



Recycle it **Right**



After you've quenched your thirst, find out how
to make sure your beverage containers get
recycled the *right* way



Recycling is Fundamental for our Future

WHY CALIFORNIA STARTED RECYCLING AND WHY IT'S MORE IMPORTANT THAN EVER FOR OUR STATE'S SUCCESS

In 1986, California decided to do something about a problem it could no longer ignore: litter. Legislators passed, and the governor signed, the Beverage Container Recycling and Litter Reduction Act (AB 2020) as a mechanism to discourage litter and encourage recycling. The act created the California Redemption Value (CRV) to incentivize people to recycle beverage containers. The original redemption value of a container was set at one cent.

"Protecting the environment is of value to every Californian," said Lance Klug, Public Information Officer for CalRecycle, which administers and provides oversight for all of California's state managed non-hazardous waste handling and recycling programs. "The bigger picture is what kind of world do we want to leave the next generation?"

Californians have made great strides in beverage container recycling since the program's inception. In 1987, California had a 52 percent recycling rate for beverage containers. By 2016, the rate was 80 percent for all materials — which includes a 91 percent rate for aluminum containers, 72 percent for glass and 76 percent for PET plastic bottles.

All of California's recycling success is tempered by a current reality.

"Recycling is not as profitable as it used to be," said Steve Rodowick, Butte County Recycling Coordinator.

Globally, there is less demand for recyclables, which drives down the value of these commodities — even more so when virgin materials are so inexpensive. Since California's Beverage Container Recycling Program produces a cleaner stream of materials, markets still exist for the vast majority of those materials.

However, global market dynamics are creating additional challenges for California recyclers. In 2018, China began placing restrictions on imports of U.S. recyclables and turning away other shipments, leading recyclers with no place to sell their materials. Some have turned to putting these materials in landfills instead, which comes with a cost.

"The long range effect is that [local governments] will probably pay more for waste agreements," Rodowick said.

While keeping streets clean may have been the initial goal, the conservation of resources has become the primary reason for recycling.

Producing new plastic bottles and aluminum cans uses tremendous energy. For example, the U.S. aluminum industry directly consumes 1.2 percent of all the electricity consumed by the residential, commercial, and industrial sectors of the U.S. economy. This is equivalent to the electricity consumed by more than 5 million U.S. households annually. In contrast, recycling aluminum uses 94 percent less energy, according to the U.S. Energy Information Administration.

Recycling cans and plastic bottles can help save the environment and they can be saved for cash — CRV is now up to 5 cents per container, or 10 cents for containers 24 ounces or larger.

California currently recycles about 44 percent of all of its non-hazardous waste, a figure CalRecycle would like to increase to 75 percent by the year 2020. Why? One factor is landfills — they are expensive to operate and space inside them is limited.

"The Neal Road landfill will be our last landfill," Rodowick explained. "We need to make it last by keeping recyclables out of it."

"Protecting the environment is of value to every Californian."

LANCE KLUG
Public Information Officer, CalRecycle

RECYCLING BY THE NUMBERS

Since 1986, more than **300 billion** aluminum, glass, plastic, and bi-metal containers have been returned for recycling through the CRV program.



The CRV is **5 cents** for bottles and cans less than 24 ounces and **10 cents** for larger ones.

How many years does it take to decompose?



Aluminum can:
80-200 years



Glass bottle:
1 million years



Plastic bottle (in the ocean):
450 years

SOURCE: NOAA



In Butte County, more than half of the area's waste is kept out of the landfill.

Redeeming Work

RECYCLING GENERATES JOBS IN BUTTE COUNTY AND A SOURCE OF INCOME FOR DISADVANTAGED INDIVIDUALS

BY MATT JOCKS

Aluminum, glass and plastic aren't the most valuable resources that are dealt with at Fair Street Recycling in Chico. It's the employees and customers.

Whether it's the crew of line workers, most of whom have disabilities, the team leaders who oversee them or the collectors who bring in cans and bottles to get money to feed themselves, it is a business about people as well as things.

"I started here in 2013 and, to be honest, it started as just me having a gig," said team leader Milo Jennings. "It started out as just another job. But now, I don't see myself going anywhere else."

The recycling business has become a vital part of the economy in California, with more than 100,000 jobs.

Fair Street has taken that a step further.

Manager Jerry Morano has made Fair Street a training center for those with developmental and physical disabilities.

"Knowing I'm making a difference is as important to me as the recycling part," Morano said. "Finding not just employment, but worthy employment, is a really important thing. For that, I think I've hit the jackpot."

Morano and the team leaders work closely with the workers, who are referred from the Far Northern Regional Center.

"A lot of these people have always been told what they can't do. That they're not good enough," Morano said. "This gives them a different opinion about themselves — that they can learn skills, that they are trustworthy."

