

# **Plumas County Environmental Health**

## **2019 Annual Report**



Rainbow over the American Valley

### **OVERVIEW**

Promoting an environment that enhances human health and well-being is the foundation of environmental health. Chemical, physical and biological conditions are all important variables in determining human health. Environmental Health works to protect human health by limiting exposure to disease-causing factors in the environment.

Environmental Health's mission is to preserve the environment and enhance public health through outreach, education, planning and sensible application of environmental health principles, laws and statutes. We implement and carry out a variety of programs that protect human health and the environment.

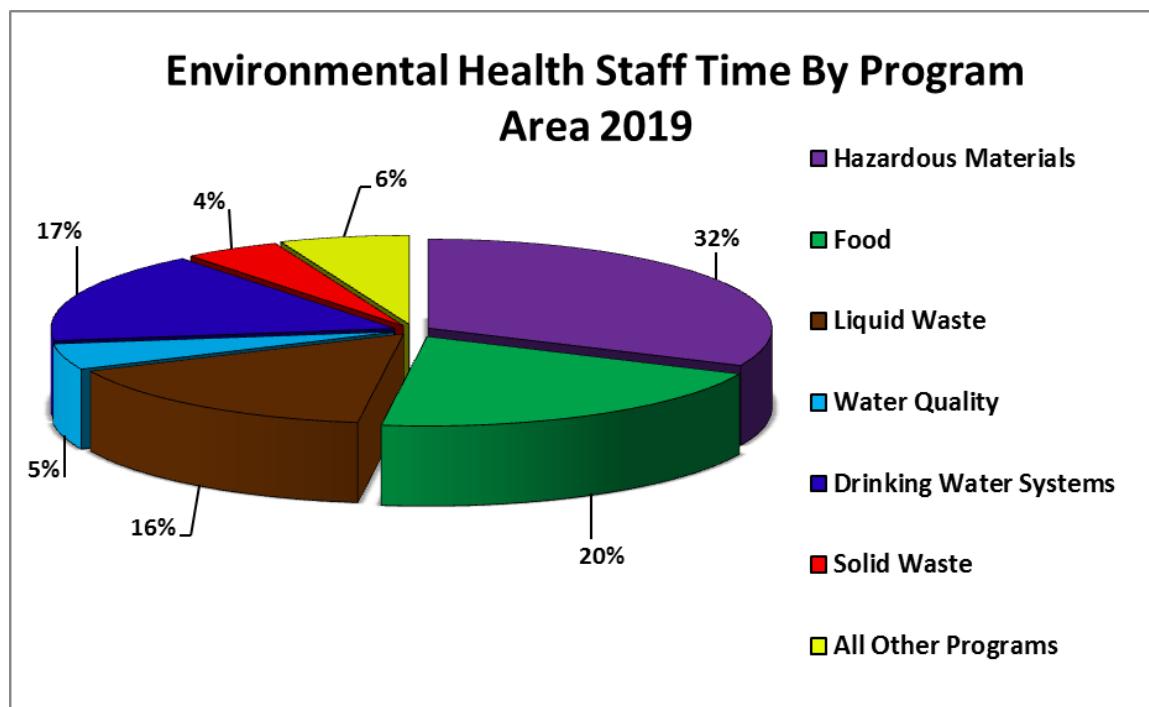
This annual report is a look back at some of Environmental Health's notable activities and accomplishments in 2019.

### **PROGRAMS**

In Plumas County, Environmental Health services are generally grouped into one of ten core program areas. The amount of time spent in each program area depends on a variety of risk factors, state mandates, and the service needs of the community. In Plumas County these ten essential environmental health programs include:

- Hazardous Materials Management
- Drinking Water Protection
- Food Safety
- Liquid Waste Management
- Solid Waste Management
- Water Quality Protection
- Land Use and Development
- Rabies and Vector Control
- Recreational Health
- Housing and Institution Safety

In 2019, staff time was allocated as shown in the following chart and some notable programs and activities are summarized below.



## HAZARDOUS MATERIALS MANAGEMENT

Hazardous Materials Management continues to be our largest program area. Environmental Health is the Certified Unified Program Agency (CUPA) for Plumas County. We permit, inspect and enforce a variety of hazardous materials and hazardous waste regulations under certification by the California Environmental Protection Agency (CalEPA). CalEPA evaluates Environmental Health's program every 3 years to ensure it complies with state program standards. Environmental

Health successfully completed the 2019 evaluation cycle with only a few minor areas needing correction. The five main elements of the CUPA program include:

### **Hazardous Materials Business Plan Program (HMBP)**

- Assuring that businesses electronically report hazardous material handling, use and storage (volumes greater 55 liquid gallons, 500 solid pounds, or 200 cubic feet of gases) and develop release response plans.
- Coordinating with and training local fire departments and other emergency responders on preparedness and response to chemical emergencies.

### **Above Ground Storage Tank (AST) Program**

- Tracking, permitting and inspecting AST facilities, operations and equipment.
- Reviewing and verifying Spill Prevention Control and Countermeasure Plans (SPCC) are in place.
- Ensuring tanks are properly managed to minimize the chances of a spill.



Poorly managed ASTs. These tanks have since been relocated and the spill hazards mitigated.

### **Underground Storage Tank (UST) Program**



Underground Tank Removal, Pacific Street Portola

- Tracking, permitting, and inspecting UST facilities and equipment.
- Ensuring underground tanks and piping are properly operated, monitored and maintained to avoid risks of spills, leaks, or releases.
- Inspecting the construction, repair, upgrade and removal of underground tanks.
- Verifying that closed and removed tanks have not leaked.

Because of special certification required in the UST program, Plumas County provides UST services to Sierra County.

### California Accidental Release Program (Cal ARP)

- Tracking, permitting and inspecting facilities that handle certain quantities of acutely hazardous material (such as chlorine gas or anhydrous ammonia).
- Reviewing Risk Management Plans (RMP) intended to reduce the risk and consequences of accidental releases.

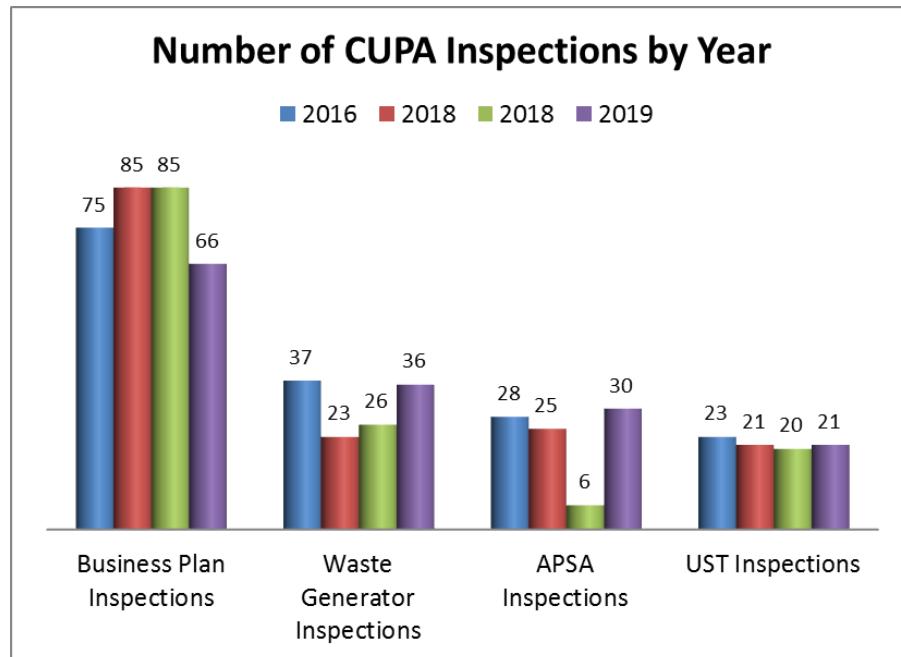
### Hazardous Waste Generator Program

- Tracking, permitting, and inspecting facilities that generate hazardous wastes such as waste oil, solvents, and used chemicals.
- Ensuring the proper storage, management, handling and disposal of these wastes.

