HAZARDOUS MATERIALS COMMODITIES FLOW STUDY FOR PLUMAS COUNTY, CALIFORNIA

Plumas County Environmental Health

Tait Environmental Services, Inc.

July 2024

Primarily prepared and edited by

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In Cooperation with
Plumas County Environmental Health

The development of the 2024 Hazardous Materials Commodity Flow Study (CFS) for Plumas County was possible through the coordinated effort of the staff of Plumas County Environmental Health (PCEH). Information contained in this CFS was provided by PCEH or through referenced public domain sources. The PCEH has reviewed and accepted this CFS as complete. TAIT represents that the services were performed in a manner consistent with industry standards. No other warranty, either expressed or implied, is intended by TAIT.

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1.0 Introduction

Tait Environmental Services, Inc. (Tait) in coordination with Plumas County Environmental Health (PCEH) is pleased to submit this 2024 Hazardous Materials Commodities Flow Study (Flow Study) for Plumas County. Funding was provided by the U.S. Department of Transportation's Hazardous Materials Emergency Preparedness (HMEP) Grant administered by the California Office of Emergency Services (OES).

The purpose of the Flow Study was to identify the types and amounts of hazardous commodities transported through and adjacent to the specified geographic areas of Plumas County, as well as the routes on which they are transported. Chemicals transported have been identified specifically or by hazard class, as well as the types of vehicles used to transport them and the routes they take in and out of the County. This Flow Study also includes a section on Planning Needs Assessment, which is based on the conclusions of the Flow Study outlined herein.

Conducting an analysis of commodity flows is an important step in assessing transportation-related hazardous materials risks. Upon completion of the PCEH Flow Study, planners will have a better understanding of hazardous materials transportation patterns, and these data can be used to conduct planning and estimate risks facing the area. First responders can utilize this study as a guide to anticipate potential chemicals involved in a spill within specific areas of Plumas County. This study can be used to assess total truck traffic, daily and seasonal variations in traffic, awareness and training of emergency personnel/first responders in the area, and frequently used transportation routes. Information obtained from this Flow Study can be incorporated into a Community Risk Assessment for Hazardous Materials.

In 2009, Plumas County completed a commodity flow study, which is referenced as follows;

> Plumas County Environment Health, August 2009, Plumas County Hazardous Materials Emergency Preparedness (HMEP) Commodity Flow Study.

Some of the information used in the current commodity flow study will be utilized from the 2009 study. The 2009 study will be referenced as the "2009 CFS".

1.1 Areas of Focus

This Flow Study was undertaken for the PCEH and was focused on the various locations of potential hazardous materials transport within and adjacent to the County limits. The objective of the study was to identify the types and amounts of hazardous commodities transported along the major highways through specific areas of the County.

Areas of focus included a highway hazardous materials placard survey, data concerning use and transport of hazardous chemicals throughout the County. Plumas County contains main lines of both the Union Pacific (UP) and Burlington Northern Santa Fe railroads (BNSF). The two railroads currently transport hazardous chemicals through Plumas County, and available railroad data are included in this report. Additional data normally restricted to first responders and other authorized personnel is appended to this report.

1.2 Historical Background of Plumas County

Plumas County is located in the in northeastern California where the northern part of the Sierra Nevada Mountains and the southern part of the Cascade Mountains meet. (https://www.plumascounty.us/). The County covers 2,553 square miles and has a population of just under 22,000 people. The town of Quincy is the County of seat of Plumas County. California State Highways 70 and 89 traverse the County from northwest to southeast.

Plumas County was originally occupied by the indigenous Mountain Maidu (https://en.wikipedia.org/wiki/Plumas_County,_California). European American settlers entered the area in 1848, and the County was formed in 1854. The County was broken into Lassen and Plumas Counties in 1864, and subsequently Plumas County annexed part of Sierra County to the south.

The Western Pacific Railroad was constructed in 1910 and extended up the Feather River Canyon. This railroad, which is now owned by Union Pacific Railroad was built as a lower elevation alternative to the steep route over Donner Pass to the south. Today, the Burlington Northern and Santa Fe Railroad and Union Pacific Railroad traverse the County roughly parallel to Highways 70 and 89. The railroads in the County travel through numerous trestles and tunnels, with the most unique engineering feats visible at the Keddie Wye and the Williams Loop.

The County is home to the Sierra Pacific Industries lumber mill in Quincy, and government, ranching and tourism are also important industries within the County.