Added Jennings: "This has definitely opened my eyes to a few different things — seeing people differently."

The refunds Fair Street hands out in the form of CRV has an economic benefit to another group: the collectors. The regulars, about 20 or so, are familiar faces who come in nearly every day. Many are economically disadvantaged.

"This is my food and living money," said Andy, one of the regulars, who is homeless. "There are good days and bad days. On the low end, it can be about \$10 for a day. I've gotten as much as \$50."

"Canners" generally stake out regular routes in the community. Andy has some members of the community who help save and gather bottles and cans for him to take to the recycling center.

"I tell everybody else who does this that they should come here [to Fair Street]," he said. "I just like the way they deal with people. They are nothing but professional and they treat people with respect."



"It started out as just another job. But now, I don't see myself going anywhere else."

MILO JENNINGS
Team Leader, Fair Street Recycling

ADDING VALUE TO THE ECONOMY

Recycling industry offers a wide variety of jobs:

- Truck drivers
- Mechanics
- Sorters
- Material recovery
- Managers,
- Route managers
- Sales representatives
- Machine technicians

115,000
people employed
in California¹

99,000
new jobs possible
by 2020²

Recycling generates more jobs than waste collection³

Disposal:
1.35 jobs
per 1,000 tons of
waste material

Recycling:
2.9 jobs
per 1,000 tons of
recycled material

SOURCES: 1 - California Employment Development Dept. 2, 3 - CalRecycle.

A Market in Flux

AS THE MARKET DEMANDS CLEANER RECYCLABLES, CENTERS HAVE HAD TO ADAPT

BY MATT JOCKS

These days, Jerry Morano, Manager of Fair Street Recycling in Chico, is happy to still be working in the recycling industry. However, the business is a lot leaner than it used to be.

Fair Street began primarily by recycling paper products. As recycling grew in the 1990s, plastics and aluminum began taking over.

"The whole market was booming. We were getting 95 cents a pound for aluminum and everyone was fat and happy," Morano said. "Then, the recession hits and we were getting 35 cents. Those were some dark days."

The numbers have rebounded somewhat, but only on some products. And other factors beyond supply and demand have complicated matters.

China, the major market for recyclables from the United States, has recently set much stricter standards for the cleanliness of materials it accepts. This has led to high rejection rates that have affected the American recycling industry.

"Operation Green Fence enforces regulations against contamination, because too much waste was being imported with it," said Kendra Kostelecky, Communications Specialist at Waste Management. "Food and liquid that has soaked into cardboard and paper can start to rot and possibly spoil the entire load. That's trash they can't recycle, and instead becomes a disposal problem."

Waste Management has reduced the percentage of cardboard headed to China from about 75 percent to less

than 5 percent, according to Waste Management CEO James Fish, whose company is now seeking alternative markets in places like Vietnam and India.

Meanwhile, the market forces have caused other changes visible to local residents. Parking lot recycling outlets, particularly in rural areas, have been disappearing.

Morano said the drop in prices and rise in the minimum wage put the squeeze on those centers.

"The price wouldn't cover the cost of transport," he said. "The volume we do here at Fair Street can cover the cost; at those centers, the volume doesn't."

Volume and having cleaner recyclables are keeping Fair Street in business.

"A bale we send is nothing but what I say it is," Morano said. "That's all they're getting. And that makes our stuff worth more."

As the markets for plastic and glass collapsed, Morano said Fair Street finds itself turning away items as small as clam shell salad containers or as large as plastic-laden e-waste, such as printers.

"A lot of customers will get upset that we don't take some things," he said. "But it comes down to, 'If I can't sell it, I can't take it.'"

**"If I can't
sell it, I can't
take it."**

JERRY MORANO
Manager, Fair Street Recycling



Jerry Morano, Manager of Fair Street Recycling in Chico, has seen ups and downs in the recycling market. Right now, markets overseas are demanding cleaner recyclables and refusing to purchase contaminated loads.
PHOTO BY DANIEL HORN

WHAT IS CONTAMINATION?

When something that doesn't belong in the recycling cart ends up there, it's called contamination.

Keep these items OUT of the recycling cart:



Liquids or food waste: When recyclables are dirty with liquid or food waste, they can contaminate entire loads of material, causing otherwise recyclable items to be sent to the landfill. *Examples: residual liquid in a soda can or cheese on a cardboard pizza box*



Mixed material items: Items that are made of multiple materials, like some drink cartons that are made from both paper and plastic, cannot be recycled because the components of the item cannot be easily separated for recycling. *Examples: juice boxes, aseptic (shelf-stable) cartons*



Nonrecyclable items: These items interfere with the processing of recycling because they contaminate the load and can wrap around components of processing machines. *Examples: Plastic bags, tarps and clothing*

1

**Say “No!”
to plastic
straws**

2

**Bring
Your
Own
Reusable**

— cups, to-go
containers, shopping
bags.