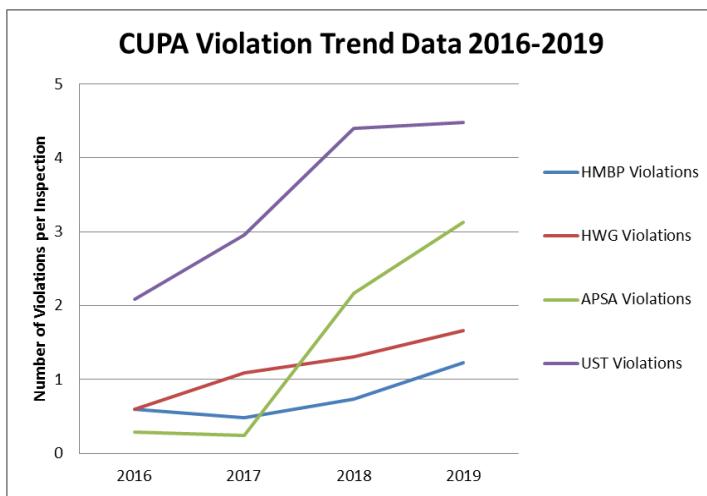


Waste containers at Simple Fuels, Chilcoot

Since Cal EPA implemented the California Electronic Data Reporting System (CERS), Environmental Health tracks the number of inspections conducted and violations cited in each of the CUPA program elements. Inspection and enforcement data for the past four years is shown on the charts below. In 2019, Environmental Health completed 153 CUPA inspections which are up from 138 completed last year.



Environmental Health also tracks the number of violations encountered during each CUPA inspection. Trend data for the last four years shows that the number of violations per inspection continues increasing for both hazardous waste and business plan elements. The increasing trend for underground tanks appears to have tapered off at just over 4 violations per inspection.



Unfortunately, the strong upward trend in aboveground tank violations is continuing. This is likely due to increasing state emphasis on above ground tank compliance and the frequency of site inspections occurring only once every three years. Since Environmental Health strives for compliance through outreach and education rather than through issuing notices for violations or other enforcement actions, we are evaluating the costs and benefits of increasing aboveground tank inspections. With 3 years between visits, some businesses may backslide into established habits and patterns and would benefit from seeing a CUPA inspector every year or every other year, especially until sound hazmat practices are firmly established. We are hopeful the increased inspection frequency will increase voluntary compliance and this trend is something to watch in the future.

Another important part of the hazardous materials management program is emergency response and overseeing site cleanups. In 2019 Environmental Health staff responded to five hazardous materials incidents, which is considerably fewer than the 17 logged the year before. We work with the responsible party, land owners, state agencies, and others to ensure cleanup is timely and effective. Fortunately, we did not have any significant releases in 2019.

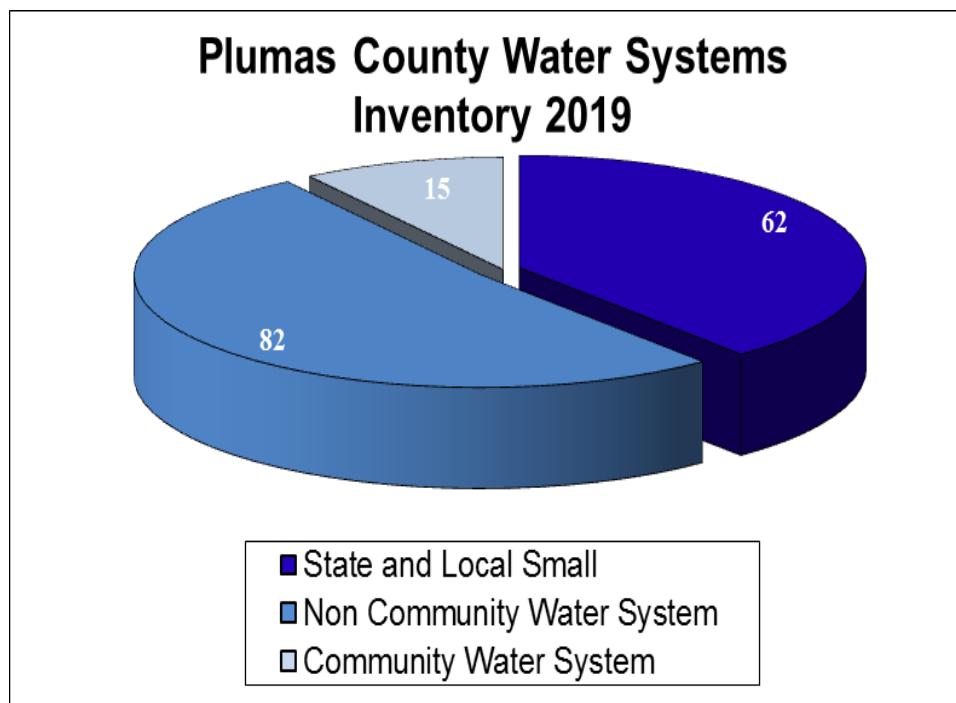


Spill cleanup Highway 49 near Vinton, November 2019

## DRINKING WATER PROTECTION

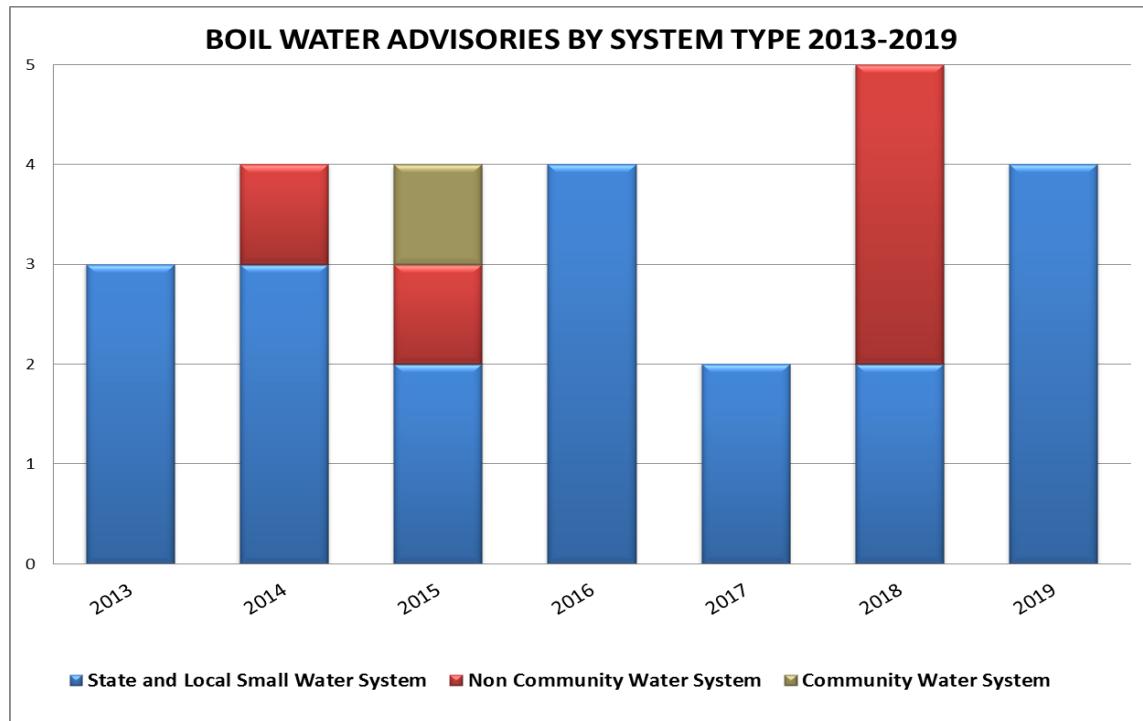
Ensuring safe and potable drinking water supplies is a vital function of Environmental Health. During 2019, almost 20% of EH staff time was spent in this program. As part of this program, Environmental Health maintains state certification as the Local Primacy Agency (LPA) for smaller drinking water systems serving less than 200 connections. Annual program evaluations by State Water Resources Control Board (SWRCB) ensure this program meets state and federal oversight requirements. EH staff serves as a local resource for water system operators, helping ensure that our drinking water remains the highest quality possible. Last year, we were also able to partner with the California Rural Water Association to offer water system operator training in Quincy for many of the local water purveyors.

