



# **ENHANCING COMMUNITY ORAL HEALTH IN BUTTE COUNTY**

October 2, 2024

# OVERVIEW

- Butte County
- Funding source
- Local Oral Health Program (LOHP) in Schools and Community
- Sustainable LOHP with partners for billable services through Medi-Cal/Denti-Cal
- GIS Mapping
- Community Water Fluoridation
- Staffing



# GETTING TO KNOW BUTTE COUNTY



## POPULATION 207,000

75.74% White

17.96% Hispanic

6.17% Asian

1.81% Black or African American

0.86% American Indian,  
Alaskan or other

6.27% Multiracial (Two or More  
Races)

\*\* Since 2018, Butte County's population has gradually declined by approximately 16,000 residents.

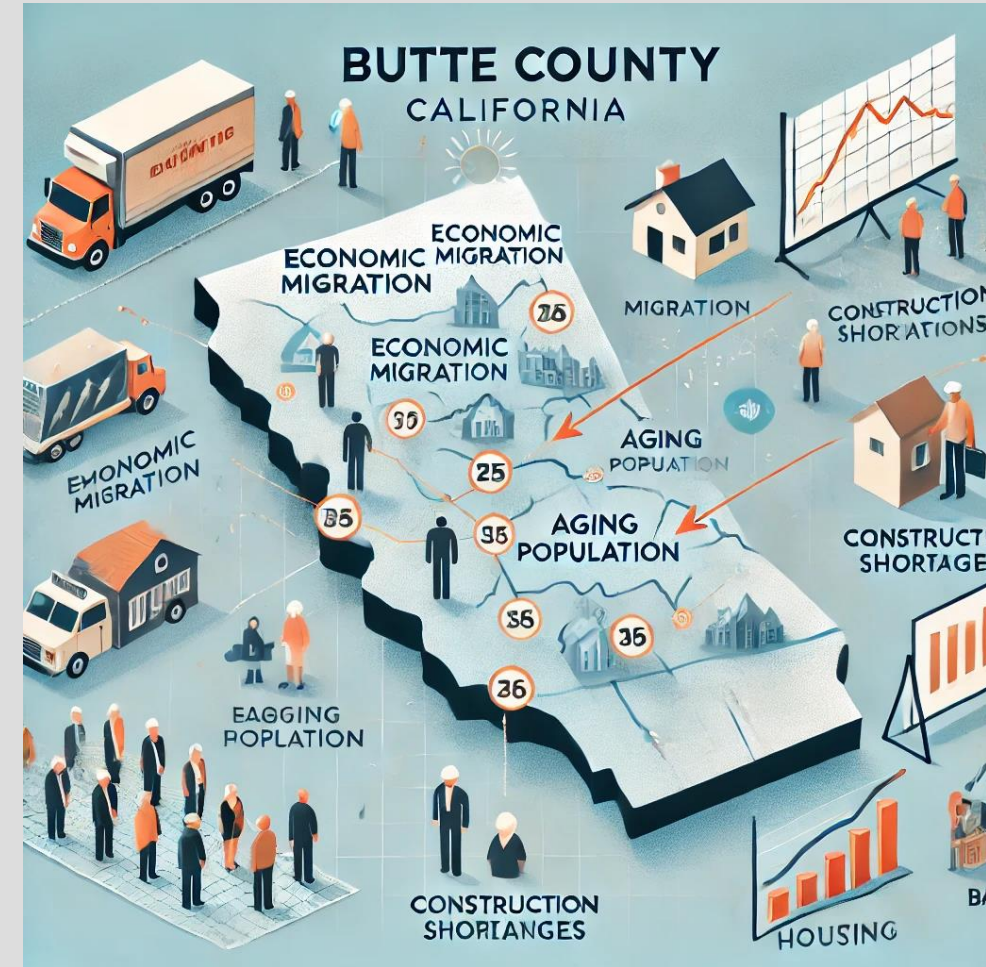
# GETTING TO KNOW BUTTE COUNTY

- The population decrease in Butte County is attributed to several factors;
- **Wildfires:** The 2018 Camp Fire, which devastated the town of Paradise and surrounding areas, led to a significant reduction in the population. Many residents were displaced, and some have not returned due to the extensive damage and challenges in rebuilding the community.
- [Camp Fire - November 2018](#)



# GETTING TO KNOW BUTTE COUNTY

- **Economic Migration:** Like other rural areas, Butte County has seen people move to larger urban centers for better job opportunities, higher wages, and access to services.
- **Aging Population:** A portion of the county's population is older, and natural population decline due to aging (higher death rates compared to birth rates) contributes to the overall decrease.
- **Housing Costs and Availability:** Post-disaster housing shortages and rising costs have also impacted the population, making it difficult for some residents to remain or relocate back to the area.



