California is one of the most diverse places in the world, but in one way we're exactly the same:

We all need water.

Clean, reliable, sufficient.

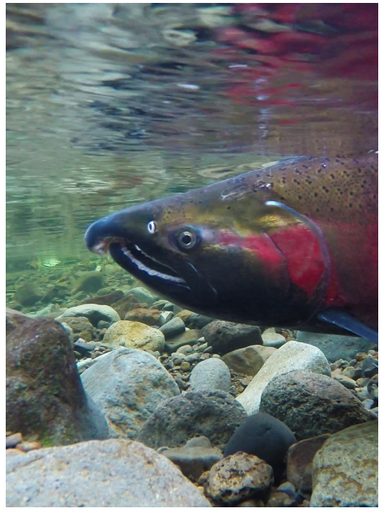
Can future Californians count on it?

The answer is up to us.

Sustainable Conservation

The crisis we're facing isn't about the price of strawberries or whether we'll be able to water our lawns. It's about grave threats to our water security that imperil Golden State communities, food production, and wildlife alike:

- A million Californians do not have access to clean drinking water.
- California's ability to feed the nation is at risk due to dangerously over-pumped aquifers in our premier food-growing regions.
- Disconnection of Golden State rivers and streams from their natural floodplains sends precious water out to sea instead of allowing it to help replenish our depleted aquifers and provide habitat.
- California fish and wildlife are struggling to survive due to degraded habitat, including denuded river banks and thousands of barriers to fish passage.
- Extreme swings between prolonged droughts and more intense storms are the new normal – increasing uncertainty about water supplies and the likelihood of catastrophic flood damage to homes and businesses.



California: ecological marvel, horn of plenty, land of innovation.

Because our Golden State hosts and offers so much, our environmental leadership at home matters to the rest of the country.

- World's fifth-largest economy.
- Most populous state in the U.S.

- Grow 2/3 of U.S. fruit and nuts.
- Grow 1/3 of U.S. vegetables.
- Produce nearly 20% of the country's milk.

- Home to one of the world's richest varieties of geography, climates, and flora and fauna.
- At least 1/3 of California's native plants are found nowhere else on Earth.

Forging new ways to conserve and protect our most essential resource is a significant challenge – but not an impossible one.

The good news: Sustainable Conservation brings abundant solutions to the urgent issue of water security. Our actions now will not only impact Californians for generations, but the environment, economy, and food security beyond our state's borders.

Please join us.
Because everything depends on it.

WHY SUSTAINABLE CONSERVATION

This state of ours is like nowhere else. Our coastline, deserts, forests, and farms nourish and inspire the nearly 40 million people who call the Golden State home. Our home.

This is why Sustainable Conservation focuses on California. While larger groups' Golden State programs compete with global efforts, and smaller groups focus strictly on regional issues, Sustainable Conservation is truly California's conservation organization.

Whether your family has been a part of California's history for generations, or you're just discovering the abundance and beauty of the Golden State, our environmental solutions are built for, and with, you. Your donation fuels our work to address mounting water challenges in a part of the U.S. that routinely sets the national standard for new ways of doing things.

Here's how Sustainable Conservation stands out from the pack, and why we're up to the formidable task of meeting the water needs of our state's environment and people, now and into the future:

We facilitate a transformative process between unlikely partners.

For over 25 years, Sustainable Conservation has been solving California's water issues with collaborative strategies that make economic sense. Our unique approach unifies people who have seemingly incompatible agendas – environmental, business, community health – and finds the common ground that benefits everyone.

We forge environmental solutions in areas of California where the stakes are highest for getting it right.

Our partnerships with Golden State farmers help replenish and protect water supplies in regions that suffer the most from depleted, contaminated aquifers – ensuring clean drinking water for local communities and thriving food production for us all. We also make it easier for Californians to restore habitat in parts of the state where fish and wildlife need our help to survive.

Our collaborations amplify our impact.

We partner in fields and forests with farmers and landowners, in the lab with scientists and researchers, in the boardroom with trade groups and fellow conservation organizations, and in the halls of the Capitol with California legislators. The trust we have won within and across multiple sectors leads to environmental solutions that are primed for uptake.

Each strategy we pursue provides multiple benefits for all three of our concerns: environment, communities, economy.

Business calls it synergy. Biologists call it symbiosis. We call it the smartest, most efficient way to achieve the greatest possible results.

We embrace science to catalyze mutual understanding and collective momentum.

