

County Prevention Coordinators

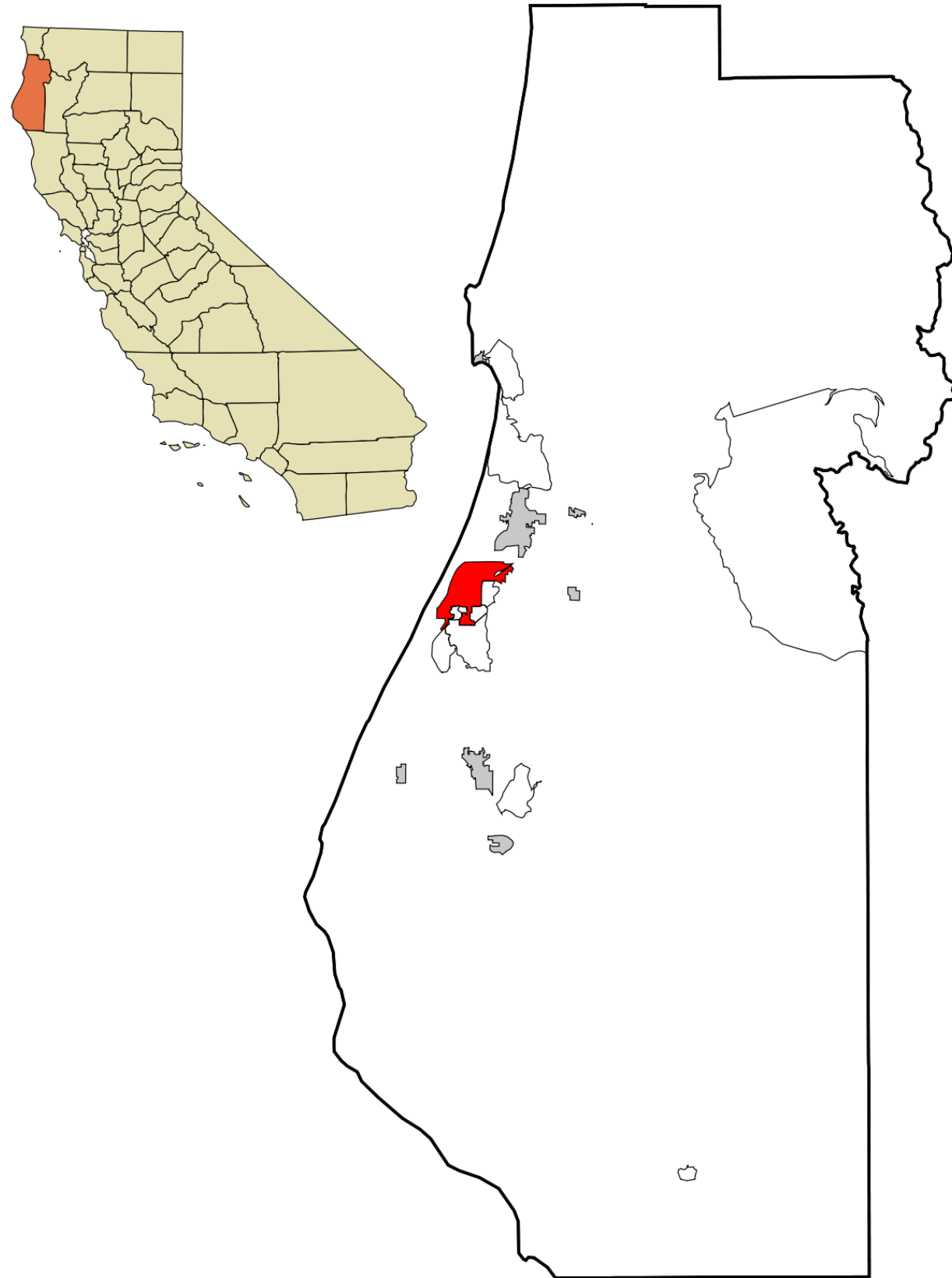
Humboldt County's Recreational Nitrous Oxide Ordinance Policy Work



January 2026



Humboldt County: Prevention in the Heart of the Redwoods



- Northwest corner of California
- Rural, frontier and micropolitan areas
- Heart of “The Emerald Triangle” of cannabis cultivation in California
- Rugged and remote system of redwoods, rivers, and coastline
- Transportation and technology can be an issue
- Access to health care and other services can be an issue
- Population: 132,380 (2024)
- Race and ethnicity (2024)
 - Non-Hispanic White (71.0%)
 - Hispanic or Latino (14.4%)
 - American Indian and Alaska Native (6.4%)
- Seven incorporated cities: “The Seven Cities”
- Eight federally recognized Tribes
- Largest population of Native Americans living in their ancestral homelands.