2.0 Highway Hazardous Materials Commodities Flow Study

In June 2024, information was gathered that identified the types and volumes of hazardous materials being transported on state highways within Plumas County. The highway commodities flow study was undertaken on June 11, 12, and 13, 2024. The locations of the placard study observation points reflected potential movement of hazardous materials into and out of Plumas County. The survey points were undertaken at the five (5) following locations:

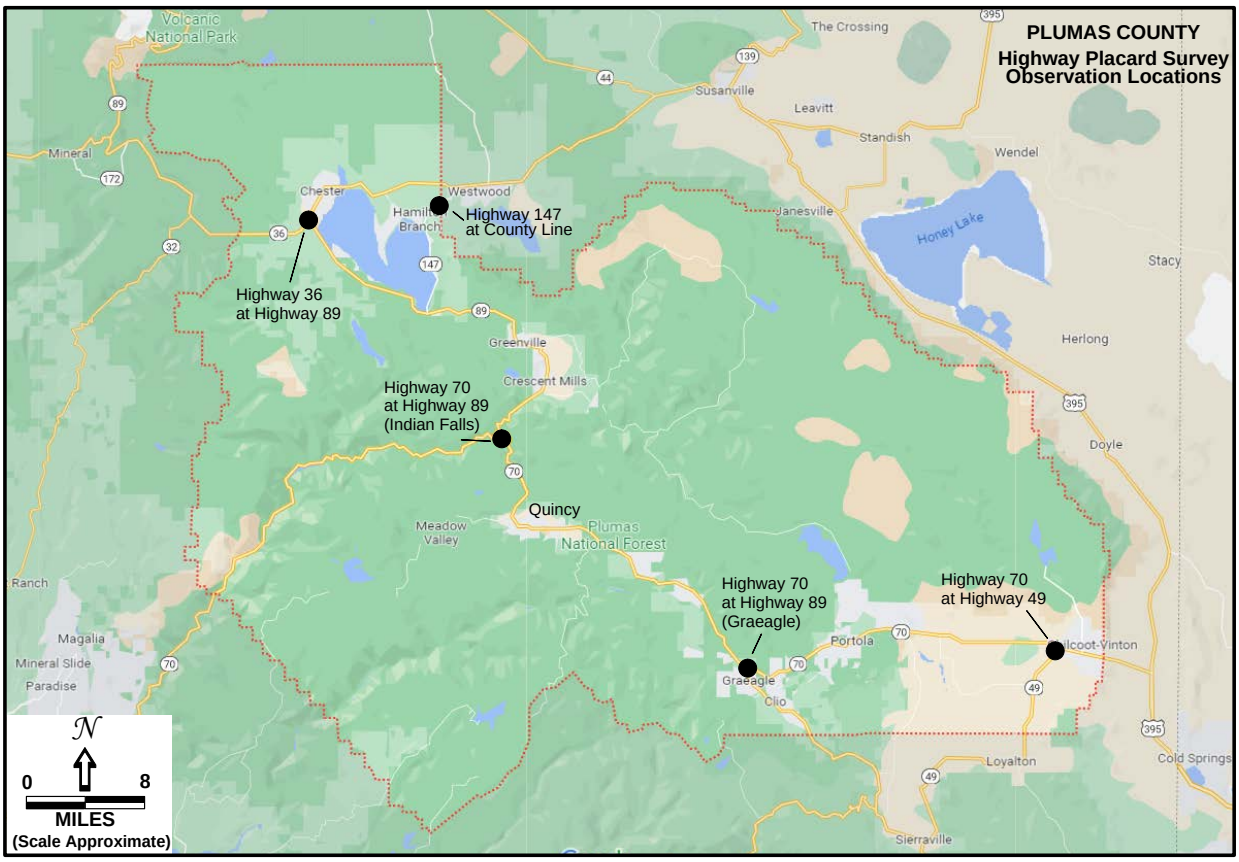
- Highway 36 at Highway 89
- Highway 70 at Highway 89 (Indian Falls)
- Highway 70 at Highway 89 (Graeagle)
- Highway 70 at Highway 49
- Highway 147 at County Line

Details of the placard survey dates and times are as follows:

Survey Date	Survey Location	Survey Time
06/11/2024	Highway 36 at Highway 89	9:00 am – 12:00 am, 1:00 pm – 4:00 pm
06/11/2024	Highway 70 at Highway 89 (Indian Falls)	9:00 am – 12:00 am, 1:00 pm – 4:00 pm
06/12/2024	Highway 70 at Highway 89 (Graeagle)	9:00 am – 12:00 am, 1:00 pm – 4:00 pm
06/12/2024	Highway 70 at Highway 49	9:00 am – 12:00 am, 1:00 pm – 4:00 pm
06/13/2024	Highway 147 at County Line	9:00 am – 12:00 am, 1:00 pm – 4:00 pm

It should be noted that these surveys were completed during the summer in Plumas County. Traffic closures along Interstate 80 over Donner Summit typically occur during the winter months. Resulting truck traffic may be diverted along Highway 70 in Plumas County and would flow through the City of Quincy. A traffic commodity flow survey is recommended during the time that Donner Summit is closed to determine the amount and types of hazardous materials flowing through the County during the closure. The survey could be undertaken in Quincy, where the speed of the trucks is reduced, and a more accurate truck and placard count could be completed.

The locations of the highway placard survey points are shown on the Plumas County Map below.



Locations of the highway placard survey points are shown on maps contained within each of the individual placard survey descriptions in Section 2.3 of this report. Each of the maps are overlain on Google Earth™ images contained within Google Maps.

2.1 Hazardous Commodities Placards

The following sections in this chapter detail the results of Plumas County highway placard survey. Hazardous commodities were identified by reference to the 2024 Emergency Response Guide (ERG) which was published by the U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA). The following information was gathered concerning hazardous commodities flowing through each of the survey observation points and is detailed below:

- Duration and time of day of placard survey.
- Total number of trucks travelling through the survey observation point.
- Total number of hazardous placarded trucks travelling through the survey observation point.
- Individual hazardous commodities, including the placard number, were determined where applicable. The placard number is the 4-digit United Nations

(UN) identification number for the specific hazardous commodity as stated in the ERG. In the list of hazardous materials in each section of the report, the placard number of each commodity is shown in parentheses [e.g. propane (1075)].

- Listing of vehicles containing multiple placards. For the purposes of this study, vehicles containing multiple placards are treated as one vehicle per placard with respect to the hazard classes and hazardous commodities (i.e. one vehicle with three placards will be treated as three separate vehicles).

- A pie chart showing the percentage of hazardous materials identified at each survey observation point, broken down by the U.S. Department of Transport Hazardous Materials Classification System (9 classes, including a designation for dangerous goods as outlined in the ERG). The hazard classes are as follows:

    - Dangerous Goods
    - Class 1: Explosives
    - Class 2: Gases
    - Class 3: Flammable/Combustible Liquids
    - Class 4: Flammable Solids
    - Class 5: Oxidizers and Organic Peroxides
    - Class 6: Toxic Substances
    - Class 7: Radioactive Materials
    - Class 8: Corrosive Substances
    - Class 9: Miscellaneous