Drinking water systems are categorized based on the size of the system and the nature of the population served. Community systems typically serve year-round residents, with state and local small systems serving up to 15 connections, and small community systems serving up to 200 connections. These systems make up almost half of the regulated inventory. Non-community systems provide water to areas without residential populations such as parks, resorts, campgrounds, or workplaces. These 82 systems account for the other half of our system inventory.

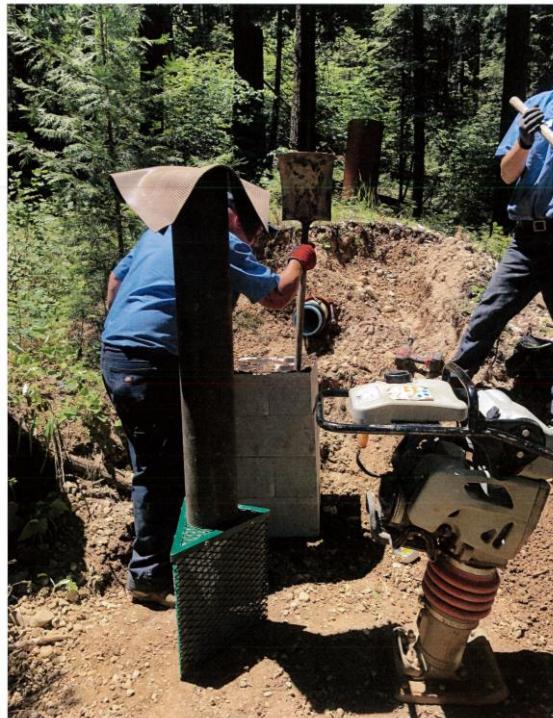


To ensure the water provided by all these systems remains safe to drink, we review and track nearly two thousand (2,000) bacteriological reports each year. In addition, we also track numerous chemical data for each of these systems.

If there is an immediate risk to human health, the system operator is required to issue a Boil Water Advisory. The few number of Boil Water Advisories issued as compared to the number of samples taken is a strong indicator of the safety of Plumas County's drinking water quality.



Important Boil Water Advisories affected the western portion of Quincy in June and September of last year. Because this water system is larger than can be delegated, it is under State Division of Drinking Water oversight and does not appear on the chart above. Nevertheless, Environmental Health spent considerable time and resources on these two incidents. Our primary responsibilities were to notify vulnerable populations, such as the hospital and schools, and ensure they had alternative potable water supplies. We also worked with restaurants, markets, and the public to ensure that they implemented safeguards for their cooking, sanitation and potable ice needs.



Repairing Water Supply Line Serving the Quincy Community

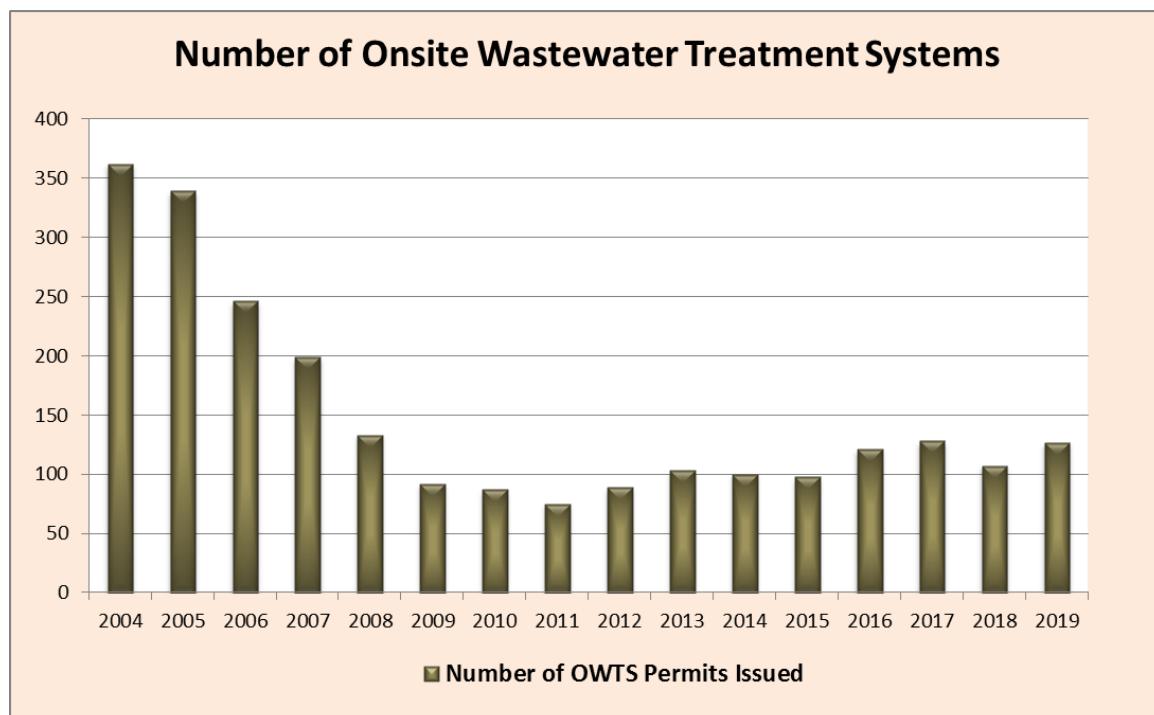
## LIQUID WASTE MANAGEMENT

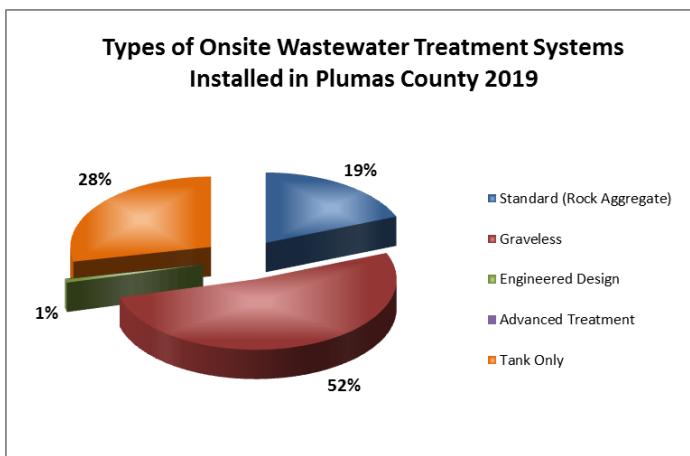


Root-clogged Onsite Wastewater Treatment System near Lake Almanor

Environmental Health ensures that sewage and liquid wastes are properly handled, treated and disposed. This includes preventing human exposure to contaminated wastewater as well as preventing contamination of surface and groundwater. We specify the location, design, construction, installation and repair criteria of all septic or on-site wastewater treatment systems (OWTS) through a permit and inspection program.

