

GREENER FIELDS

California Communities Combating Climate Change



September 2018



American Farmland Trust (AFT) is the largest national organization dedicated to saving the land that sustains us by protecting farmland, promoting sound farming practices and keeping farmers on the land.

AFT unites farmers and environmentalists in developing practical solutions that protect farmland and the environment. We work from "kitchen tables to Congress"—tailoring solutions that are effective for farmers and communities and can be magnified to have greater impact. Since our founding, AFT has helped to protect more than six and a half million acres of farmland and led the way for the adoption of conservation practices on millions more.

Through our *Farmers Combat Climate Change* initiative, we aim to protect the most productive, resilient U.S. farmland and improve its soil to benefit farmers, consumers, and the environment. The initiative employs three strategies: reduce the conversion of agricultural land to development and promote smart growth; increase the use of climate-smart conservation cropping systems; and build support for policies that help agriculture mitigate and adapt to a changing climate.



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The continued growth of California's population and associated impacts of climate change pose complex challenges to communities across

the state. Climate change alters both average and extreme temperatures and precipitation patterns, which in turn influence crop yields, pest and weed ranges and introduction, and the length of the growing season. Extreme events, such as heat waves, floods, and droughts, may be among the most challenging impacts of climate change for agriculture since they can lead to large losses in crop yields and livestock productivity. As a result, farmers, ranchers, and citizens are becoming increasingly concerned about the future of food and where it will be grown.

Over the past three decades, more than one million acres of California farmland have been removed from agriculture, representing a devastating loss in agricultural capacity. Half of this loss is taking place on the state's most productive farmland, which is often located at the urban edge where it is most vulnerable to the effects of urban sprawl. If current development trends continue, another 1.4 million acres will be lost by mid-century. Increased development encroachment on farmland has accelerated the loss of soils and crops that play a vital role in mitigating climate change, producing a diverse bounty of food, and supporting our most vulnerable communities.

Urban expansion, especially low-density development, results in the irreplaceable loss of far more farmland than necessary. Average emissions from urban areas are 58–70 times higher (per acre) than those from crop production in California. Related to this, low-density development produces more greenhouse gases (GHG) per capita than efficient high-density development.

Not all remaining farmland is ideal for agriculture however. Stress on water supplies, unsustainable management practices, and unforeseen temperature and climate changes deplete the availability of high-quality farmland in California. Therefore, protecting the best farmland that's left—the most productive, versatile, and resilient—is paramount.

An acre of farmland in California produces



58–70 TIMES fewer greenhouse gases



than an acre of urban land. Without action to preserve farmland and improve soil productivity, the toll on California's 12 million acres of farmland will be irreversible, potentially crippling its ability to combat climate change.

A Direction for the Future

Keeping land in farming and managing it with good stewardship practices offers a viable and encouraging solution to climate change. With California's population projected to grow to 50 million people by 2050, the land base—including natural, working, and developed areas is a foundational element of the state's strategy to meet GHG reduction targets. The state has made a strong commitment to fighting climate change by establishing a goal of reducing statewide GHG emissions by 80% by 2050. AFT projects that cutting farmland loss by 75% by 2050, or by 700,000 acres, would reduce our GHG emissions the equivalent of taking 1.9 million cars off the road each year.

Protecting farmland while growing cities in a compact manner would save 33 tons of GHG (per acre per year) when compared to sprawl development. This type of efficient development stabilizes and reduces future emissions while still allowing the state economy to expand.

Preserving land is only the first step; we need to also ensure that it remains productive and resilient into the future. Climate-smart agriculture includes a variety of practices that foster carbon sequestration in our soils and increased efficiency of on-farm water and energy use. Statewide programs that provide training and financial incentives to farmers to adopt these practices represent actionable strategies for promotion of good stewardship.

Agriculture is fundamental to our future. To ensure our farmland is protected and our farmers thrive, greater awareness and action is necessary on each of our parts. By aligning agricultural land conservation with climate-smart management practices and elevating our collective voices in support, communities can reach the state's goals for climate change while securing the future of our food.

If the annual loss of farmland to urban development in California

was reduced by **75%** by 2050...



...that could reduce greenhouse gas emissions equivalent to removing

1.9 million cars from the road annually.

Ways to Combat Climate Change by Preserving Agriculture in California

By protecting farmland and ensuring that it's sustainably managed, we are not only acting on behalf of agriculture but also our food, economy, and environment. Each of us can contribute to this work by increasing awareness and action in our communities. We invite you to share the following educational visual assets and also reference our programs and policies guide for GHG reductions in the agricultural sector. All of these resources are available at **farmland.org/cagreenerfields**.

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How You Can Help Farmers

- Buy locally and sustainably grown food direct from farmers and ask your retail stores to carry more of it.
- Learn about your farmer's agricultural practices, understand their challenges, and express your personal commitment to farmland protection.
- Get involved with local land trusts that are supporting family farms in permanently protecting the most valuable and resilient land.

How You Can Help Local Planners and Officials

- Express your support for establishing local agricultural land conservation targets as a part of the community planning process.
- Encourage planners to explore Sustainable Agricultural Land Conservation (SALC) Program grant opportunities for developing plans around farmland protection.
- Ask local officials to invest in and plan for smart growth, healthy communities, and farmland preservation during community planning processes.

How You Can Help State Legislators and Agencies

- Advocate for establishing a statewide agricultural land conservation goal of reducing farmland conversion by 50% by 2030 and 75% by 2050.
- Support state funding for the Healthy Soils Incentives Program and other state-funded programs that provide financial incentives for farmers to adopt climate-smart practices and infrastructure.
 - Urge the state to require that local land use planning agencies more fully integrate farmland conservation in their general plans.

How You Can Help Your Community

- Encourage friends and family to contact their legislators about funding and initiatives that protect farmland and help farmers manage the land sustainably.
- Ask your neighbors to attend local planning meetings and show support for prioritizing compact development over urban sprawl.
- Teach young people about where their food comes from and why it's important to have local farms.
- Introduce your community to the work of American Farmland Trust so they can stay informed and involved in protecting the future of agriculture.



No Farms No Food



Join American Farmland Trust in saving the land that sustains us.

farmland.org/cagreenerfields