From studies that compel us to embark on a new project, to field monitoring that tracks how well our solutions are working, science guides us every day. Science shines a light on common ground; when members of the diverse coalitions we lead review data together, our shared path forward comes swiftly into focus.

We've been at this a long time.

We've been in the business of "sustainable conservation" for nearly three decades; as a result, our approach is finely tuned to make a big difference.

"Sustainable Conservation has emerged as the one statewide actor with the agility, values, skills, and experience to build coalitions and turn what could be warring factions into cauldrons of creativity. Outcome is what matters, and politics take a back seat to clean, abundant water."

— **Peter Kareiva, Director, UCLA Institute of the Environment and Sustainability**

HOW WE DO IT AND WHY IT MATTERS

RESILIENCE STRATEGY: Protect coastal aquifers from seawater and fertilizer pollution

In many coastal areas, groundwater is the primary source of hydration for people and crops – but those underground stores have been taxed by years of over-pumping. Depleted aquifers create a vacuum, drawing in seawater that taints these precious stores. In addition, when fertilizer isn't measured to accurately meet crop needs, the excess can pass down through farm fields to pollute groundwater below.

If these trends continue, we face irreversible damage to California's water "savings account."

In partnership with a multinational berry company and Central Coast conservation groups, Sustainable Conservation developed a solution that helps farmers calibrate just the right amounts of water and nutrients needed for healthy crops. It's a "crop-per-drop" strategy that minimizes nitrate contamination and maximizes aquifer levels.

Technology can help: in-field sensors tied to smart phone alerts tailor water and fertilizer for specific plants and conditions. Similar to how a personal fitness tracker sends you activity prompts throughout the day, on-farm digital intelligence can notify farmers to turn off irrigation water when seedlings are satiated.

Growers embrace the cost- and water-saving benefits, and we support them by providing tools and incentives that make stewardship simpler.

With your help, we're working toward the following wins:

- Aquifers are protected from seawater and fertilizer pollution.
- Clean drinking water is consistently available to all.
- Farmers continue to produce iconic California crops like berries and salad greens, and simultaneously reduce costs by using just the right amounts of water and fertilizer.

RESULTS TO DATE

Growers who have adopted Sustainable Conservation's "just right" protocols for tending their fields have seen great savings. Our 2017 field results from nearly 300 strawberry acres averaged a remarkable **94% for water-use efficiency** – down from the original baseline of 136%. 100% is the optimal ratio for efficiency – meaning plants are getting exactly what they need – and crop yields on these demonstration sites have remained healthy with even less.

"At Driscoll's, we ask our growers to provide delicious berries while also being water-smart. We're proud to partner with Sustainable Conservation to expand water-saving practices among Central Coast farmers. Sustainable Conservation understands just how much California's farms and communities need clean, reliable water to flourish. I value our shared commitment to solving water challenges through innovation, collaboration, and education."

— J. Miles Reiter, Chairman, Driscoll's

HOW WE DO IT AND WHY IT MATTERS

RESILIENCE STRATEGY: Secure a reliable water supply for drought years

Our changing climate threatens California's water security in two ways: through prolonged droughts and major floods. Sustainable Conservation is solving for both, expanding practices that replenish aquifers in wet years to provide a more reliable water supply in dry ones.

Our technique of choice: groundwater recharge. Guided by the software tool we developed and field-tested with water agencies in the heart of the San Joaquin Valley, farmers capture excess water during storms and allow it to spread across their land. Water – that would otherwise be flushed out to the ocean – percolates down, replenishing the basin below while still supporting abundant crop quality.

This technique could replenish a third of the annual overdraft in California's main agricultural region, making it a game-changing addition to our state's water toolkit. Sustainable Conservation is supporting the farming community in scaling up recharge in the San Joaquin Valley. We will also use our expertise to encourage the expansion of the practice along the Central Coast, where it will help allay saltwater intrusion.

Working on water resilience in agricultural areas of the state means we're achieving benefits for all: reliable drinking water for rural communities, irrigation water for farming that feeds the nation, flood protection for downstream towns, and healthy waterways that support fish and wildlife.

With your help, we're working toward the following wins:

- Water captured during wet years to replenish aquifers helps reverse years of over-pumping.
- Aquifers are protected from seawater and fertilizer pollution.
- Clean drinking water is consistently available to all.
- Downstream communities are protected from flooding.
- U.S. food security and California's agricultural economy are safeguarded.
- Roads and canals avoid further damage from land sinking due to depleted aquifers.