# GETTING TO KNOW BUTTE COUNTY

- Gateway to the rural north. Butte County, located in Northern California's Sacramento Valley, is bordered by the Sierra Nevada and the Sacramento River, with vital water resources from Lake Oroville supplying much of Southern California's water.
- 2021-2022 school year, 62% of students in TK-12th grade were eligible for free or reduced meals. (<http://www.ed-data.org/county/Butte>).
- **Rural & Unincorporated Areas:** Approximately 67,640 residents live in unincorporated regions of Butte County, many of whom face limited access to essential services due to the remote and isolated nature of these areas.
- **Healthcare Access Challenges:** The Camp Fire led to the closure of Feather River Hospital and the loss of several dental providers in Paradise. Additionally, local tribal clinics and mobile units face limitations in meeting the area's healthcare needs.



# \$\$ FUNDING SOURCE \$\$

- Funding - CA Healthcare, Research and Prevention Tobacco Tax Act, 2016 Prop 56 (Tobacco Tax Dollars). The raised tax on tobacco products fund state Local Oral Health Programs, LOHPs
- First Butte County Public Health Local Oral Health Program grant cycle was from 2017-2022
- 5 year continuation grant started July 1, 2022, titled “Moving California Oral Health Forward 2022-2027.”



SCHOOL-BASED AND  
SCHOOL-LINKED  
INITIATIVES TO IMPROVE  
ORAL HEALTH

# WHAT WE DO

- **Local Oral Health Program (LOHP):** Aims to improve oral health, ensure equitable access to dental care, and address the community's oral health needs, with a particular focus on schools.
- **Presentations:** Provide 20-minute educational sessions on topics such as brushing, flossing, nutritional guidance, and the dangers of tobacco use as it relates to oral health (content is age-appropriate).
- **Toothbrush Kits and Oral Health Education Materials:** Distributed alongside educational materials to support oral health initiatives.
- **Kindergarten Oral Health Assessments (KOHA):** Required for Kindergarten entry, to be completed one year before or by May of the Kindergarten year. Butte County Public Health Registered Dental Hygienists (BCPH RDH) conduct KOHAs and oral health screenings in schools to identify treatment needs and provide referrals for untreated decay or emergency dental care. School nurses manage case follow-ups.
- **School-Based Dental Program:** A partnership with Registered Dental Hygienists in Alternative Practice (RDHAP) to deliver preventive dental services at school sites and community events using Butte County Public Health's mobile dental equipment.



## School-Based Dental Services (2023/24 School Year)

- Education Presentations **2,870 students**
- Distribution of Toothbrush Kits **3,464 kits**
- Oral Health Screenings **1,459 students (Passive Consent)**
- Kindergarten Oral Health Assessments (KOHA) **134 Assessments**



## School-Based Dental Services (Registered Dental Hygienist Advanced Practice (RDHAP) Partnership)

- Fluoride Varnish Applications **56 students billed**
- Dental Cleanings (Prophy) **42 students**
- Sealants **58 applications**
- Caries Risk Assessments **21 assessments**



# SCHOOL-BASED SERVICES

## Schools Served - (September 2023 – May 2024)

- Butte Community School, Chico
- Blue Oak Charter School, Chico
- Golden Feather Spring Valley Elementary, Concow
- McKinley Elementary, Gridley
- Wilson Elementary, Gridley
- Pine Ridge Elementary, Magalia
- Cedarwood Elementary, Magalia
- Paradise Ridge, Paradise
- Stanford Avenue Elementary, Oroville
- Wyondotte Academy, Oroville
- Poplar Elementary, Oroville
- Siskiyou Elementary, Oroville
- Plumas Elementary, Oroville
- Sierra Avenue Elementary, Oroville
- Oakdale Elementary, Oroville
- Ophir Elementary, Oroville
- Ipakanni Early Charter School, Oroville




# SCHOOL-BASED SERVICES DATA EXAMPLE

**Stanford Elementary School, Oroville - November 17, 2023**

**Oral Health Screenings & KOHAs Passive Consent**

From Oral Health Assessment form

Grade	# students screened	Caries Experience	KOHA	Visible untreated decay 	Treatment urgency: (pain, infection, swelling or soft tissue lesions)	Care Coordination/Referral Need for tx recommendation
TK						0
Kindergarten	37	22		16	4	20
1st	37	21	4	11	5	16
2nd	78	53		29	9	38
3rd	54	35		11	8	19
4th	46	28		10	2	12
5th						
<b>Totals</b>	<b>252</b>	<b>159</b>	<b>4</b>	<b>77</b>	<b>28</b>	<b>105</b>
<b>Percentages</b>	<b>100%</b>	<b>63%</b>	<b>2%</b>	<b>31%</b>	<b>11%</b>	<b>42%</b>