The following chart tracks the number of OWTS permits Environmental Health has issued since 2004. In 2019, the number rebounded from 107 issued in 2018 to 127 issued in 2019. Still the number is well below the high numbers issued in the mid-2000s.

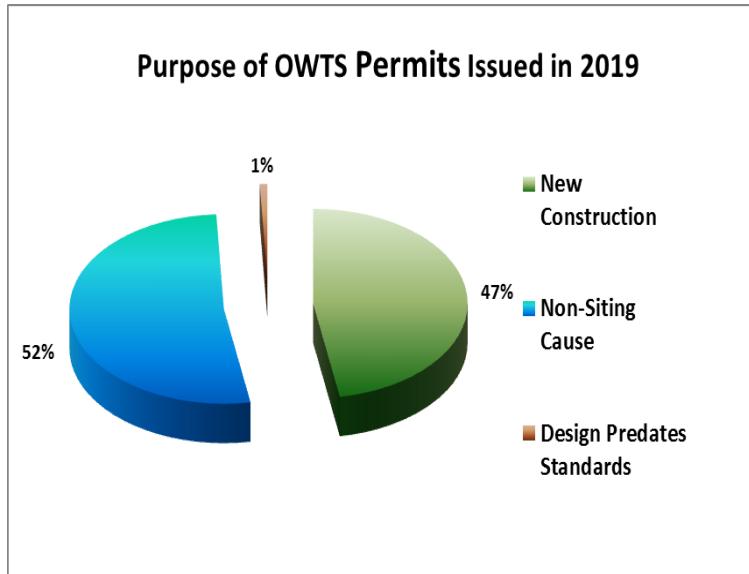




The trend towards gravel-less disposal field installation continues, with more than half of the systems installed using this design. Conventional rock disposal fields make up less than one fifth of leachfield installations. The number of tank only permits continues to rise, continuing the trend toward community treatment and disposal, such as found in Bailey Creek, Gold Mountain

and other development communities. Only a handful of Engineered and advanced treatment OWTS were permitted last year.

Plumas County conducts the liquid waste program under authority granted by the Central Valley Regional Water Quality Control Board. 2018 was the first year of comprehensive reporting to the Regional Board on various performance measures including OWTS failures, complaints, design deficiencies, and water quality monitoring, and this will be an ongoing program responsibility. Of the 127 permits issued in 2019, 60 were for new construction. 66 permits were issued for repairs for failing systems, and the vast majority of these failed due to root intrusion or other 'non-siting' causes. No replacement permits were issued because of failures due to groundwater intrusion, pollution or other health-based problems. Only 1 permit was issued to replace an antiquated system where the design predated current OWTS standards.

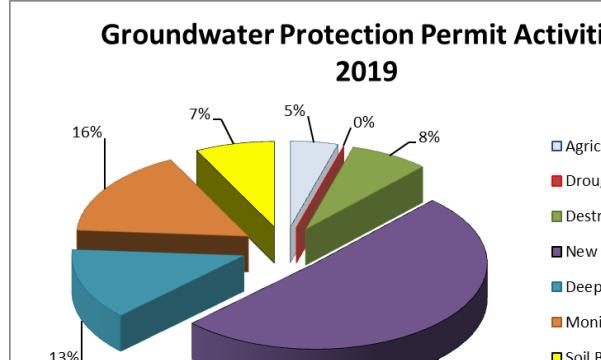
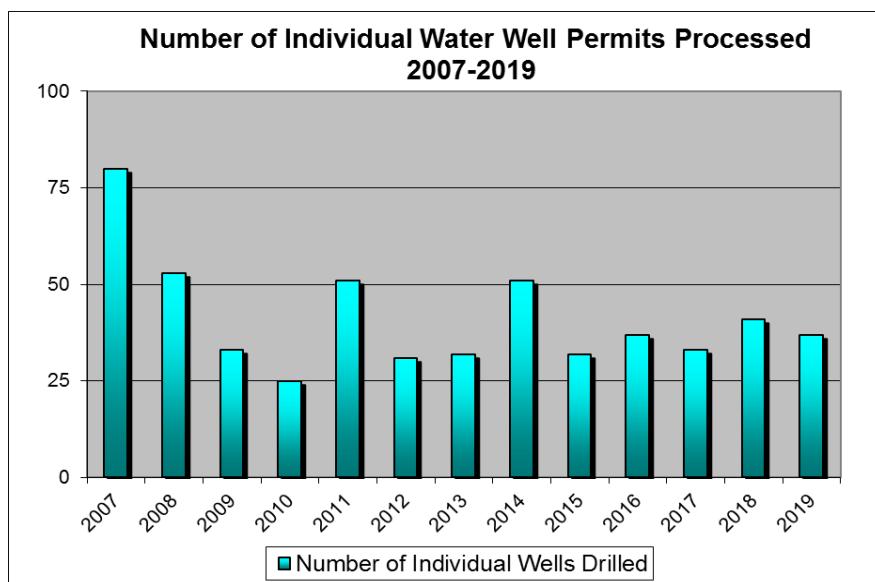


Our OWTS program also includes a groundwater monitoring component to ensure wastewater pathogens like E. coli or nutrients like nitrates are not contaminating drinking water supplies. At the end of five years, a comprehensive analysis of water quality data will need to be performed, but currently at the end of year 2 all data strongly indicate that the Plumas County OWTS program is effective and protecting public health and the environment.

## WATER QUALITY ASSURANCE

Protecting the quality of Plumas County's lakes, streams and groundwater supplies are a core function of Environmental Health. An important part of this program is a permit process since improperly located or constructed wells can affect

groundwater quality. The annual number of well permits issued is shown above. The number of well permits issued in 2019 was 37, down four from 2018.



We track new permits including residential water wells, agriculture wells, and public water supply well permits. We also track the purpose of the permit, such as if the well is required because of drought related impacts. In 2019 no drought-related well permits were issued.

Finally, we also issue and track permits for other borings or excavations that pose a risk to contaminating groundwater such as monitoring wells or geotechnical soil borings. In 2019, 16 permits were issued for these activities. The summary of groundwater protection permit activities is shown on the chart above.



