lands as climate solutions. The toolkit begins by introducing the issue of agricultural land loss. By first highlighting the history of California's agricultural lands and ending with potential forms of mitigation, this toolkit highlights the benefits of preserving farmlands and provides essential context for community stakeholders.

**BETWEEN
2010 - 2016**

**22% of California's arable
land being used for
agriculture was lost to
development**

Toolkit Organization

History & Context

Background history of logistics industry development and farmland decline in the IER.

Overview of California Environmental Quality Act (CEQA) and Environmental Impact Reports.

Comment Letter Samples

Applicable template language on the significance of agriculture in the contexts of economics, food security, and climate change.

Alternative Forms of Mitigation

Offers alternative mitigation strategies to consider when facing agricultural land loss.

HISTORY OF AGRICULTURE AND LOGISTICS IN SOUTHERN CA

1870-1990

Agriculture has been a staple industry of the Inland Empire Region (IER) since the proliferation of citrus groves in the 1870s. At the time, the profitability of this industry propelled Riverside, CA to be one of the wealthiest cities in the nation. Although this wealth was never well distributed amongst its immigrant farm working populations, IER's history is rooted in agriculture and so is its continued sustainable development.

Several Los Angeles Times articles summarize the management of agricultural land in the Inland Empire. A key 1985 piece entitled "By Comparison, Land in the Inland Empire is Dirt Cheap," provides evidence that the affordability of land allowed for growth of its citrus, row crop, and animal agriculture industries. However, by the late 1980s the area of land used for agriculture began to decrease. The same land, which allowed for the proliferation of an agricultural industry, was seized upon by another industry with more capital and short-term revenue potential; the IER began transitioned into a hub for the global logistics industry.

By 2015, the times reported that “people living near 60 Freeway in Ontario breathe the worst air in the Southland.” Recent California EnviroScreen data places many Inland Empire communities above acceptable air pollution levels. As a result, today’s Inland Empire residents suffer from chronic health issues such as asthma, cancer, obesity, and heart disease. As air pollution increased alongside the loss of local farms the food landscape of the IER began to change; roadside produce stands were replaced by big box food outlets lacking in quality food. Additionally, despite 2015 predictions that the “Inland Empire was poised to be a ‘big dog’ in the California economy,” by 2018, the LA Times reported that fewer than half the jobs in the region paid a living wage. Environmental justice groups and IER community members have since spoken against warehouse and logistics industry development, however, their concerns often come into conflict with political and corporate interests. High levels of poverty, air pollution, and low-quality foods has led to increased rates of chronic illness and lower quality of life for IER communities despite the promise of development.

Rapid loss of farmland is a significant issue not only for the IER but for all of California. The main drivers for the loss of farmland in California are rapid population growth, urbanization, and inefficient use of land. In 2010, California hosted more than 43 million acres of arable land being used for agriculture; however, by 2016 nearly 22% of this land was lost due to development. A continued issue within policy efforts to protect farmland has been that their legislators fail to consult local farmers and community members affected by these development projects. We must be conscious of the roots of California's and specifically the IER's transition away from agriculture in order to build meaningful and informed protections for our agricultural lands.

CEQA PROCESS

CEQA stands for the California Environmental Quality Act. This act was signed into law by Governor Regan in 1970. The purpose of CEQA, as dictated on the CA government website is to “inform government decision makers and the public about the potential environmental effects of proposed activities and to prevent significant, avoidable environmental damage.” Essentially, the CEQA process examines how a proposed activity will change environmental conditions, compared to the baseline without the activity.

Some of the key actors involved in the CEQA process are the applicant, who represents the proposed activity, the public, the lead agency, which is both responsible for deciding if an activity is subject to CEQA and for approving a project, and a planning commission, which contributes towards decision making on the future of the proposed project. An activity is subject to CEQA if the lead agency determines that there may be an environmental impact of pursuing it.

When a project is being evaluated under CEQA, there are three levels of environmental review that it can be subjected to: exempt, negative declaration or mitigated negative declaration, and environmental impact report (EIR).

A project can be exempt from further CEQA review if it meets one of the three outlined categories of exemption:

- statutory
- categorical
- general

Additional information about CEQA exemptions can be accessed [here](#).