**\*\*1 out of 3 students have visible tooth decay, 1 out of 10 students require emergency dental treatment**



# COLLABORATIVE PARTNERS FOR SCHOOL-BASED DENTAL SERVICES

- **Preventive Billable Dental Services - MOU with RDHAP**
  - Cleanings
  - Fluoride Varnish
  - Sealants
  - Carries Risk Assessments
- **Outreach and School Based Dental Services**
  - Resources and education presentations



# COMMUNITY PARTNERS



UTILIZING GIS MAPPING FOR  
ENHANCED PLANNING IN  
BUTTE COUNTY

# UTILIZING GIS MAPPING FOR ENHANCED PLANNING IN BUTTE COUNTY

## GIS Training & Implementation:

- **GIS webinar training:** LOHP Staff participated in training sponsored by CSU, Long Beach for Public Health Agencies.
- **Goal:** Gather data to identify areas with significant oral health disparities for targeted interventions.
- **Collaboration:** Partnered with Butte County Public Works; discovered geospatial data/tools via Esri ArcGIS. Static maps prepared with LOHP pertinent content.
- **Progress:** ArcGIS licensing and training for Public Health Analysts ongoing

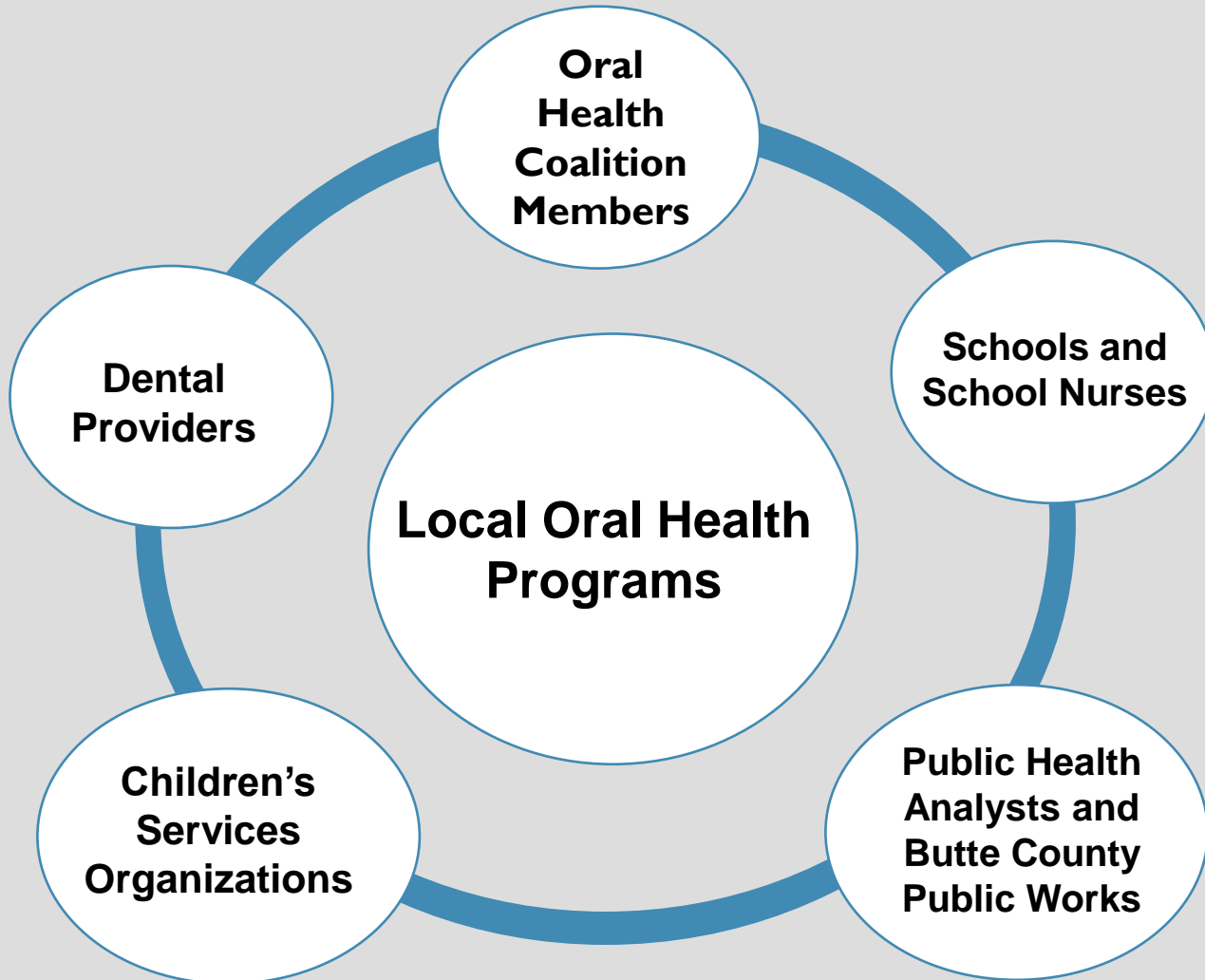
# WHAT IS GIS?