Recreational Nitrous Oxide Use in Humboldt

- According to the 2021-2023 California Healthy Kids Survey (CHKS) Humboldt County Secondary Report, 4% of Grade 7 and Grade 11 students reported that they have already used inhalants (California Department of Education, 2023).
- In the 2021, “Your Thoughts on Substance Use in Humboldt County” survey, young people and community members highlighted that nitrous oxide misuse and litter should be a priority area for our prevention work.
- In May 2024, a fatal pedestrian collision involving a driver under the influence of recreational nitrous oxide occurred in the City of Eureka, Humboldt’s county seat.



Photo courtesy of: Lost Coast Outpost; July 8, 2024

2024-2028 Nitrous Oxide Logic Model

Information Dissemination

Community presentations to
parents and general community

Create print resources for
community members, parents,
and policy makers

Health fairs and other
community-based tabling
events

Community- Based Process

Key Informant Interviews with
policy makers and key
stakeholders

Focus groups

Produce and publish
Recreational Nitrous Oxide
Retail Landscape Analysis
Summary Report
(also environmental)

Environmental

Comprehensive retail landscape
analysis throughout every
jurisdiction in Humboldt County

Present results of retail
landscape analysis to
policymakers, law enforcement
departments and other key
stakeholders

Work throughout Humboldt
County jurisdictions to support
work on Nitrous Oxide retail
ordinances

Nitrous Oxide (NO)

- Colorless gas
- Hard to detect
- Health care: sedation and pain relief
- Culinary industry: compressed gas to make whipped cream
- Recreational (illicit) use, inhaling NO to get “high”
 - Blocks NMDA receptors, involved in memory, learning and mood regulation (Journal of Molecular Sciences, 2022)
 - Causes feelings of (Alcohol and Drug Foundation, 2025)
 - Euphoria and giddiness
 - Sedation and numbness
 - Confusion and dizziness.



In Humboldt, it is possible for community members to purchase recreational nitrous oxide products in a residential neighborhood. This mini watermelon nitrous oxide canister was found in a local neighborhood.

Recreational NO Use: Short-Term Effects



The Substance Use Prevention program trains local youth in annual Photo Voice Projects. This project highlighted issues of alcohol and other drug litter, including nitrous oxide products, on the HCOE Court & Community campus in Eureka.

- Short-term effects may include (Alcohol and Drug Foundation, 2025)
 - Dizziness and light-headedness
 - Blurred vision
 - Sweating
 - Unusual tiredness or weakness
 - Fainting or loss of blood pressure
 - Heart attack (in extreme cases)
 - Potential for hypoxia (lack of oxygen).

Recreational NO Use: Long-Term Effects

- Long-term effects may include (Alcohol and Drug Foundation, 2025)
 - Memory loss
 - Vitamin B-12 depletion
 - Potential brain and nerve damage
 - Ringing or buzzing in the ears (tinnitus)
 - Incontinence
 - Numbness in hands or feet
 - Limb spasms; loss of muscle control
 - Weakened immune system
 - Disruption to reproductive systems
 - Potential birth defects, if used during pregnancy
 - Neurological damage
 - Peripheral neuropathy
 - Psychological dependence
 - Potential for psychosis.



Nitrous oxide “whippet” canister litter found at the mouth of the Van Duzen River near Alton.