If the impacts of the project were previously analyzed in a different EIR or if analysis of the project does not show that there could be potential significant impacts, the determined level of environmental review will be negative declaration or mitigated negative declaration. The difference between the two is that a mitigated negative declaration will include changes to the project intended to mitigate potential environmental impact and mitigation measures that the applicant will take to offset environmental impact to a less than significant level.

The final level of environmental review is an EIR. It is decided that a project is subject to the preparation of an EIR when it can be argued, based on substantial evidence, that a project may have a significant environmental impact.

EIR PROCESS

Given that an EIR is the most in-depth level of assessing the environmental impact of a project, those pursuing projects will attempt to avoid them. The EIR process is generally perceived as intensive, expensive, and potentially restricting to a given project. However, the EIR process is extremely important, especially in situations where the proposed activity may have a disproportionate negative impact in comparison to benefits. The requirements of an EIR are project description, environmental setting, significant environmental effects, unavoidable significant adverse effects, growth inducing impacts, cumulative impacts, mitigation measures, alternatives, and responses to comments. The steps of the EIR process are as follows:

1. Distribution of a Notice of Preparation, which discusses the proposed activity and some of the potential impacts, requests public comments over a 30-day period on what the EIR should address
2. Preparation of a Draft EIR, which discloses extensively, environmental damage, mitigation efforts, and alternatives
3. Submission of the Draft EIR
4. 30-45 day public review period in which comment letters are received from the public (find tips for writing effective comment letters here)
5. Public hearing on the Draft EIR, public testimony received
6. Preparation of Final EIR, which is intended to incorporate public responses
7. Filing of a Notice of Determination if the project is approved

In summary, the lead agency will produce a Notice of Preparation, which indicates that they are ready to receive public comment on what a given EIR should address. After this, an EIR will be drafted and submitted. Once this draft EIR is released, there is a 30-45 day long comment period in which comment letters are accepted. After this, there is a public hearing in which members of the public are welcome to testify. The final EIR is then produced, and further considered and certified by the lead agency. Once this is done, the project is either approved or denied. If approved, the agency will release a notice of determination. Public comment is an important component of the EIR process, as is demonstrated by the fact that Final EIRs must include responses to public comments. Public comments and public testimony are important ways for community members to weigh in on decisions that they will ultimately face the burden of.

TEMPLATE LANGUAGE FOR COMMENT LETTERS

The following section offers template language for comment letters on the importance of farmlands, farmland and climate change, farmland and food security.

Carbon Sequestration Capacity of Agricultural Land

The preservation of agricultural land within the IER and further California is crucial for securing a sustainable, habitable future. Climate change mitigation is one of the essential benefits of farmland preservation because of the potential to capture carbon in agricultural soils and further to decrease greenhouse gas quantity in the atmosphere through effective land management. The capacity for carbon capture through agriculture is a product of the process of carbon sequestration in soils. Soil carbon sequestration is defined as the process through which atmospheric CO₂ is transferred into the soil through the breakdown of plant mass and plant residue and is stored in the soil as a component of the soil organic matter. The soil within agricultural practices can sequester carbon. Climate-smart agricultural practices are beginning to be implemented to sequester carbon emissions, such as conservation tillage, cover crops, rotational grazing, and bio charcoal applications. In this sense, the preservation and intentional management of agricultural lands is a crucial piece of broader carbon drawdown solutions.

Economics of Farmland Preservation

Farmland and its agricultural productivity helps the economy and provides food security for individuals. In 2021, the farm industry alone accounted for \$44.7 billion, making California the leading agricultural state in the United States. Agricultural contributions to the economy are also subject to the multiplier effect, which means that contributions to the economy from agriculture actually impact the state's economy more than the original contribution. Agriculture in California is also uniquely important in supporting the nutritional needs of a growing global population. In California, specialty crops are grown throughout the state, which are crucial for human nutrition. Additionally, in low-density regions, such as those with high quantities of farmland, fewer greenhouse gasses are transmitted per person. If California preserved farmland instead of encouraging the development of industry, the state would more actively participate in climate change mitigation.