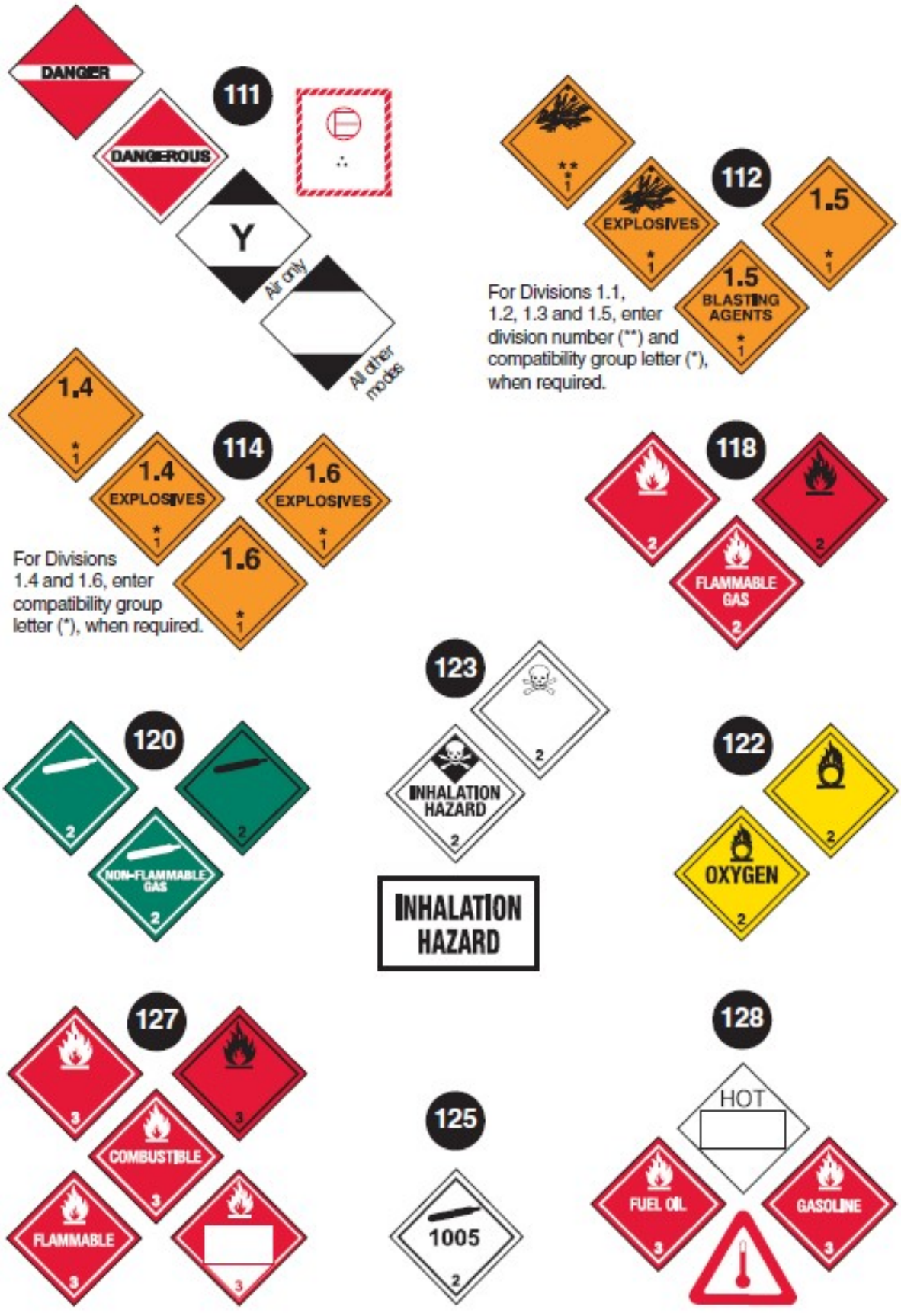
- A pie chart showing the percentage hazardous commodities identified at each survey observation point.