- **Geographic Information System** used to gather, manage, and analyze spatial data.
- Enables the visualization of patterns, relationships, and trends across geographic spaces.
- Combines data from multiple sources to support decision-making in areas like urban planning, public health, and environmental management.

# HOW GIS MAPPING WILL BE USED IN BUTTE COUNTY

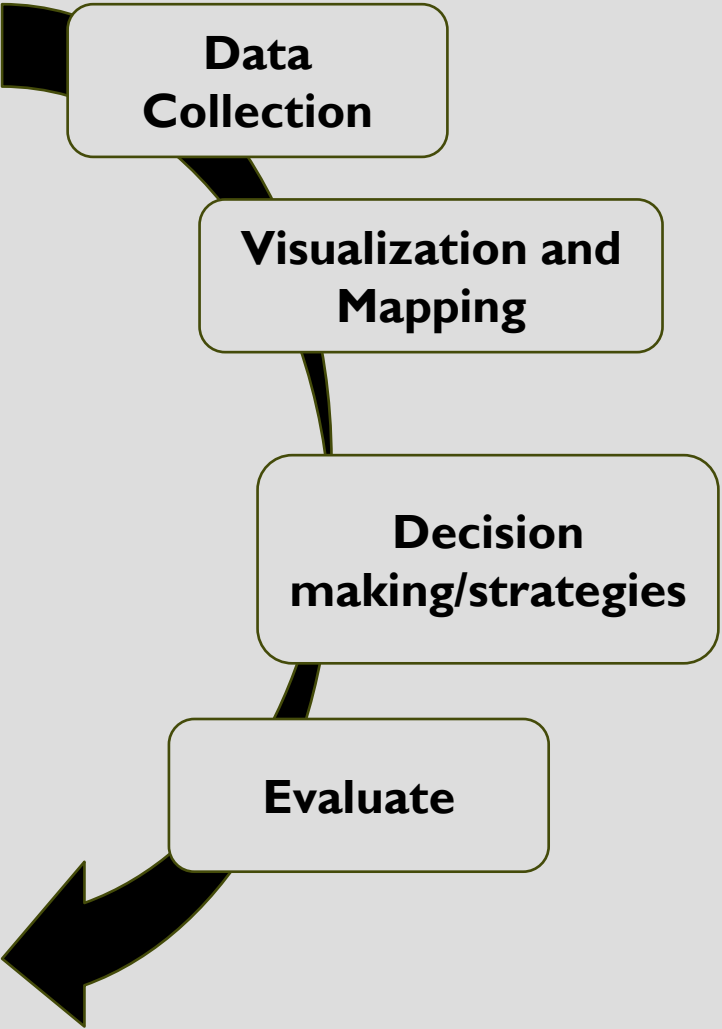
- Strategic plan to live in a more equitable community by targeting education and prevention in highlighting areas using interactive GIS mapping transparency with data of interest
  - School data-non treated visible decay and emergency referrals
  - Denti-Cal Providers
  - Fluoridated water
  - SNAP
  - 2021-2022 school year, 62% of students in TK-12th grade were eligible for free or reduced meals. This ranges from a low of 25% to a high of 90% of students who were eligible