Newly Constructed Domestic Well near Quincy

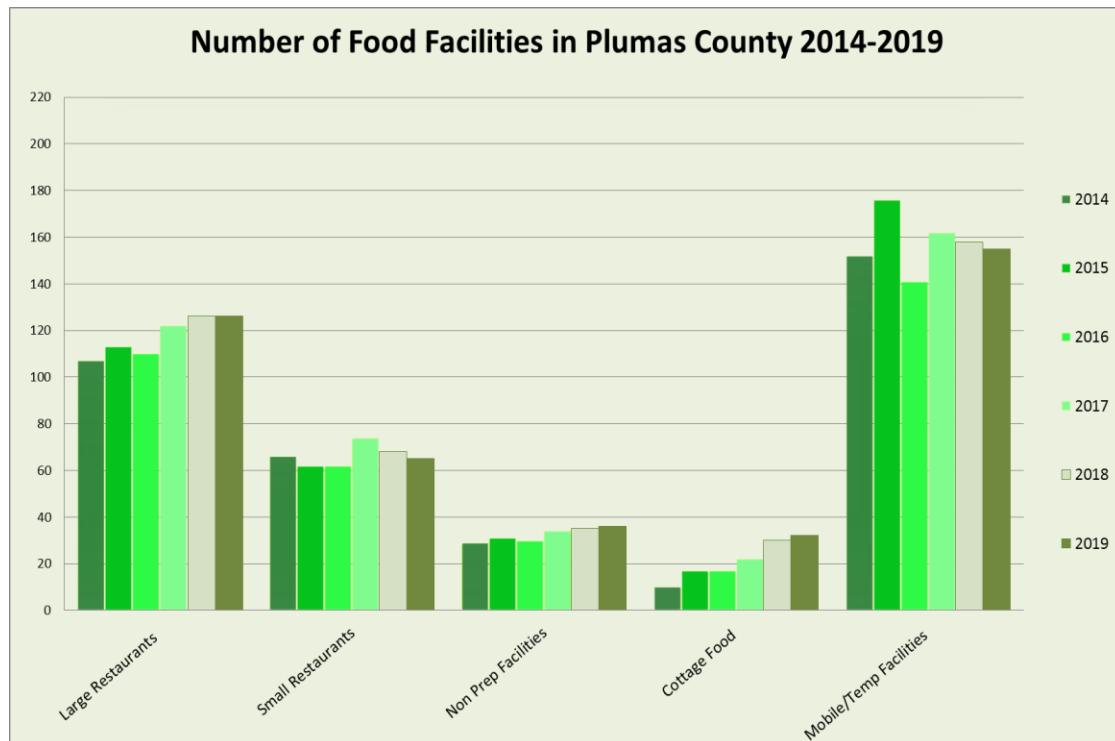
## FOOD SAFETY

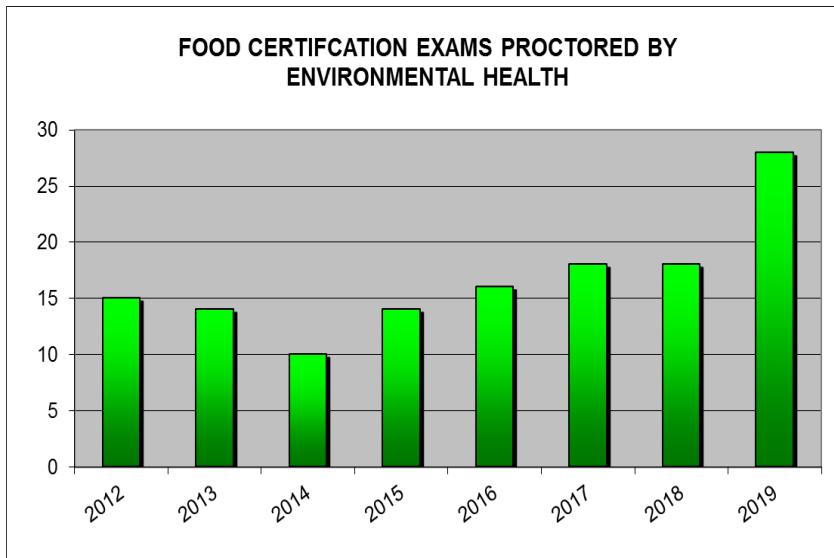
Our food safety program helps protect the public from food-borne illness. Food safety is achieved through education, outreach, and inspection of retail food facilities countywide. Facilities are evaluated for compliance with the California Retail Food Code. Registered Environmental Health Specialists are authorized to inspect, record and correct violations of safe food handling practices, and even close the facility if necessary to protect public health.



Checking Food Temperatures During Routine Inspection

In Plumas County, the inventory of retail food facilities includes large restaurants (with a seating capacity of more than 25 or food preparation area in excess of 500 square feet), small restaurants, non-prep facilities such as convenience markets, cottage foods (limited foods prepared in home kitchens), and mobile or temporary facilities serving community events like music festivals and the county fair. The inventory of facilities operating in Plumas County since 2014 is shown below. The total number of fixed facilities shows a slight but steady growth over the past 6 years. The fluctuating number of mobile facilities reflects the number of vendors participating in various fairs, festivals and other community events.





Every food facility that prepares, handles or serves potential hazardous foods must have an individual who is certified in food safety. Certification must be renewed every five years. In 2019, Environmental Health became authorized to proctor online Serv-Safe exams for local purveyors. Providing

this service to customers has been very popular as shown by the increase in the number of exams administered this past year.

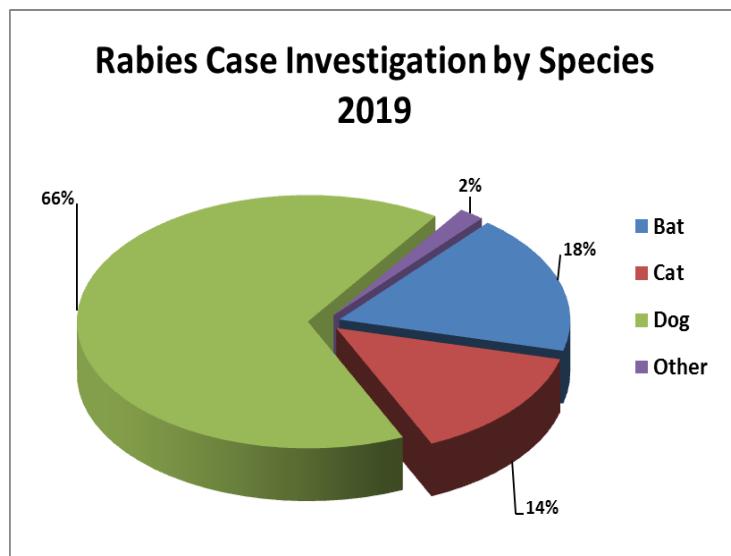
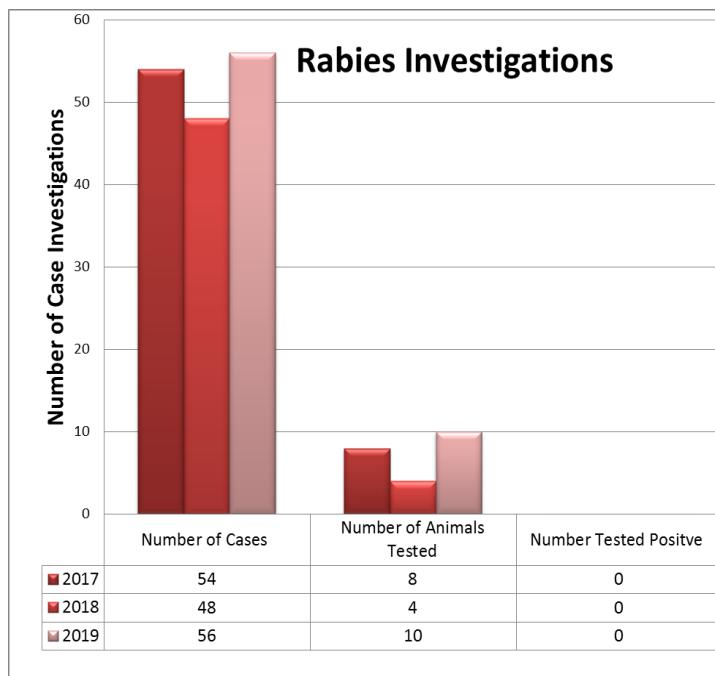
Another part of our food safety program includes public education and outreach. As part of that effort, all fixed food facility inspection reports are available to the public through Environmental Health's Food Facility Inspection page on the county's website at <https://www.plumascounty.us/608/Food-Facility-Inspections>