Importance of Working Lands in Building Climate Resilience

Working lands are vital for producing food, as well as through conservation benefits such as clean water, wildlife habitat, biodiversity, and climate change resilience. Socioeconomic trends have been used as an argument for preserving working lands. Rural communities might advocate for preserving working lands and open space, hoping that the available land space will bring capital to the area without the development of the lands. The benefits of the preservation of the working lands and public green spaces include increased air and water quality. Working lands also have the potential to sequester carbon, reduce GHG emissions, and increase the capacity for California to adapt to the impacts of climate change. From a policy standpoint, California Governor Gavin Newsom stated, "California's natural and working lands – our forests, rangelands, farms, wetlands, coast, deserts, and urban green spaces – sustain our economy, support our unique biodiversity, contribute to the global food supply, support outdoor heritage and provide clean water and air." The ultimate goal of the executive order is to build climate resilience within California by developing a Natural and Working Lands Climate Smart Strategy. Newsom is also dedicated to protecting roughly 30% of the state's water and land resources to preserve biodiversity.

Farmland is recognized explicitly in the Executive Order, stating, "America's farmers, ranchers, and forest landowners have an important role to play in combating the climate crisis and reducing greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation and sourcing sustainable bioproducts and fuels." In addition, the order emphasizes the importance of local control and input. Specifically, the Secretary of Agriculture should seek input from "Tribes, farmers, ranchers, forest owners, conservation groups, firefighters, and other stakeholders on how to best use Department of Agriculture programs, funding, and financing capacities, and other authorities, and how to encourage the voluntary adoption of climate-smart agricultural and forestry practices that decrease wildfire risk fueled by climate change and result in additional, measurable, and verifiable carbon reductions and sequestration and that source sustainable bioproducts and fuels."

DIRECT LAND CONSERVATION:

Most EIRs indicate that agricultural land loss cannot be mitigated. While there is no requirement within the State of California to mitigate agricultural land loss, there are many forms of mitigation that can be undertaken. Some counties and municipalities have created voluntary agricultural land loss mitigation policies for the direct replacement of lost farmland, which is our recommendation.

Mitigation should include **funding for the purchase of land for direct conservation**. Working with organizations who are able to hold land in trust, mitigation monies can be banked for direct land purchase--ideally within the municipality. If cities are not willing to adopt ordinances, litigation can sometimes lead to mitigation, and it is best to partner early on with an organization that is experienced and able to litigate on your behalf. This can cost money, but oftentimes firms work at a reduced rate or pro-bono, depending on the circumstances. Mitigation funds can be given to urban agriculture organizations in the form of endowments or other contributions as described below.

ALTERNATIVE FORMS OF MITIGATION: URBAN AGRICULTURE

The development of the logistics sector in the IER has been regarded having "significant and unavoidable" impacts. We must bolster and ensure creative alternatives for a resilient IER agriculture industry. Although envisioning these solutions can be difficult, there are a variety of possibilities within the urban agriculture movement to establish realistic and sustainable measures that grow alongside and in response to unsustainable industries.

An essential step before the development of any urban agriculture project is the assurance of community impact and participation. Without a robust and involved group of stakeholders, creative projects are fruitless; they lack the meaning and support to provide long term use for mitigation. Well organized alternative forms of mitigation have the potential to provide employment opportunities, new revenue streams, and community involvement. The following list provides examples of alternative agricultural practices and models that have potential as possible mitigation measures in the IER.

HUERTA DEL VALLE

Huerta del Valle is a grassroots, non-profit organization building a network of urban farms and community gardens throughout the Inland Empire Region of Southern California. In doing so they aim to create an accessible and equitable food system and provide healthy, organic produce for everyone in the Inland Valley region.

Their model provides tangible means to support the development of a food system in which residents of the IER are able to access affordable food that is of high quality and sustainably grown. Efforts such as these are prime examples of replicable means of food production and economic and environmental justice. In establishing a garden or farm for every square mile of residential space, food systems become mechanisms through which ordinary people can learn about problems related to food access, nutrition, and sustainability while actively practicing their solutions and growing their own food.