3

Rinse your aluminum
cans before you toss them.
Give them a quick rinse,
let them dry
and then they
are ready to
recycle.

4

Take caps off
bottles before you
toss them.



5

Spread the word

— instill good recycling
habits at home, work or
school.



6

Glass is a
recycling star, if it
is clean. The best
practice is to take
it to a recycling
center. Throwing
glass in your
home recycling
cart can result in
contamination and
glass unsuitable
for recycling into
another bottle.



9

**Purchase
items with the most
recyclable packaging.**

Recyclable plastics in Butte County
have recycling symbols #1 through
#7.



8

Buy in bulk

— you'll reduce
packaging waste and
save money.



7

Reuse.

Find another use
for your cans
and bottles:
flower vase, art
project, musical
instrument — be
creative!



Top 10

Ways to Recycle Responsibly

BY RODNEY OROSCO

5 REASONS TO RECYCLE

For Butte Colusa Recology General Manager Dan Shea, the benefits of smart, local, recycling are simple, they “meet our obligation to the planet.” Shea is optimistic that we will continue to meet that obligation. “California can innovate and take care of its recycling,” he said. “We have the will to do it.”

Some benefits of recycling:

1

Prevents **greenhouse
gas** by using less
energy

2

Saves **landfill** space

3

Conserves natural
resources

4

Creates **jobs** in
the recycling and
manufacturing
industries

5

Increases **economic
security** by tapping
a domestic source of
materials



**“We need to
have the will
to make things
recyclable.”**

HEIDI SANBORN
Executive Director, California Product
Stewardship Council



Imagine No Garbage

**CONSUMERS AND COMPANIES CAN DRIVE
CHANGES THAT REDUCE WASTE**

BY RODNEY OROSCO

Collecting beverage containers and recycling them is good, but for California Product Stewardship Council Executive Director Heidi Sanborn, it's only a start.

“It is encouraging that recycling is occurring,” she said, “but it is not enough.”

Sanborn is passionate about taking waste reduction to the next level: “We need to educate people that disposable is not an option.”

Disposable beverage containers may serve a purpose, but they are creating waste in landfills, especially as it becomes harder to find markets to recycle these items.

Sanborn pointed out there are a few immediate actions we can take to close the loop and make our world a more sustainable place.

First, she said we can encourage companies to develop a closed-loop system — make companies take responsibility for their packaging and insist manufacturers don't create single-use products (like plastic straws). We can use the market to encourage them, she said. “We can send a market signal that doing the right thing pays,” she said.

The next thing we can do to save our planet is to “create our own recycling infrastructure,” she said. That way, she explained, we will not be dependent on China to take our waste.

Lastly, Sanborn said closing the loop will take innovation. As an example, she mentioned one company that has made efforts to address a major problem: plastics in our oceans.

“We've got plastic inside of fish,” she said. “Whales are showing up dead on beaches and they are stuffed with plastic in their stomachs.”

Saltwater Brewery in Delray Beach, Florida, is taking a small but significant step to end the death-by-plastic scenario. The craft brewer is making six-pack rings made from barley and wheat remnants. If any of the biodegradable “beer-rings” make their way to the ocean, they can be safely eaten by fish.

Innovation can be less technological and more organizational, and it can be local (Sanborn touted Sierra Nevada Brewing Co. as a green business).

She said companies and consumers need only one thing to make our communities more sustainable: the will to do it.

“It is a will problem,” Sanborn said. “We need to have the will to make things recyclable. People want to do the right thing.”

And if our will fails us?

“We are going to have a planet with a lot less life on it,” she said.

KEEPING FRAUD OUT OF THE RECYCLING LOOP

Taking care of California's recycling industry is about more than collecting cans and paying out deposits — CalRecycle also ensures Californians are not victims of recycling fraud.

In December 2017, a CalRecycle investigation led to indictments that shut down a recycling fraud scheme costing the state more than \$80 million. The five people arrested allegedly collected California Redemption Value (CRV) refunds on out-of-state beverage containers and created fraudulent weight tickets to justify the payment from California.

“Recycling fraud is a serious crime and CalRecycle will continue to work alongside law enforcement to disrupt these schemes and protect public funds,” CalRecycle Director Scott Smithline said.

Other CalRecycle enforcement activities

- The agency created daily customer load limits at recycling centers to prevent out-of-state fraud: 100 pounds for aluminum and plastic, and 1,000 pounds for glass
- Recycling center operators are required to attend training, which includes fraud identification measures
- CalRecycle has 17 auditors dedicated to the beverage container recycling program
- CalRecycle works with the California Department of Justice and local law enforcement to provide training and awareness of fraud schemes

Glass has a **Bright** Recycling Future

WITH AN ENDLESS RECYCLING LIFE, GLASS IS WORTH SAVING

BY RODNEY OROSCO

Cheri Chastain likes a good beer. Specifically, she likes good beer out of a glass bottle, and she does not have to go far to find it—she has an entire warehouse of it down the hall from her office at Sierra Nevada Brewing Co.