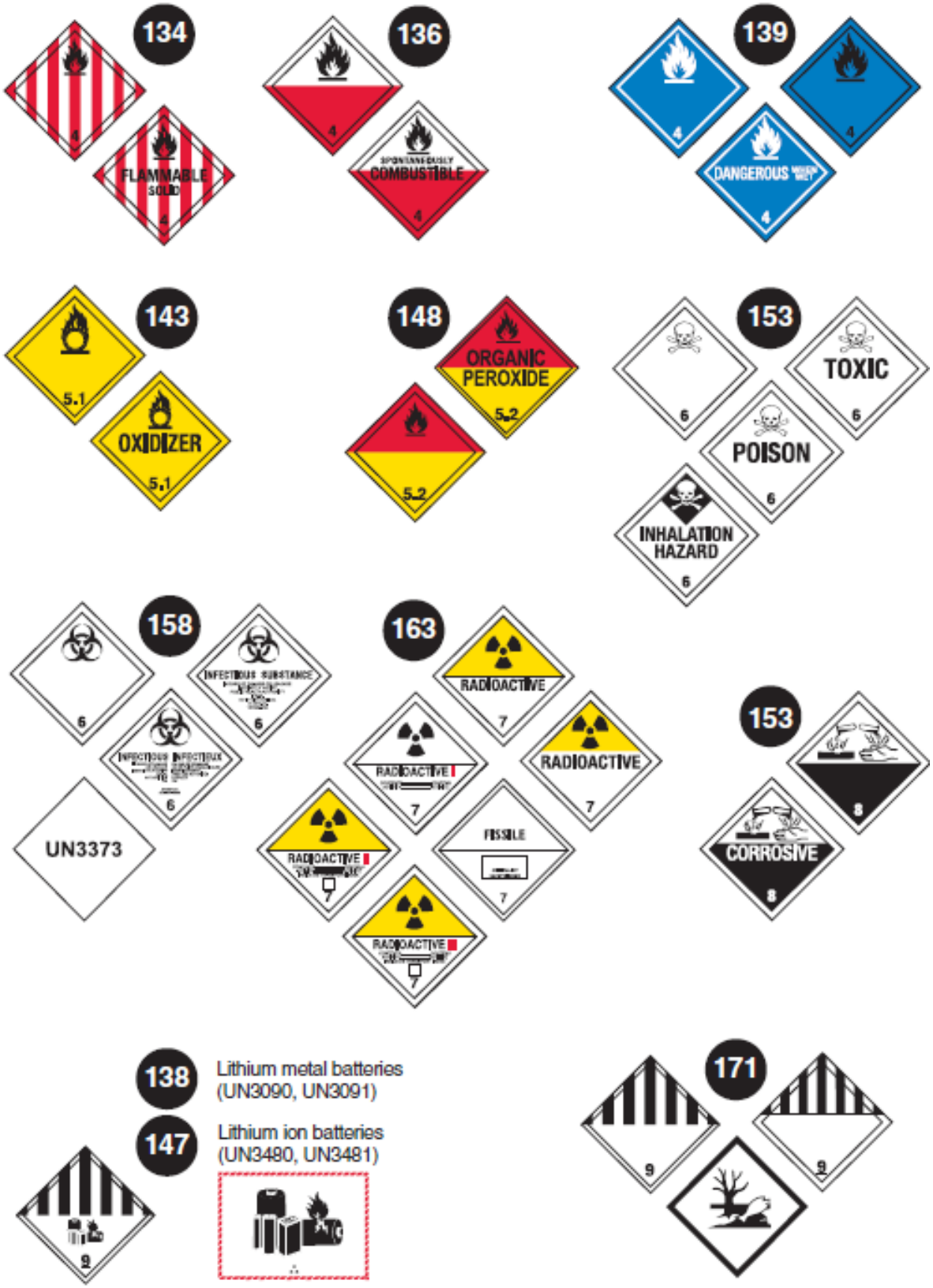
- Where the UN identification number was not present on the placard, a category of "not otherwise specified" (n.o.s.) has been made throughout this report, both on the charts and in the body of the report (e.g. corrosive n.o.s.). As defined in the ERG, the term n.o.s is used when the actual chemical name for the particular hazardous commodity is not listed in the regulations, and a generic name is used to describe it on the shipping papers. Under these circumstances the Hazard Class of the commodity was identified from the placard.

- The term "n.o.s." may also be used as a general category under a specific placard number as defined in the ERG (e.g. 1287, Alcohols n.o.s.).

A compilation of the highway placard survey data is listed on the table contained in Appendix A. Total truck counts and Hazmat truck counts are contained in Appendix B.

A visual listing of the highway placards, which was copied from the ERG (2024), is shown on the following pages.


DANGER
DANGEROUS
111
Y
Air only
All other modes
112
EXPLOSIVES
1.5
1.5
BLASTING AGENTS
For Divisions 1.1, 1.2, 1.3 and 1.5, enter division number (**) and compatibility group letter (*), when required.
1.4
114
1.4
EXPLOSIVES
1.6
EXPLOSIVES
1.6
For Divisions 1.4 and 1.6, enter compatibility group letter (*), when required.
118
FLAMMABLE GAS
120
NON-FLAMMABLE GAS
123
INHALATION HAZARD
INHALATION HAZARD
122
OXYGEN
127
COMBUSTIBLE
FLAMMABLE
125
1005
128
HOT
FUEL OIL
GASOLINE


134
FLAMMABLE SOLID
136
SPONTANEOUSLY COMBUSTIBLE
139
DANGEROUS WHEN WET
143
OXIDIZER
148
ORGANIC PEROXIDE
153
TOXIC
POISON
INHALATION HAZARD
158
INFECTIOUS SUBSTANCE
UN3373
163
RADIOACTIVE
FISSILE
153
CORROSIVE
138
Lithium metal batteries
(UN3090, UN3091)
147
Lithium ion batteries
(UN3480, UN3481)
171

2.2 Hazardous Cargo Vehicles

Highway trucks were identified according to the DOT Road Trailer Identification Chart, which is contained within the ERG (2024). The chart is shown below.