Recreational NO Use: Paraphernalia Defined



Canister

- Small metal cartridges that contain compressed nitrous oxide gas
- Chargers, whippets or “Whip-Its”



Cracker:

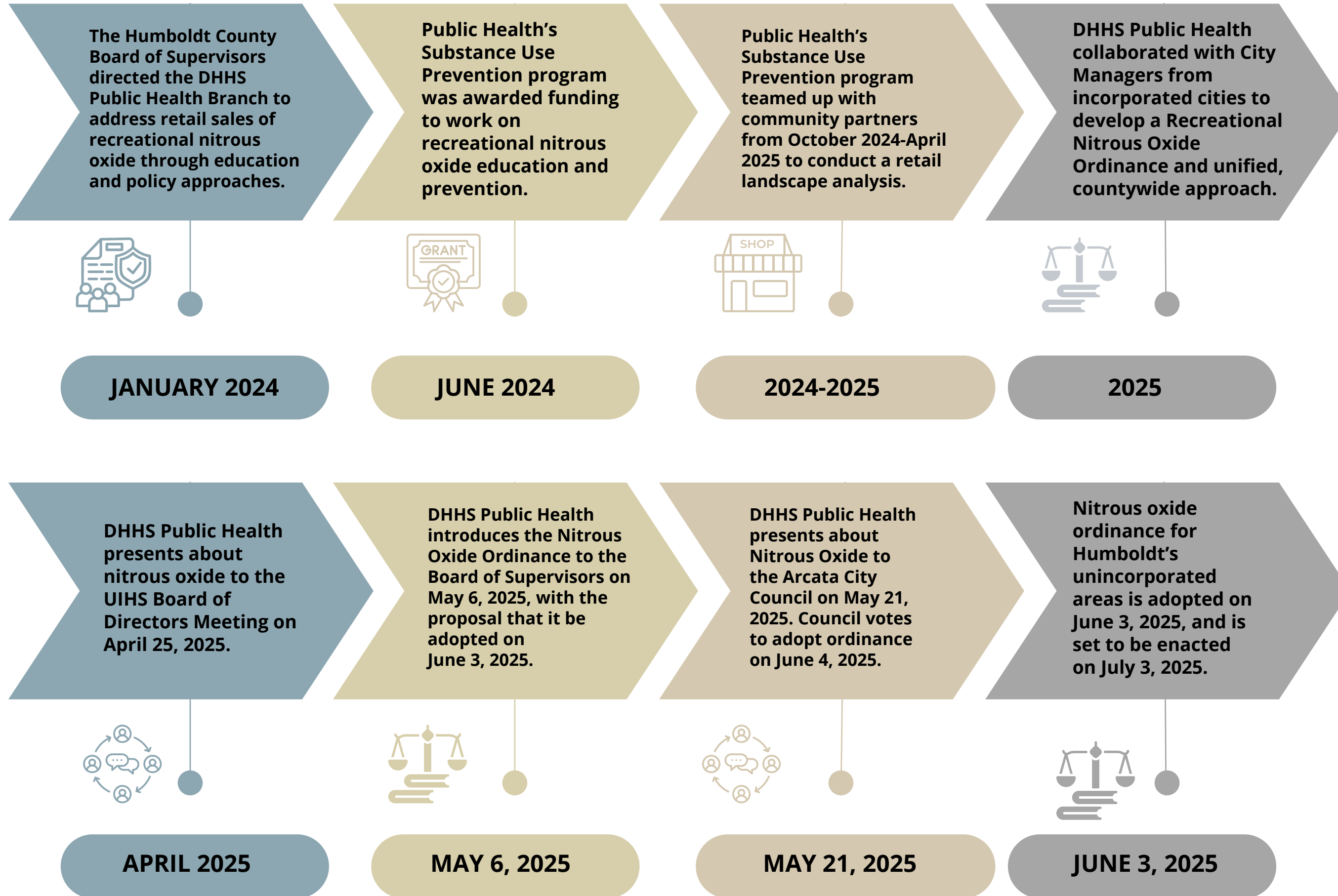
- Metal container that “cracks” the canisters and dispenses nitrous oxide gas