GrowRIVERSIDE:

GrowRIVERSIDE is a community initiative that interests multiple stakeholders in food and agricultural efforts across the Southern California Inland Empire Region. They are organized to equip community groups with tools and knowledge for stronger local food systems that generate opportunities for community and economic development. Through food waste programs and farmer training programs, they help to further and maintain agricultural land preservation efforts. In addition to their community involvement measures that are also dedicated to advancing agricultural policy throughout the Inland Empire Region, as evidenced by their Food Policy Action Plan. Efforts like these lay the groundwork for novel and resilient food systems readied for climate change and future industrial growth.

UNCOMMON GOOD COMMUNITY FARMING:

The non-profit organization Uncommon Good has developed a model under the name Community Alliance for Urban Sustainable Agriculture, in which food is collected from urban farm plots around Claremont, Pomona, and Ontario. The food is grown at public schools, places of worship, sister organizations, and private homes and is then distributed to the local community, supplying community members with high-quality fruits and vegetables that they wouldn't otherwise be able to afford. This model is especially exciting in that it provides an avenue for homeowners to put their unused produce to use. While this program may be challenging to start or facilitate, it provides a model for the inclusion of households in urban food systems. If agricultural lands are being lost due to an increase in development, communities and individual households can take initiative to create shared networks of growing food that utilize their own urban spaces, likely their backyards.



AGRICULTURE LOTS AND HYDROPONICS:

Vacant plots of land provide opportunities to redistribute and revitalize land according to community need. Any area which has yet to undergo or is left derelict from development is an opportunity to establish food growing locations. The EPA offers grants to groups making efforts to clean up “brown fields,” property previously marred by the presence of hazardous substances, pollutants, or contaminants. A number of communities have successfully used these grants to establish urban agriculture projects, building food systems that provide sustainable means to feed local communities.

Additionally, empty parking lots and warehouses provide opportunities for growing without soil through hydroponics. Despite valid criticism for high start-up costs and lack of natural nutrients given the absence of soil, hydroponics provides a viable form of alternative land use in areas that cannot be quickly remediated. Hydroponics have been shown to yield produce in higher volumes and greater size. Thus, alternatives such as these are ideal options by which polluted or paved spaces can be turned into growing areas.

GREEN ROOFING:

Green roofs are an alternative when no ground space exists in the form of vacant lots, for example, as they work atop existing infrastructure. Case studies throughout the U.S. demonstrate that they provide an effective way to increase green space within an urban environment and can even help to mitigate issues of food scarcity and obesity within surrounding communities. Planting rooftop vegetable gardens, for example, increase the supply of healthy food and encourages community members to become more involved with the source of what they eat, which has been shown to decrease obesity in urban areas. Furthermore, projects like these encourage community engagement by incorporating local ideas. One community garden in South Side, Chicago, located atop the Gary Comer Youth Center, is a good case study to examine in looking to replicate this program in the Inland Empire. The rooftop farm covers $\frac{1}{3}$ acres and produces up to 1,000 pounds of produce, including potatoes, sweet potatoes, veggies, herbs, and flowers, which are distributed at a youth-led farmers’ market and through an entrepreneurial project. In San Bernardino County, 42.6% of students were considered overweight or obese in 2019, compared with 39.7% statewide and up from 41.1% in the county in 2018. Given the success of many existing community garden programs located strategically on roofs and lots, it is evident that Inland Empire communities could reap their benefits, especially for younger generations. However, it is important to note that in order for green roofs to be net beneficial, their positive effects must exceed losses from construction, irrigation, resource management, and maintenance labor. That said, green roofs should be seen as a last-resort solution for lost agricultural land, only to be used in extreme cases when no open space exists on the ground.

EDIBLE LANDSCAPES:

Food-producing wall mounts, called “edible landscapes” by the LA Initiative Urban Farming Food Chain Project, offer a similar creative solution. These wall systems, typically made of aluminum or stainless-steel panels, are designed to grow fruits, vegetables, and herbs vertically and have been used in downtown LA to help feed low-income and homeless people. New policies adopted in the Inland Empire could require the planting of green roofs and edible landscapes on new and existing buildings as an alternative to strict preservation. Mitigation strategies like these also provide opportunities for partnerships with local organizations; collaboration with groups like Huerta del Valle could involve affiliated farmers in planting green roofs and edible landscapes.

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