DEPARTMENTS	GOVERNMENT	ABOUT PLUMAS COUNTY	DOING BUSINESS	LIVING HERE
 <b>PLUMAS COUNTY CALIFORNIA</b>				
		Canyon Dam Store <a href="#">December 19, 2019 (PDF)</a> <a href="#">December 19, 2017 (PDF)</a> <a href="#">November 28, 2016 (PDF)</a> <a href="#">June 6, 2016 (PDF)</a>	Chester-Lake Almanor	
		Carey Candy Company <a href="#">January 1, 2020</a> <a href="#">January 17, 2019 (PDF)</a> <a href="#">April 18, 2018 (PDF)</a> <a href="#">March 9, 2017 (PDF)</a>	Quincy-Bucks Lake-La Porte-Meadow Valley	
		Caribou Crossroads Store & Cafe <a href="#">November 13, 2019</a> <a href="#">June 29, 2018 (PDF)</a> <a href="#">December 20, 2018 (PDF)</a> <a href="#">March 13, 2018 (PDF)</a>	Feather River Canyon-Greenville-Indian Valley	
		Carol's Cafe <a href="#">May 9, 2019</a> <a href="#">September 21, 2018 (PDF)</a> <a href="#">July 27, 2017 (PDF)</a> <a href="#">September 9, 2016 (PDF)</a>	Chester-Lake Almanor	
		Carol's Ranch House <a href="#">September 22, 2019</a> <a href="#">September 8, 2017 (PDF)</a> <a href="#">March 18, 2016 (PDF)</a> <a href="#">November 20, 2015 (PDF)</a>	Chester-Lake Almanor	
		Cedarling <a href="#">Temporarily Closed</a> <a href="#">December 5, 2019</a> <a href="#">December 13, 2018 (PDF)</a> <a href="#">July 20, 2018 (PDF)</a>	Quincy-Bucks Lake-La Porte-Meadow Valley	
		Chalet View Lodge <a href="#">August 15, 2019</a> <a href="#">July 27, 2019</a> <a href="#">November 7, 2018 (PDF)</a> <a href="#">December 1, 2017 (PDF)</a>	Portola-Sierra Valley	

Through this link, anyone can access inspection reports and make informed decisions about their dining choices.

## RABIES AND VECTOR CONTROL

Our rabies and vector control program protects the public from exposure to vector-borne diseases such as Hantavirus, plague and West Nile Virus, but the majority of our time in this program is spent on rabies case investigations. We closely coordinate with state, federal and local partners while performing exposure investigations, environmental surveillance, consultation and other activities. Rabies case investigations and specimen testing both increased in 2019.



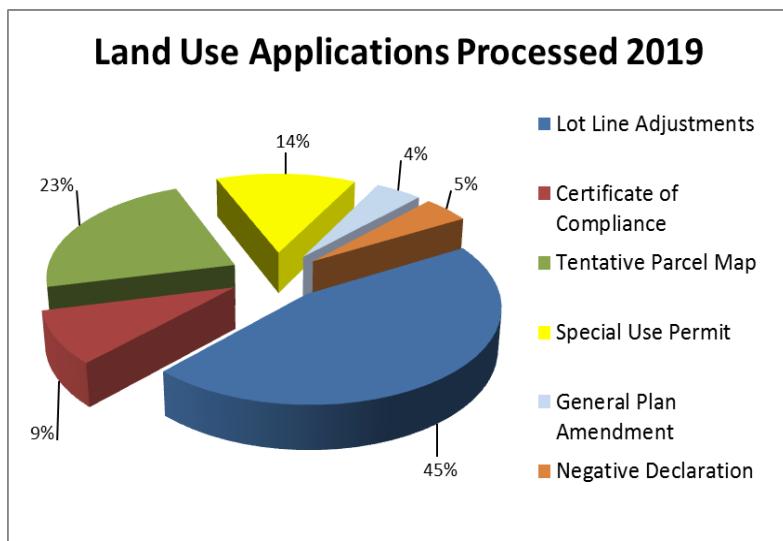
In 2019, Environmental Health tracked and investigated 56 animal contact cases for potential rabies exposure. About two-thirds of case investigations involve domestic dogs, but bats are also commonly encountered by humans. In fact, the last animal that tested positive for rabies in Plumas County was a bat found in Graeagle in 2016.

Plumas County is considered endemic for the rabies, meaning that the virus is constantly present in wild animal populations like bats, skunks and foxes. Rabies is a significant public health hazard, and the Director of the California Department of Public Health (CDPH) has declared all 58 counties in California as rabies areas every year since 1987.

## LAND USE

Environmental Health works in conjunction with several other regulatory agencies, such as Planning and Building Services, Engineering, and Public Works for land use project review. Our role is to evaluate the foreseeable Environmental Health implications of proposed development projects. The land use program helps ensure today's development is sustainable into the future. In 2019, the Board of Supervisors reconvened the county's Development Review Committee, where agencies coordinate and streamline their review of development projects and Environmental Health participates on this committee.

Last year we reviewed 22 land use applications. Lot line adjustment applications made up almost half of them, followed by tentative parcel map and special use permit requests. Also of note in 2019 was the negative declaration review for the proposed East Quincy CHP. Environmental Health focused primarily on the sustainable potable water supply and wastewater disposal needs for the new facility.



## RECREATIONAL HEALTH

Our recreational health program helps protect bather health and safety by ensuring the safe and sanitary operation of public swimming pools and spas. Environmental



Harmful Algal Bloom in Willow Lake, July 2019

Health provides routine design review, permitting, inspection, and technical assistance for the 29 existing pools and spas countywide. We also review construction plans and inspect repair or upgrade work to ensure the proposed work meets the minimum standards required by the California pool code.

An emerging issue in freshwater lakes and streams is an increase in the number and severity of harmful algal

blooms. Blue-green algae blooms (known as cyanobacteria) pose a risk to swimmers, pets and livestock. Dogs are especially at risk and several deaths statewide have been attributed to this toxin. Environmental Health coordinates with the State Water Board to post and inform the public of these risks.

More information is available on the State Water Board website at <https://mywaterquality.ca.gov/habs/>.

## SOLID WASTE

Environmental Health is designated as the Local Enforcement Agency or LEA by CalRecycle. We are responsible for ensuring the proper, safe, and sanitary handling of the county's solid waste. We inspect and permit county landfills, transfer sites,

and investigate old or abandoned sites for hazards. Environmental Health staff also investigates complaints about litter, debris, and illegal dumping.



In 2019, Environmental Health staff completed 39 inspections of county transfer sites, 20 inspections of landfills, and 29 inspections of closed facilities. Results of these inspections are available at the CalRecycle website at