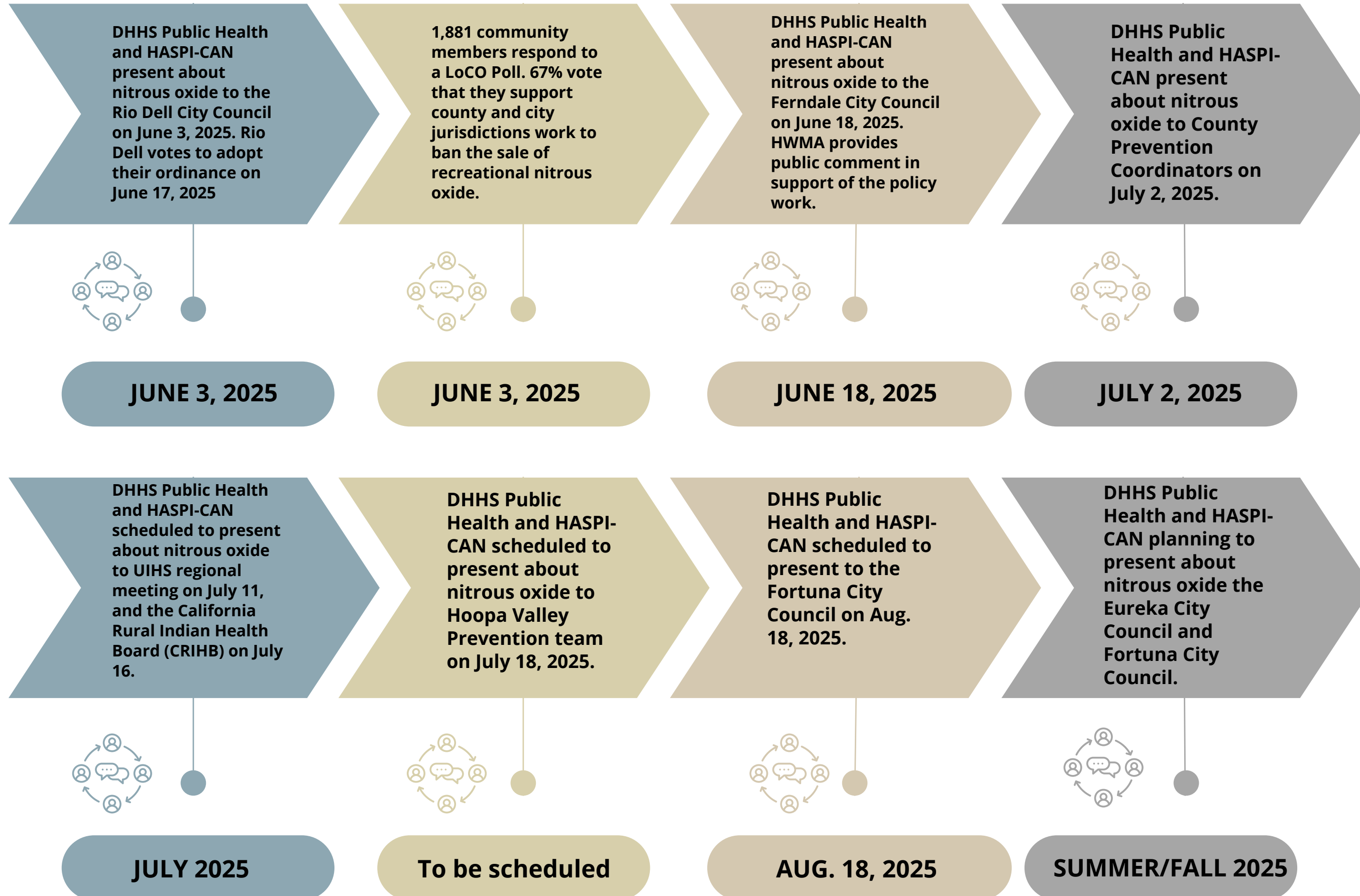
Tanks

- Dispense a steady stream of nitrous oxide gas without having to use canisters
- Small to extra-large containers available.