ROAD TRAILER IDENTIFICATION CHART

CAUTION: This chart depicts only the most general shapes of road trailers and cargo transport units. Emergency response personnel must be aware that there are many variations of road trailers, not illustrated below, that are used for shipping chemical products. Many intermodal tanks that transport liquids, solids, liquefied compressed gases, and refrigerated liquefied gases have similar silhouettes. The suggested guides are for the most hazardous products that may be transported in these trailer types.

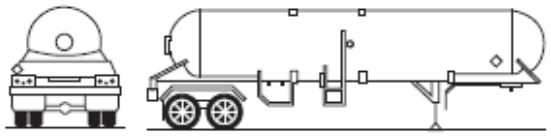
WARNING: Road trailers may be jacketed, the cross-section may look different than shown and external ring stiffeners would be invisible.

NOTE: An emergency shut-off valve is commonly found at the front of the tank, near the driver door.

The recommended guides should be considered as last resort if the material cannot be identified by any other means.

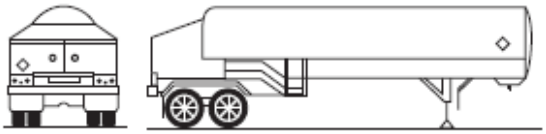
MAWP: Maximum Allowable Working Pressure.

117 MC331, TC331, SCT331



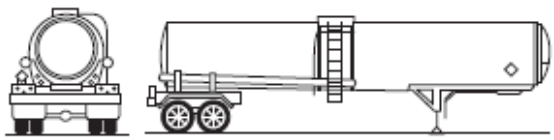
- For liquefied compressed gases (e.g., LPG, ammonia)
- Rounded heads
- Design pressure between 100-500 psi
- Different configurations exist

117 MC338, TC338, SCT338, TC341, CGA341



- For refrigerated liquefied gases (cryogenic liquids)
- Similar to a "giant thermo-bottle"
- Fittings compartment located in a cabinet at the rear of the tank
- MAWP between 25-500 psi

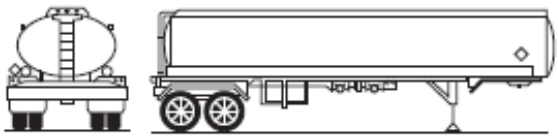
137 DOT407, TC407, SCT307, MC307, TC307



- For toxic, corrosive, and flammable liquids
- Circular cross-section
- May have external ring stiffeners
- MAWP of at least 25 psi

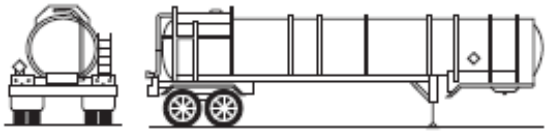
ROAD TRAILER IDENTIFICATION CHART

131 DOT406, TC406, SCT306/406, MC306, TC306



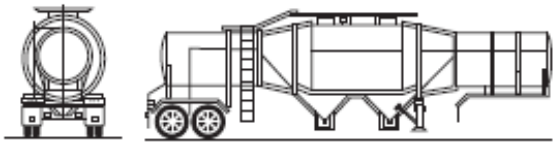
- For flammable liquids (e.g., gasoline, diesel)
- Elliptical cross-section
- Rollover protection at the top
- Bottom outlet valves
- MAWP between 3-5 psi (US + Mexico: MC306, DOT406, SCT306/406)
- MAWP between 3-15 psi (Canada: TC306/406)

137 DOT412, TC412, SCT312, MC312, TC312



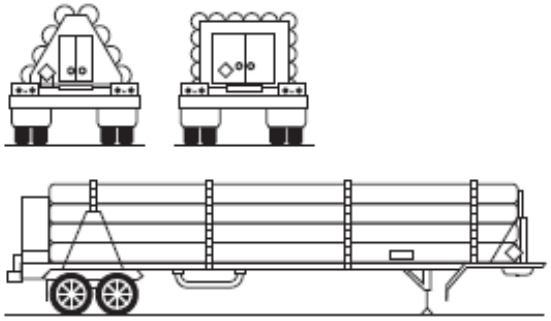
- Usually for corrosive liquids
- Circular cross-section
- External ring stiffeners
- Tank diameter is relatively small
- MAWP of at least 15 psi

112 TC423



- For emulsion and water-gel explosives
- Hopper-style configuration
- MAWP between 5-15 psi