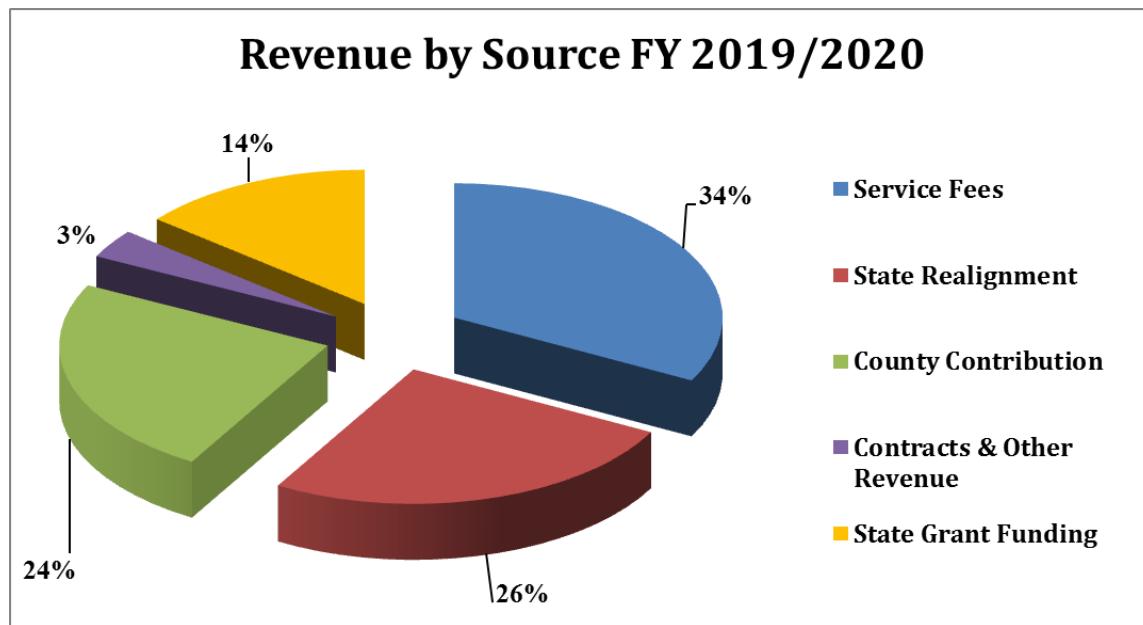
2019 Earth Day Cleanup at the Courthouse Annex

<https://www2.calrecycle.ca.gov/SWFacilities/Directory/>

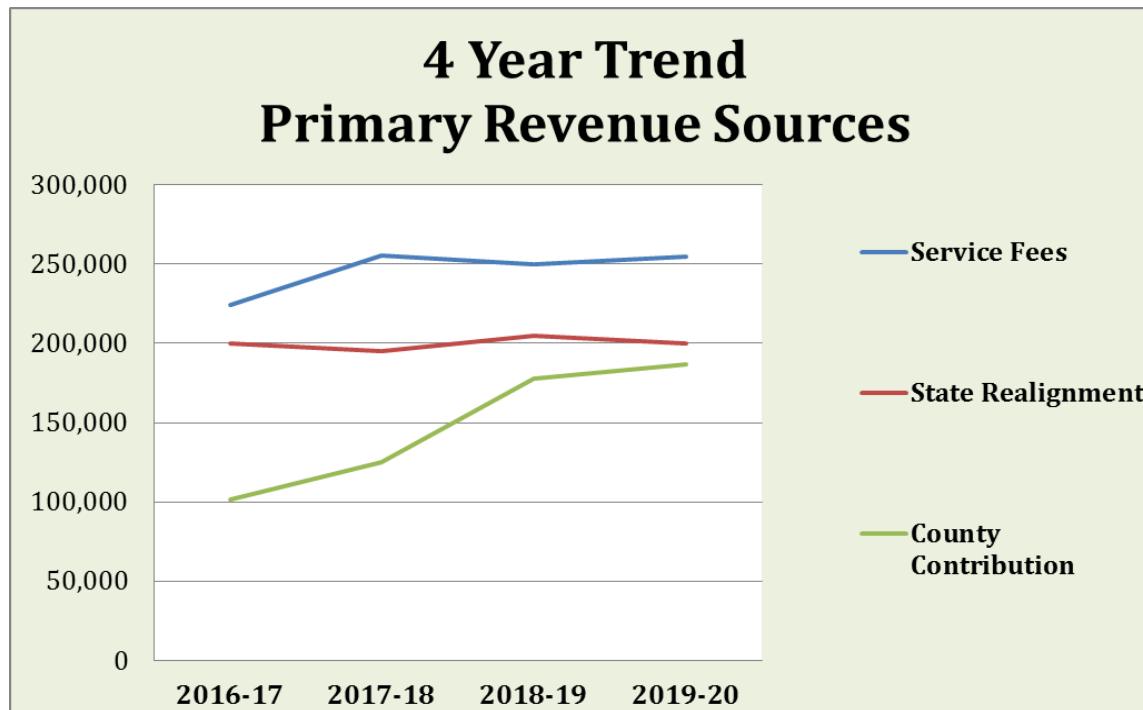
In 2019 we also organized the first annual Earth Day Cleanup at the Courthouse Annex where Health and Human Services staff from the annex collected litter from around the campus. We plan to make this an annual event.

## BUDGET AND REVENUE

Environmental Health revenue by source is summarized below:



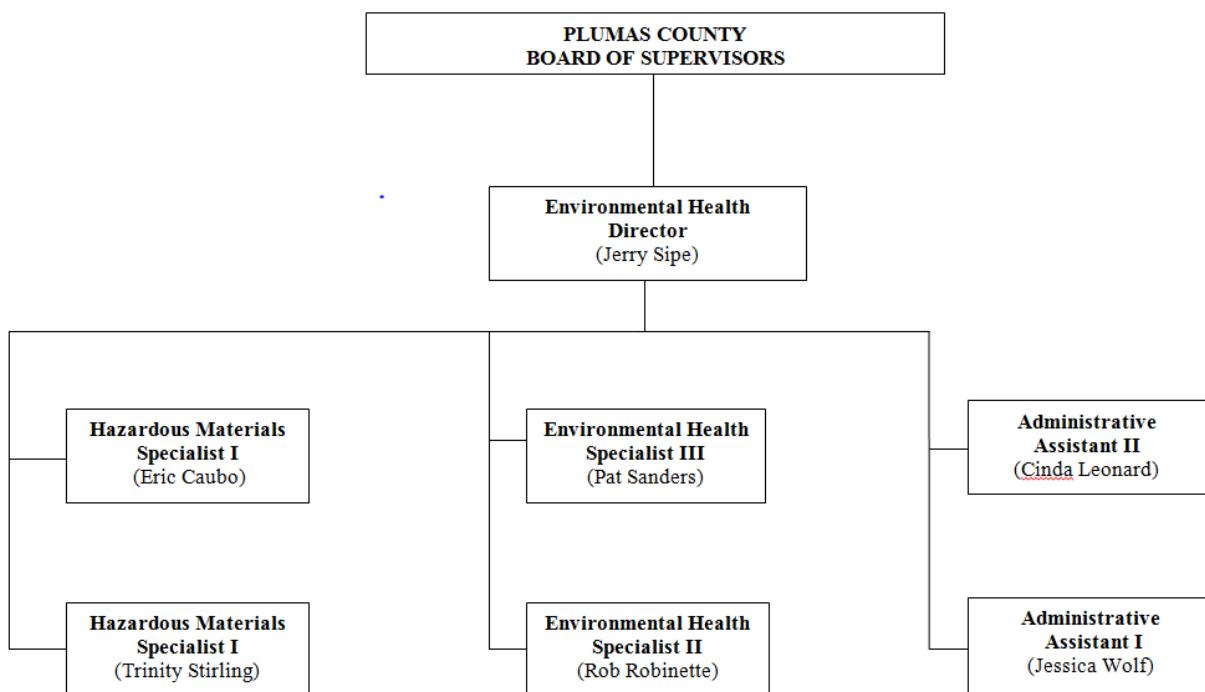
As seen in the trend diagram below, fiscal year 2019-20 funding amounts from our primary sources are similar to last fiscal year. The lower amount from County Contribution in fiscal years 2016-16 and 2017-18 were due to unfilled vacancies in Environmental Health which resulted in recurring one-time savings to the General Fund.



## STAFFING

During all of 2019, Environmental Health was fully staffed as shown in the organization chart below.

### ENVIRONMENTAL HEALTH Organization Chart FY 19-20



The two experienced Environmental Health Specialists average nearly 20 years of experience but the two Hazardous Materials Specialists average only about 2 years of experience. Following our state-approved training plan, we have focused on cross training in all Environmental Health programs so both Hazardous Materials Specialists will be eligible to take the Environmental Health Specialist registration exam this coming year.