RESULTS TO DATE

- While an "acre-foot" may sound like a reason to visit the podiatrist, it's actually enough water to supply up to two California households for one year. Our 2017 demonstration fields **recharged over 7,000 acre-feet of groundwater – or enough water to supply up to 14,000 families for 12 months**.
- In 2017, we installed equipment on seven farm sites to measure how quickly water infiltrated the soil and assess whether or not the extra water posed any risks to crops. This ongoing data collection will refine the guidance we provide to additional farmers and water managers.
- Our first-of-its-kind software tool – the **Groundwater Recharge Assessment Tool (GRAT™)**, developed in partnership with the Earth Genome – helps water districts and managers maximize groundwater recharge in regions suffering the most from depleted aquifers.

"California faces major obstacles when it comes to our water future. Fortunately, Sustainable Conservation is helping meet those challenges head-on through creative thinking and sophisticated resources. They are assisting water agencies, like Madera Irrigation District, to develop tools so farming and communities alike can thrive."

— **Dina Cadenazzi Nolan, PE, Assistant General Manager, Madera Irrigation District**

WANT TO DIVE DEEPER? ASK US!

TRACK RECORD

Thanks to our amazing donors, we've celebrated the following successes:

Copper-free brakes benefit clean water, fish

A 14-year collaborative effort led by Sustainable Conservation scored one of the major environmental triumphs of 2010 when then-Governor Schwarzenegger signed into law Senate Bill 346. The bill phases out copper in automobile brake pads, the primary source of a potent toxin in urban waterways.

We convened environmental organizations, storm water agencies, and the vehicle and brake manufacturing industries to study the science and agree on a practical way to stop this pollutant at the source. Drivers still have safe, reliable brakes, cities save billions of dollars in potential environmental cleanup costs, and salmon have cleaner water in which to thrive.

Because California represents 12% of the global brake market, manufacturers adopted common formulations for North America. As a result, Sustainable Conservation's law means copper-free brakes for the entire continent.

Habitat restoration gets boost from new law

Enacted in 2015, the Sustainable Conservation-sponsored Habitat Restoration and Enhancement Act simplifies the California Department of Fish and Wildlife's permitting process – thereby expediting habitat restoration projects on public and private lands to improve water quality and help imperiled wildlife statewide.

In addition, voluntary habitat restoration has sped up significantly along the entire 1,000-mile California coastline thanks to two major Sustainable Conservation-backed California Coastal Commission rulings.

To date, more than 180 projects have gained approval using these processes. That's great news for struggling fish populations, including the highly endangered Southern California steelhead.

America's largest plant retailers help Californians PlantRight

Between 2014-2015, the Sustainable Conservation-led PlantRight campaign welcomed The Home Depot and Lowe's as "big box" teammates committed to promoting safe, non-invasive plants. This includes more than 200 locations of The Home Depot in our state. Using PlantRight's invasive plant list as a guide, California stores for both companies continue to phase out problem plants from their product mixes.

"We're very happy with how Sustainable Conservation leverages our donations to get things done. By working with businesses like brake pad manufacturers, dairies, nut growers, and nurseries to help them reduce their impacts on the environment, and passing legislation that protects water and wildlife, Sustainable Conservation leads the way in building resilience for California."

— **Sudhanshu and Lori Jain, Donors**

More milestones at:
suscon.org/about-us

HOW WE DO IT AND WHY IT MATTERS

RESILIENCE STRATEGY: Accelerate habitat restoration to save imperiled fish and wildlife, and protect water quality

California's waterways and wildlife are in urgent need of our attention. Native fish and birds rely on rivers and streams, but many have been polluted and stripped of neighboring forests that provide shade and shelter. As a result, hundreds of our Golden State's iconic species are on the path to extinction.

The good news? There's a great deal that can be done to reverse the harm, while also supporting economic endeavors on working landscapes.

Landowners – including state parks and land trusts – often want to restore the quality of wild places on their properties, but regulatory approval is an onerous, expensive, and often deal-breaking process.

Sustainable Conservation partners with government, land managers, and others to simplify permitting while upholding strict, protective standards for the environment.

Our strategy saves significant time, and more money goes to improving habitat rather than pursuing a protracted approval process. In fact, simplified permits can save restoration projects up to 50% of the time it normally takes to get approved.