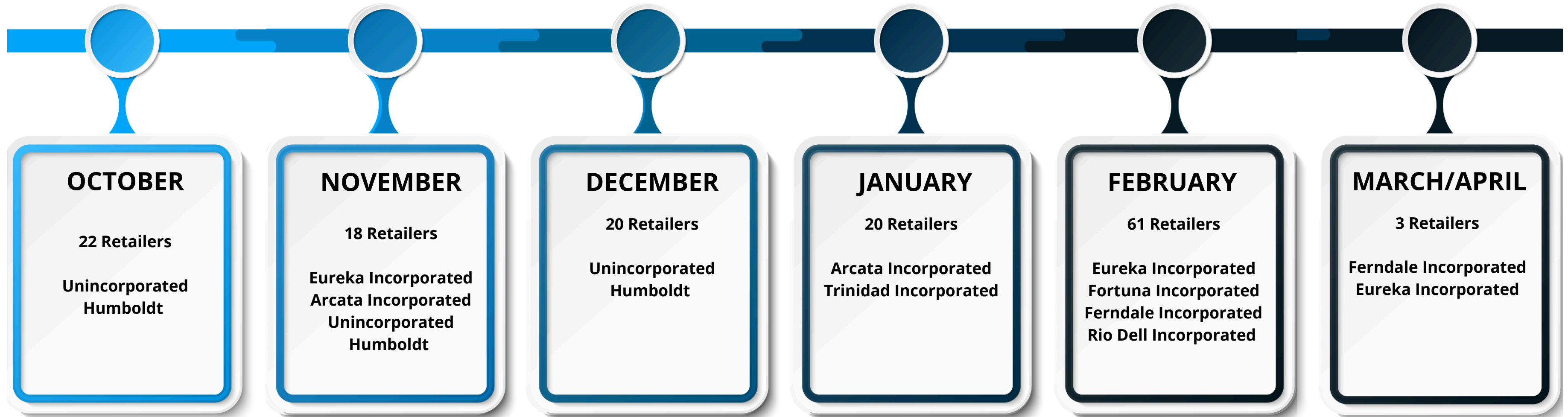
Implementation Timeline



Implementation Timeline Continued

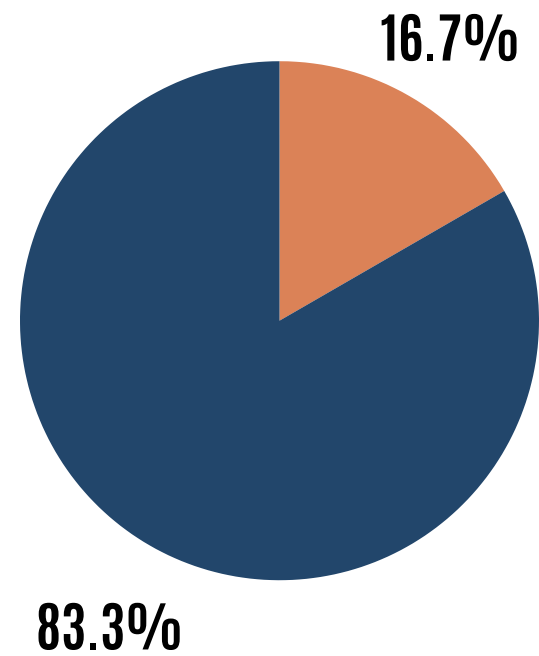


Observation Timeline



Public Health and HASPI-CAN completed 144 retail observations from October 2024-April 2025. This work included observations in unincorporated and incorporated Humboldt and did not include observations in tribal areas.