Although one of our clerical staff has considerable Plumas County experience, the two average only about three years of experience in Environmental Health programs. In addition to seeking job-specific training as available, we emphasize developing contacts in other county departments to help expand skills and knowledge.

## LOOKING FORWARD

Here is a look ahead to the challenges and opportunities in store for Environmental Health in 2020 and beyond.

## Public Safety Power Shutoffs

In 2019, Plumas County experienced the first of several intentional electrical power shutoffs, known as public safety power shutoff (PSPS) events. Parts of Plumas County were affected along with over 30 other northern California counties. PSPS events are preemptive attempts to prevent electrical equipment from sparking wildfires during strong, dry winds.



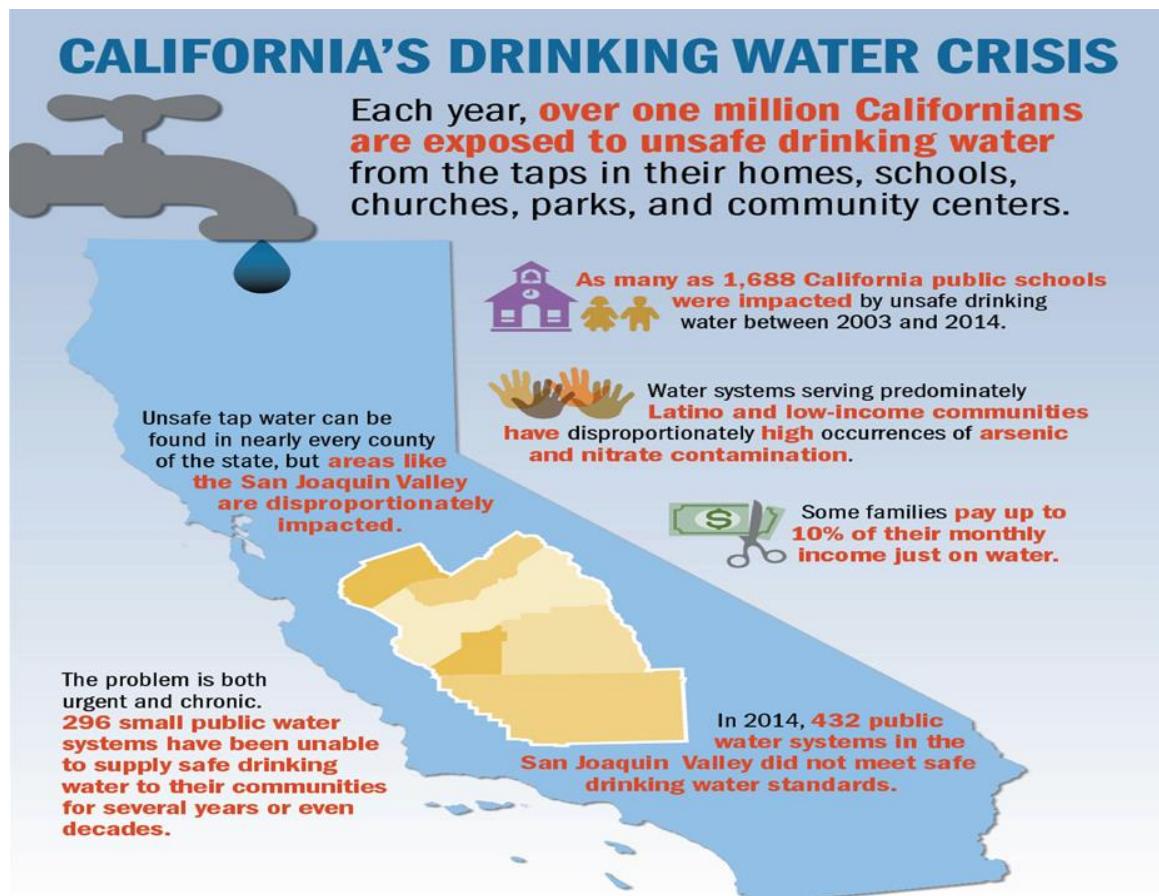
While Plumas County residents and businesses are no stranger to winter power outages, summertime PSPS events pose special challenges. For restaurants, it is much more difficult to maintain proper food temperatures during summer outages. For water suppliers that are reliant on pumps, filters, or other treatment works, it is critical to maintain drinking and firefighting water supplies either in gravity storage tanks or through locally generated power supplies. For the public, basic supplies such as food or fuel to power motor vehicles may not be available locally. For others, basic sanitation treatment or disposal may be dependent on electrical power.

PSPS events are just the latest reminder of the value and importance of local Environmental Health in emergency response operations. Whether it be fire debris removal, power outages, a boil water notice or any other disaster situation, ensuring the basic human needs of clean water, safe food, and basic sanitation are critical to containing an incident and helping the community recover more quickly. Environmental Health has completed an internal Continuity of Operations Plan which guides decisions during emergency events and helps ensure core Environmental Health functions are prioritized. We are taking inventory of food facility and water system power needs and capabilities, which will focus resources where they are needed and speed response to future emergencies. We also plan to take a lead role in the upcoming Hazard Mitigation planning effort. Together these efforts help to build a more prepared and resilient Plumas County.

## Drinking Water

Drinking water has been a hot topic in Sacramento for the past few years. Important legislation includes the Human Right to Water (2012), Sustainable Groundwater Management Act or SGMA (2014), Water System Consolidation and Anti-proliferation (2016), and Drought Contingency Planning (2018) to name just a few.

In 2019, the Governor signed California's Safe and Affordable Drinking Water Act. This legislation (SB 200) adds \$130 million annually for 11 years for public, state small, and domestic water system infrastructure, treatment, source development, consolidation, administration, operation and maintenance.



Environmental Health wants to be sure our local drinking water systems can compete for these funds. This means identifying systems in need of funding and working with state and non-profit partners to turn those needs into fundable projects. Also, policy discussions are underway to increase regulatory oversight such as monitoring, outreach and awareness of currently unregulated water systems like shared residential wells and rental housing. We plan to track the upcoming regulatory changes that SB 200 will bring, and we plan to work with water purveyors and the Integrated Regional Water Management process to help improve our local drinking water infrastructure in the coming years.

Environmental Health is also actively working with the California Conference of Directors of Environmental Health (CCDEH) and the Rural Counties of California (RCRC) to secure stable funding for the small public drinking water oversight regulatory program. As the statewide effort to fix aging infrastructure increases, so does the need for local assistance and outreach. To help fund these activities,

sustainable funding is needed. Last year's bill, SB 402, did not pass out of Senate Appropriations but a new bill with industry support will be reintroduced this year. If funded, this bill would directly fund some of Environmental Health's oversight responsibilities while allowing water systems to spend their limited funds on system improvements, not higher oversight fees.

### **Succession Planning**

Finally as briefly mentioned above, cross training and succession planning are critically important to the level, quality, and continuity of service provided by Environmental Health. We have been following a State-approved training plan to cross train 2 Hazardous Materials Specialists for work as Environmental Health Specialists. One individual recently completed more than 600 hours of training and will take the state registration exam this spring. The other will have the required 600 hours completed soon and plans to take the state exam in the fall. Cross training and registration provides job growth and a career ladder to help retain valuable employees. But more importantly, it provides maximum flexibility and efficiency for field staff to best serve the needs of the public.

As always, thanks to the Board of Supervisors, department staff, partner agencies and the public for a successful and productive 2019.



Jerry Sipe, Director  
Plumas County Environmental Health