# COMMUNITY PARTNERS FOR GIS INFORMATION

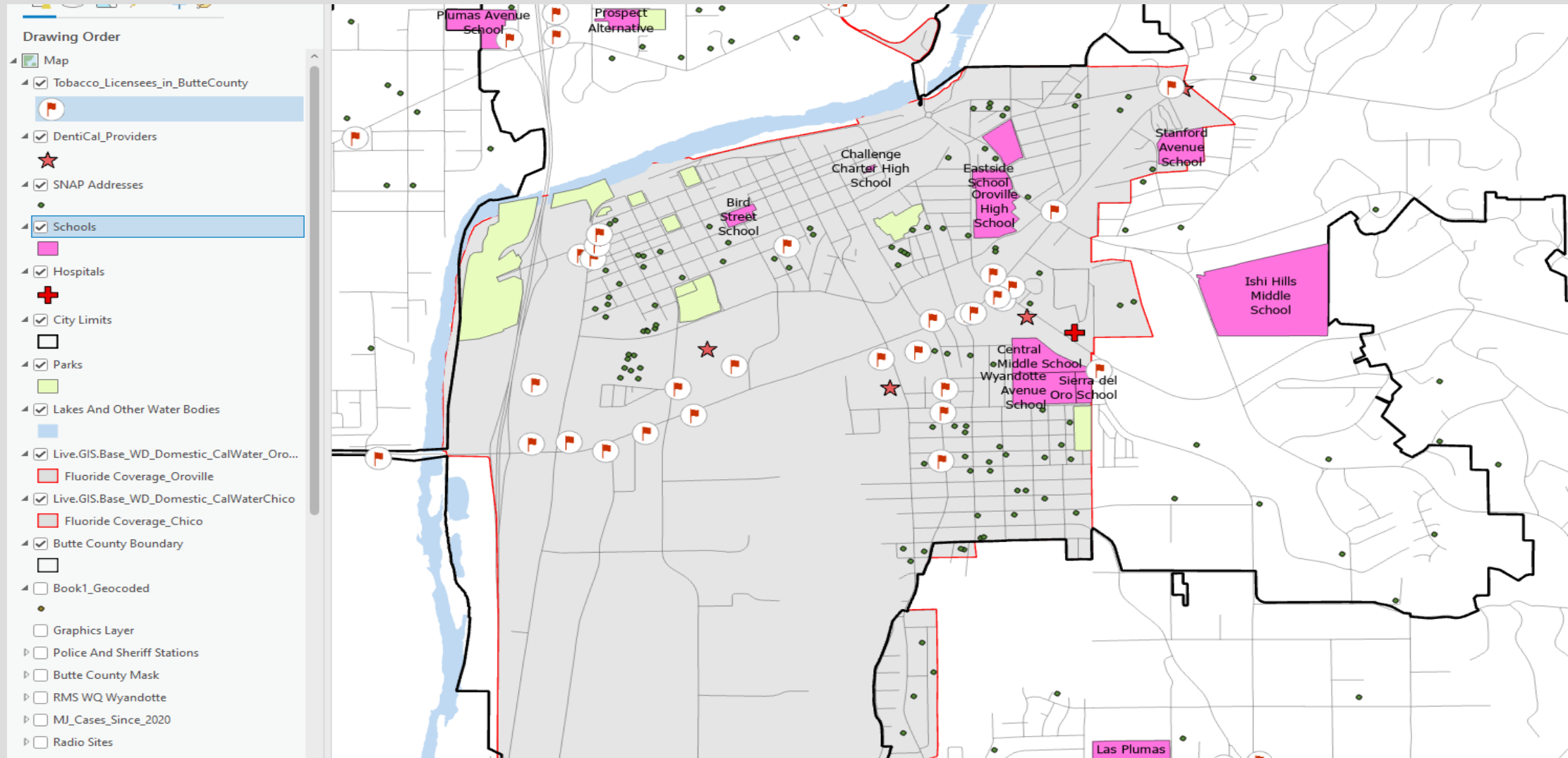


Mission: Work together to improve oral health outcomes....