It's a win for the land, our waterways – and the people, fish, and wildlife who depend on them.

With your help, we're working toward the following wins:

- Imperiled fish and wildlife are given the habitat needed to recover and thrive.
- Floodplains are reconnected to rivers as they once were, restoring health to watersheds, replenishing aquifers, and protecting homes and businesses from water damage.
- Funds go directly to restoration, instead of a prolonged approval process.

RESULTS TO DATE

- Through 2017, there have been **more than 180 approvals for restoration projects** using our statewide simplified permits.
- Looking ahead, simplified permitting tools could **save up to $125 million over 10 years**.

WANT TO DIVE DEEPER? ASK US!

"Partnerships are essential for solving complex resource issues while balancing the needs of wild fish and people. Sustainable Conservation is an integral part of the process to accelerate and streamline permitting for habitat restoration. This supports CalTrout's success in promoting wild trout and healthy watersheds throughout California."

— **Curtis Knight, Executive Director, CalTrout**

HOW WE DO IT AND WHY IT MATTERS

RESILIENCE STRATEGY: Transform dairy waste from contaminant to valuable resource

California leads the nation in milk production. That output brings us fortifying cheese and yogurt, 50,000 Golden State jobs – and a mountain of manure.

If California is home to 1.8 million cows and each animal produces around 120 pounds of waste per day… well, you can do the math. That's a whole lot of poop that dairies need to manage in order to prevent groundwater pollution and offset harmful methane emissions (cows are the single largest source of this potent greenhouse gas in California). On the flip side, manure is a free and naturally available source of nutrients that nourishes crops while saving money on synthetic fertilizers.

To date, farmers' options for harnessing manure's benefits have unfortunately been limited. Our efforts are changing that. Sustainable Conservation partners with dairies to field-test new technologies that transform the polluting effects of untreated manure into on-farm fertilizer.

For instance, a system we've pioneered with our partners allows for precision delivery of manure and water to crops through a drip irrigation system – cutting costs and helping to keep nitrates out of groundwater. We're also educating state lawmakers about the potential of composting manure to reduce farming's water and climate impacts. Solving these environmental challenges in California can help keep dairies, and the jobs they create, on Golden State soil.

With your help, we're working toward the following wins:

- Clean drinking water is consistently available to all.
- Greenhouse gas emissions, including methane and nitrous oxide, are reduced – and not just moved to another state.
- Crop yields and soil health thrive thanks to a resource from right on the farm.
- Dairy producers stay in business, and in California.

RESULTS TO DATE

Promising returns from our pilot project: **growing 15% more crop with 50% less water and a 95% increase in nitrogen-use efficiency** (that is, more crop per pound of nitrogen).

"Sustainable Conservation is uniquely positioned to support environmental innovation within the dairy industry. They understand dairy operations and conservation challenges equally, and have pioneered solutions ahead of their time – like greenhouse gas-reducing digesters, that are now gaining ground, and an ingenious irrigation system that improves crop yields while addressing water quality and supply issues."

— **Karen Ross, Secretary, California Department of Food and Agriculture**

PROGRESS AND POSSIBILITIES

We've made great strides, but there's a whole lot more we need to do to ensure that an enduring, healthy California is within reach. Here are a few examples:

2017 was a California rain year for the record books. Thanks in part to Sustainable Conservation's efforts, the San Joaquin Valley recharged 6.5 million acre-feet of water. (1 acre-foot = enough water to supply 1-2 California households for 1 year.) How much more water could our Golden State save underground?

Up to twice as much.

You can help California do this.

How much money could Sustainable Conservation's simplified permitting tools save Californians undertaking projects to restore habitat and protect water quality?

$125 million over 10 years.

Your gift can help reap impressive results.

How much water could Sustainable Conservation's pioneering irrigation technology save California dairy farmers every year?

Enough water to fill 46,000 Olympic-size swimming pools. That's if our system is adopted on just 25% of Golden State dairy acreage that grows corn to feed cows.

With your support, we can achieve this.

The future of water IS the future of California.

The time is now.

Dive in with us.

suscon.org/donate

"Sustainable Conservation's power isn't just in bringing very different stakeholders – like industry, government, and landowners – to the table. It's keeping them there until problems are fixed for good."

– **Kim Delfino, California Program Director, Defenders of Wildlife**

info@suscon.org

SAN FRANCISCO: 415-977-0380

MODESTO: 209-576-7729

Ashley Boren, Executive Director

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