Recreational Nitrous Oxide Landscape Analysis



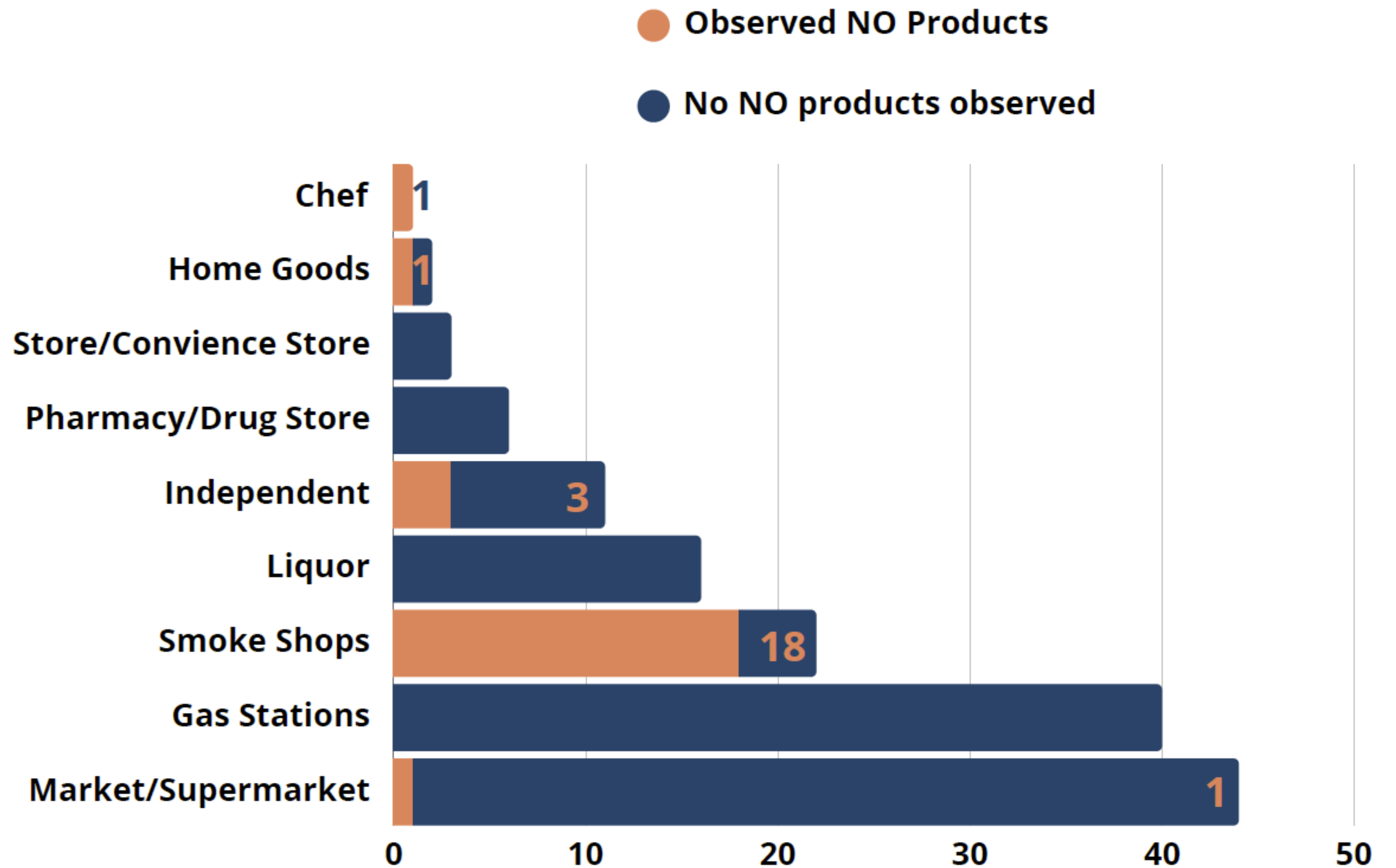
Staff observed nitrous oxide products in plain sight at 24 of 144 retail outlets.



18 retail outlets had crackers, canisters and tanks
5 of the outlets only had crackers and canisters
1 only had canisters.



Staff disclosed the nitrous oxide observations at 34 of the 144 retail outlets the team visited (24%).



Independent retail outlets include sex shops, glass shops, non-traditional tobacco retailers and variety or general stores.

Key Findings

- Recreational nitrous oxide products are readily available and located in plain sight in most jurisdictions in Humboldt County.
- The majority of retail outlets that sell recreational nitrous oxide products are smoke shops.
- Fringe stores selling nitrous oxide products included one neighborhood corner market in a residential area, two glass blowing shops and one sex shop.
- Throughout Humboldt County, recreational nitrous oxide products are available in close proximity to school sites and other youth-serving organizations.
- The retail outlets selling nitrous oxide also have a variety of flavored nicotine and tobacco products on their shelves.
- The community, including retailers, have anecdotally shared that other retailers are likely selling NO in back rooms or behind closed doors.
- Throughout Humboldt County, there are retail outlets with a wide variety of unregulated psychoactive products containing **Kratom, CBD, psilocybin, stimulants** and **male-enhancing compounds**.