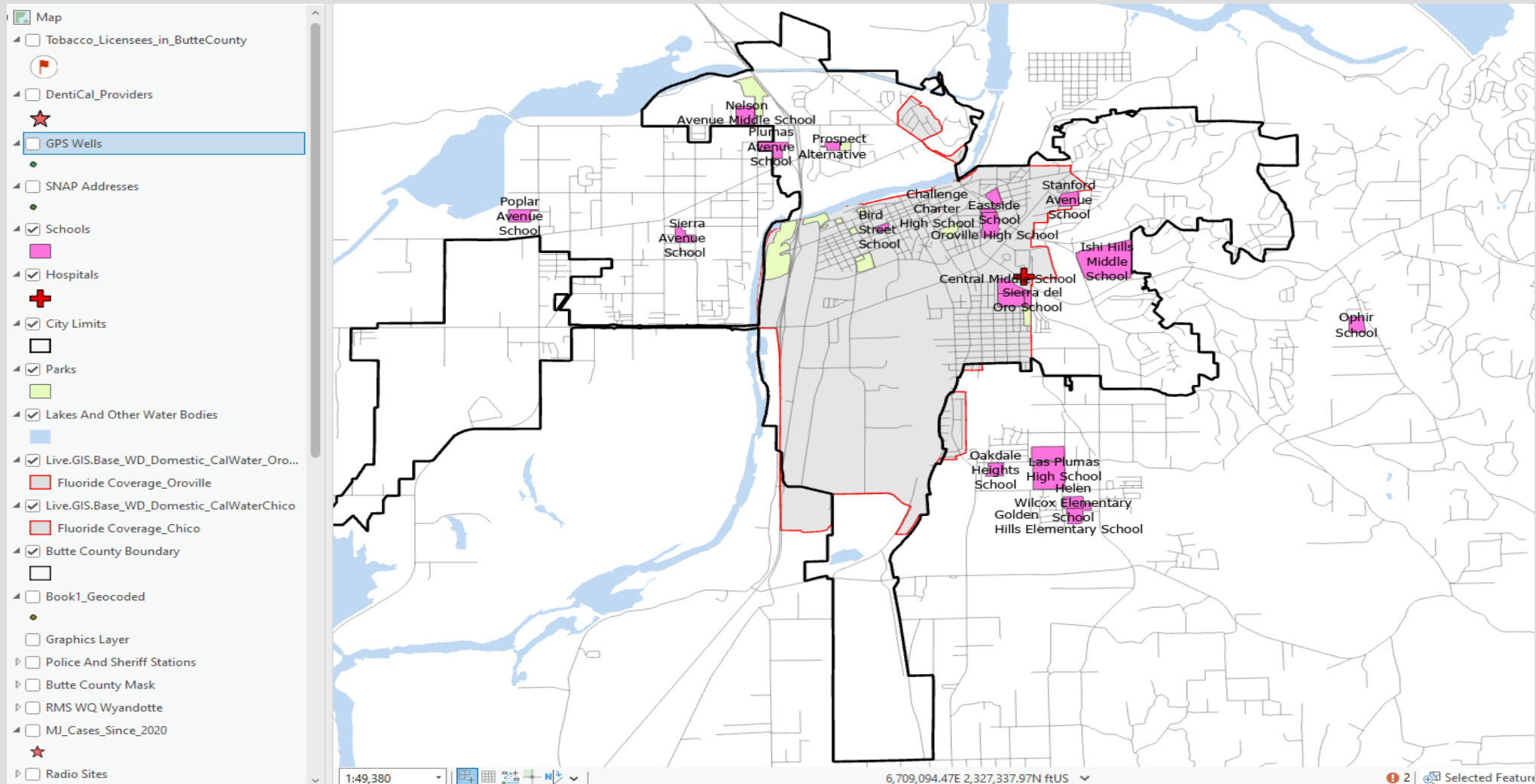
# GIS IN PUBLIC HEALTH



# GIS MAP OF SPATIAL RELATIONSHIPS

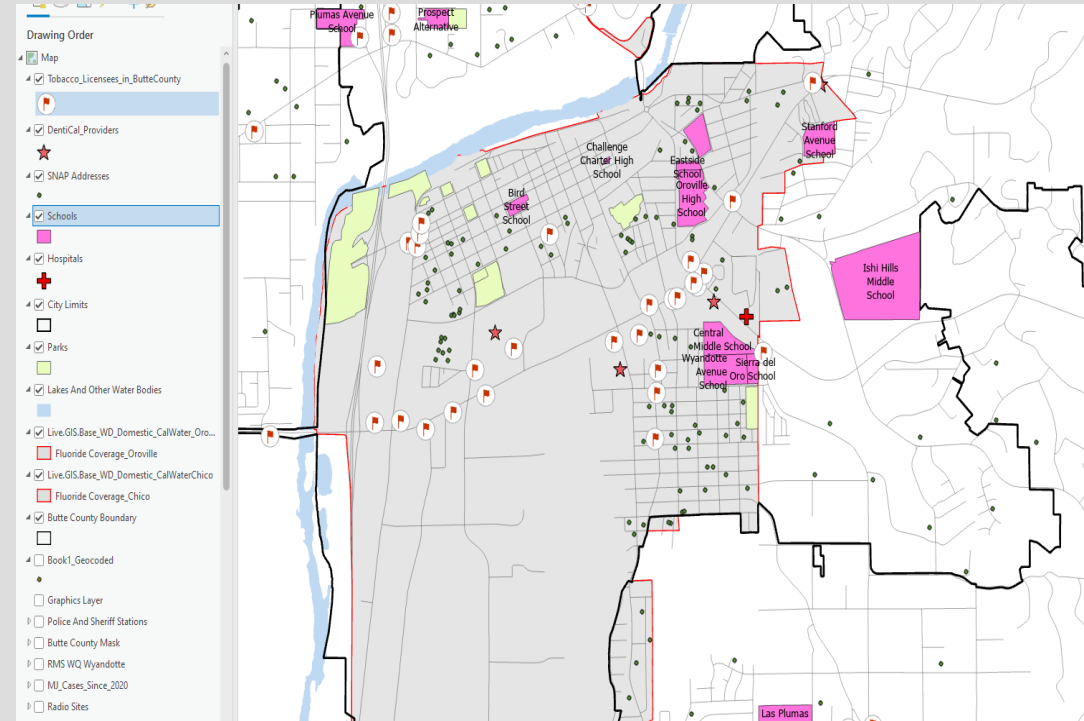


# RELATIONSHIP OF FLUORIDE ZONE TO HIGHER DECAY RATES

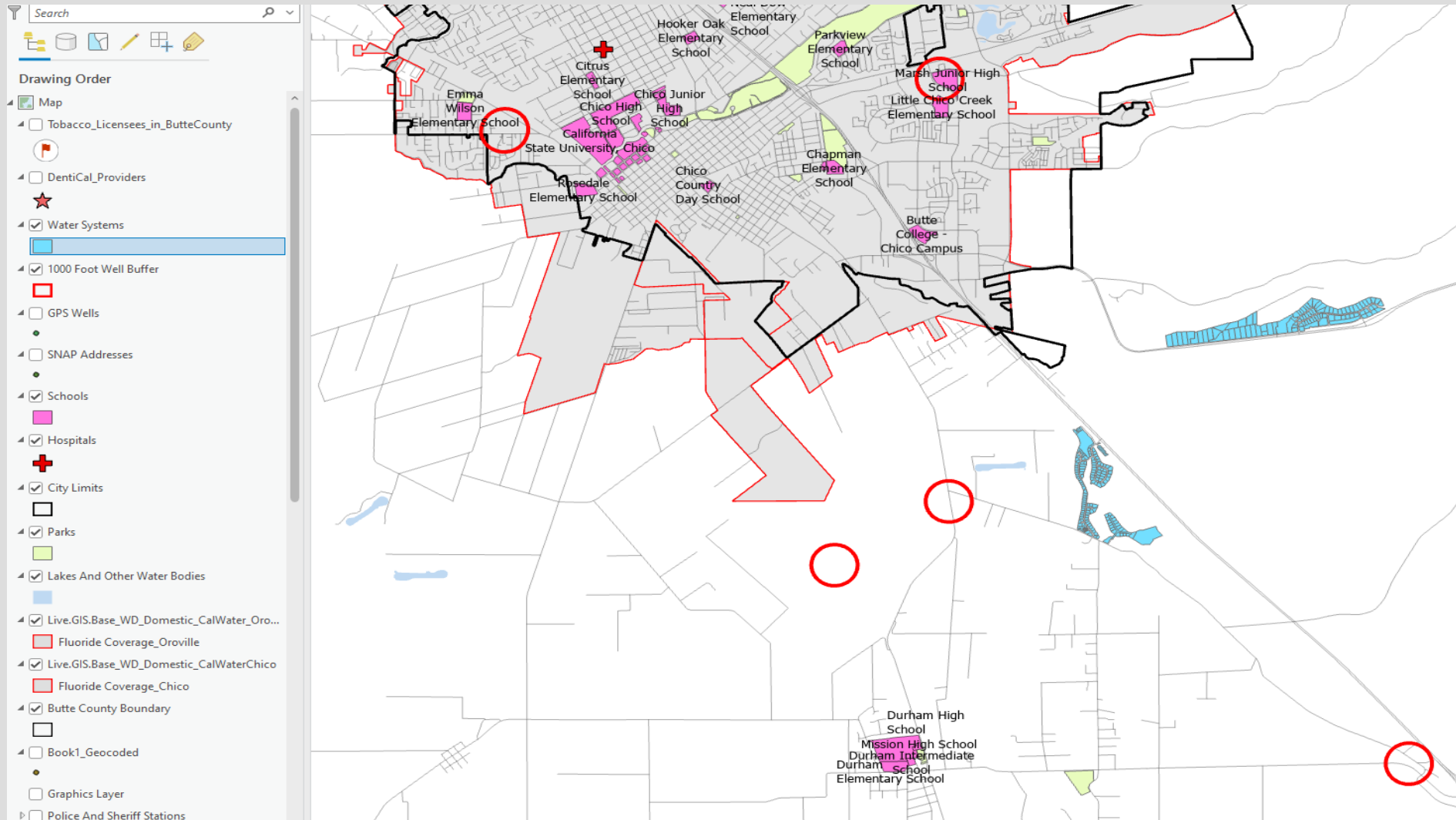


# COMMUNITY WATER FLUORIDATION

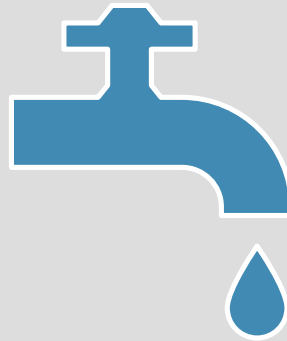
- Cal Water provided fluoridated water in the Oroville City limits since 1957 (outlined in red)
- Oroville City Council Members proposed removing fluoride from the Oroville City water in June 2024
- BCPH LOHP asked City Council Members to postpone decision
- LOHP asked dental professionals to speak & oppose removal
- UCSF Fluoride expert attended Oroville City Council Meeting and spoke about benefits of Fluoridated Water
- July 2024 Oroville City Council voted to remove Fluoride in water