But what she struggles to find is a good glass bottle in which to put that good beer.

Chastain, the Sustainability Manager at the Chico brewery, said many businesses that use glass struggle to use recycled glass.

“It is sad that most recycled glass is of such low quality,” she said.

Here’s why: Since most recycling is single-stream, meaning everything recyclable is chucked into a single bin, glass ends up too dirty to use, she explained.

“At the end of the sorting, you end up with a pile of broken, dirty glass,” Chastain said. Processors can clean it, but it still ends up suffering from lingering contamination. The result is glass not good enough to be made into bottles for her company’s beer. However, the glass does get recycled as fill for road base.

Some used glass bottles will be turned back into glass. California law requires all newly manufactured glass to contain 35 percent post-consumer recycled glass.

The glass picture gets even brighter once you take the bottles out of the blue bin.

“If people take the glass to a redemption center, you get much cleaner glass,” she said. Taken to a neighborhood recycling center, the glass will stay with other glass items — not mixed with pizza boxes and coffee grounds. Cleaner glass means higher quality glass, which means it can be made into a bottle that can then hold a nice Sierra Nevada summer lager.

Despite the law, and her desires, the truth is “it is an uphill battle changing the perception that glass has value,” she said.

For example, some larger cities like Houston and Atlanta have stopped offering curbside glass pick-up. Ending these programs “delivers a message to cities that glass has no value,” Chastain said.

However, Chastain noted, recycled glass is an energy saver compared to making new glass. And saving energy, she pointed out, equals saving the environment.



Cheri Chastain, Sustainability Manager at Sierra Nevada Brewing Co., recommends that consumers take glass bottles to redemption centers.
PHOTO BY DANIEL HORN

Thus, she is not giving up on glass.

“We have a recycling bin out back where employees can bring their bottles and then we take all that clean glass to be recycled,” she said.

And, if the glass is lucky, made into a beer bottle.

REUSABLE CONTAINERS ARE TRENDING

Every day, millions of recyclable aluminum cans and plastic bottles end up in the landfill. Even worse, some of these wayward recyclables make their way into the ocean.

Klean Kanteen is making it easy for consumers to change this scenario and to check two

boxes on their recycling to do list: Reduce and Re-use.

The Chico-based company’s wide variety of reusable water bottles makes it easy, and even fashionable, to keep garbage out of the environment.

“Klean Kanteen offers functional, stylish solutions to single-use products that allow consumers to easily make changes to their daily routine and cut down on disposable containers,” Klean Kanteen Communications Manager Ian McWilliams said. Recycling

is great. Moving away from a disposable culture is even better.

A reusable container, whether a stainless steel beauty from Klean Kanteen, or your favorite Star Wars Chewbacca travel mug from home, can go a very long way to reducing waste.





Recycling

WORKS



ButteCounty
CALIFORNIA

When you've finished quenching your thirst — do the right thing and recycle your beverage containers. It's easy: Put containers in your recycling cart and roll it to the curb. It is also profitable: Collect glass bottles and take them to the nearest recycling center, where CRV rates are now at 5 cents for containers under 24 ounces and 10 cents for containers 24 ounces or larger.

Recycling is about keeping resources out of landfills and, thus, keeping landfills open. Recycling is about the wise use of our resources. Making something from scratch is costly in resources, costly in energy and costly to the environment.

KEEP RECYCLES CLEAN BY

- ✓ Rinsing items
- ✓ Keeping non-recyclable items out of your cart
- ✓ Taking items to recycling centers

For more information visit:
www.RecycleButte.net

BUTTE COUNTY RECYCLING CENTERS

Chico Scrap Metal
878 E 20th St., Chico
530-343-7166

Chico Scrap Metal South
766 Oroville-Chico Hwy., Durham
530-343-7166

COVE Recycle Center
8279 Skyway, Paradise

Crown Metals
4801 Feather River Blvd. #18,
Oroville
1245 Oro Dam Blvd. Ste. 1,
Oroville
530-533-7718

Empire Steel Inc.
1508 Parker Ave., Oroville

Fair Street Recycling
2300 Fair St., Chico
530-343-8641

IRecycle
434 Plumas Ave., Oroville
530-552-9073

Nor-Cal Recyclers
1855 Kusel Road, Oroville
530-532-0262

Northern Recycling & Waste Services
920 American Way, Paradise
530-876-3340

Savior Earth Recycling
2680 S 5th Ave. Ste C, Oroville

Sparks Recycling
1364 Highway 99 Unit B, Gridley
530-870-3642