Packaging for “Great Whip” brand mini and large sized nitrous tanks, found in Fortuna at a busy apartment complex of families with young children.

Policy Development

- Closing loopholes in state Health and Safety Code
 - For example, no enforcement mechanism
- Protecting youth through limited accessibility
- Enforcing local, state and federal laws, as applicable
- Local control, local community building
- Unified policy approach between unincorporated Humboldt County and city jurisdictions
- Recent local policies in Humboldt County
 - Tobacco Retail Licensing Ordinance (July 2023)
 - Unincorporated Humboldt; cities now considering
 - Commercial tobacco use
 - Nitrous Oxide Ordinance
 - Unincorporated Humboldt, cities of Arcata, Ferndale and Rio Dell (June/July 2025)
 - Cities of Eureka (October 2025) and Fortuna (December 2025)
- Connect with UIHS Board of Directors to consider how DHHS-Public Health and HASPI-CAN can support local Tribal communities in NO work
 - Reciprocal and collaborative work on policy approaches when there's interest from both parties
 - Focus on upstream prevention, protecting youth from harmful substances.



Nitrous oxide is available in small to extra large tanks at retail outlets throughout Humboldt. Some tanks contain flavored NO.

County of Humboldt NO Ordinance Provisions



Various brands of nitrous oxide tanks.

Photo courtesy of: Mad River Union; KLH|Union
March 13, 2025.

- Ban on sale of NO and associated paraphernalia in Humboldt County
- No exceptions for
 - Culinary
 - Automotive
- Permissible for use
 - Health care, dental, pharmacy
 - Contained in food product for use as a propellant
 - For example, packaged, canned whipped cream
- Enforcement
 - Misdemeanor
 - Public nuisance
 - Revocation of business license
 - Revocation of tobacco retail license .

County of Humboldt's Tobacco Retail Licensing (TRL) Ordinance



- Adopted in July 2023 by Humboldt County Board of Supervisors for unincorporated Humboldt County
- Purpose
 - Reduce the availability of tobacco for youth in the community.
 - Provide local control for local, state and federal tobacco laws.
- Public Health's Division of Environmental Health provides enforcement for the TRL in unincorporated Humboldt.

- TRL amendment on May 6, 2025
 - Reference standalone NO ordinance
 - Provide additional enforcement for tobacco retailers who also sell nitrous oxide products and paraphernalia.
- Tobacco retailers who also sell nitrous oxide products risk losing their TRL and Humboldt County business license.

Humboldt Community weighs in about policy work



Clever LoCO Pollz infographic using Whitney, the mascot for Whip-It brand Nitrous Oxide products. Whip-It brand products can be found throughout the Humboldt retail environment.

Photo courtesy of: Lost Coast Outpost; June 3, 2025.

- LoCO Pollz! is a popular online forum for Lost Coast Outpost readership.
- June 3, 2025, Poll: "Do you think that Humboldt Governments Should Ban Nitrous Oxide Sales?"
- 1,881 community members responded.
- 67% respond: "Yes. The environmental nuisance caused by all the discarded little whip-it canisters is one thing. More concerning is the rise in people negatively affecting their health because of their addiction to the high nitrous oxide provides. **This is the right move.**"

Acknowledgement

Special thanks to all the retailers who have been very helpful allies to this work and have provided useful anecdotal information to guide our work. The DHHS-Public Health team appreciates you!

Additionally, thanks for the support from the following community partners and agencies:

- Humboldt County Board of Supervisors
- Incorporated City Managers
- Health & Social Policy Institute: Communities Addressing Nicotine (HASPI-CAN)
- United Indian Health Services (UIHS)
- Humboldt County Sheriff's Office
- Eureka Police Department
- Rio Dell Police Department
- Fortuna Police Department
- Humboldt Waste Management Authority
- DHHS-Public Health's Division of Environmental Health
- DHHS-Public Health's Nicotine and Tobacco Prevention program.



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Lost Coast Outpost (July 8, 2024). [DUI suspect in fatal Eureka collision admitted to using nitrous before driving, says EPD](#). Lost Coast Communications.

Lost Coast Outpost (June 3, 2025). [LoCo Pollz: POLL! Do you think Humboldt governments should ban nitrous oxide sales?](#)