# GROUNDWATER WELLS AND OTHER WATER DELIVERY SYSTEMS



# INFORMATION ON WATER FLUORIDATION & FLUORIDE



- Community water fluoridation can help offer equitable access to oral disease prevention interventions

- Optimal regulated level of fluoride for community water is 0.7 milligrams per liter (mg/L) in drinking water

- The CDC says that drinking fluoridated water can reduce cavities by up to 25% in adults and children

- Cost effective way to deliver fluoride to the community and save on dental care costs



# WATER FLUORIDATION THROUGHOUT **TIME** IN BUTTE COUNTY

## 1940s and 1950s

Grassroot movement pushed the City council to request the California Public Utilities Commission to order the addition of fluoride in Cal-Water

### 1953

City of Gridley began fluoridating their water

### 1957

Cal-Water Service Co. in Oroville began fluoridating their water

## 2019

California Water Boards reported that two public water systems in Butte County were fully fluoridated (these covered parts of Oroville and the city of Gridley)

## October 2019

Fluoridation in Gridley was ceased due to ongoing issues regarding dosing equipment and increased maintenance cost

## March 2020

Gridley City council voted to discontinue water fluoridation entirely

## July 2024

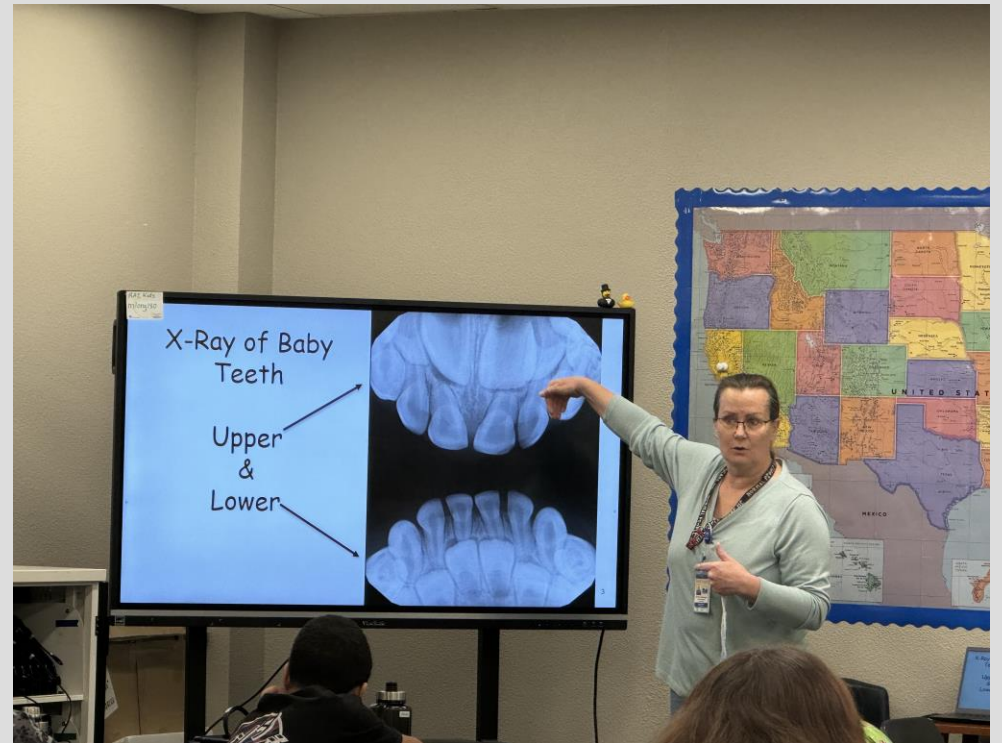
Oroville City Council voted to lift the fluoride requirement and ruled that fluoride ingestion should be a personal choice for drinking water



# ORAL HEALTH CHAMPIONS

## Staffing as a Key Success Factor

- We firmly believe that hiring the right staff with strong community connections is crucial for improving oral health outcomes, regardless of whether a community is rural or urban.
- Our commitment to hiring and empowering qualified individuals is a cornerstone of our strategy for achieving equitable and sustainable oral health for all.



**ButteCounty**  
CALIFORNIA



## CONTACT INFORMATION

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[Website Program Information:  
https://www.buttecounty.net/ph/Programs/CommunityHealth/oralhealth](https://www.buttecounty.net/ph/Programs/CommunityHealth/oralhealth)



THANK  
YOU

# QUESTIONS?