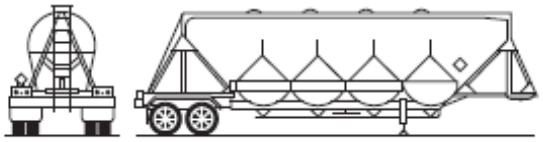
117 Compressed Gas/Tube Trailer



- For pressurized gases (e.g., air, helium, oxygen)
- Long horizontal tubes permanently mounted on a trailer
- Filling and discharge manifold typically located at the rear of trailer

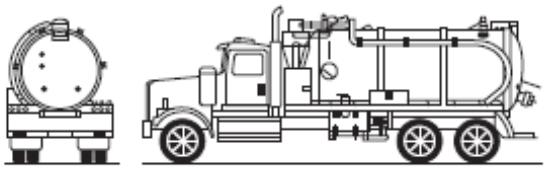
ROAD TRAILER IDENTIFICATION CHART

134 Dry Bulk Cargo Trailer



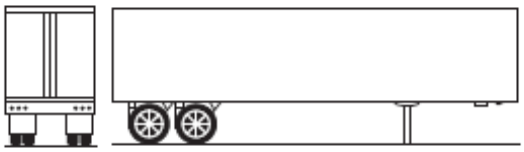
- For dry bulk cargo (e.g., oxidizers, corrosive solids, cement, plastic pellets, fertilizers)
- Also known as hopper tanks or hopper trailers
- Shape can vary but always contains one or more cone shaped bins

137 Vacuum Tanker



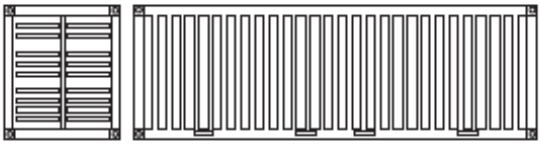
- For cleanup of chemical/oil spills or for hauling crude oil, water
- Large hinged rear door used for dumping

111 Mixed Cargo

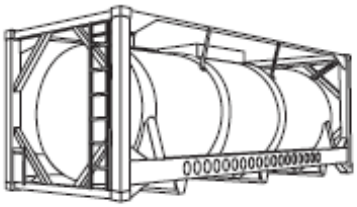


- For general freight that carry bulk or non-bulk packages
- May transport hazardous materials/ dangerous goods in small packages (e.g., bags, boxes, drums) or intermediate bulk containers (IBCs), sometimes referred to as "totes"
- Cargo door(s) in the rear

111 Intermodal Freight Container



117 Intermodal Tank



- For liquefied compressed gases, refrigerated liquefied gases, solids and liquids
- Working pressure may range from 20 to 500 psi
- Tank capacity can range from 50 to 12,000 gallons (200 to 45,000 L), and tank dimensions may vary

In addition to the vehicles shown in the chart above, there are several other types of vehicles that can be used to transport hazardous materials. These vehicles include local delivery trucks, utility vehicles, and construction vehicles. Local delivery trucks is a

generalized term used to cover vehicles that are variable in size, commonly are single-axle, and are not generally used for long-distance trucking like the semi-truck trailer mixed cargo vehicles shown above. Utility vehicles are variable primarily in design and configuration, and they are often outfitted for specific tasks. Construction vehicles vary in size and may consist of end dumps, concrete trucks, dump trucks, etc. Examples of these vehicles are shown below. Trucks classified as "Other" vehicles may include, but not limited to, delivery vans, trailers pulled by pick-up trucks, or trash trucks. In addition to these vehicles, a significant number of logging trucks were travelling on the highways of Plumas County.

Local Delivery Vehicle

Utility Vehicle

Construction Vehicle

Trash Vehicle (Other)

Delivery Van (Other)

Logging Truck

2.3 Highways and Roadways

Placard Surveys were performed on California State Highways within the Plumas County limits. These surveys were completed to determine patterns of transport of hazardous materials through different parts of the County. Survey points were located at highway junctions, to better obtain useful information of the direction of the commercial traffic flow throughout the County. Traffic observations and compilations at each survey point were conducted over a period of 6 hours.

A compilation of the highway placard survey data is listed on the table contained in Appendix A. Total truck counts and hazmat truck counts, including the truck classifications are contained in Appendix B. Approximately 5% of the truck traffic through the County during the survey was placarded with hazardous materials.

2.3.1 Highway 36 at Highway 89

One 6-hour placard survey was performed at the 3-way intersection of Highway 36 and Highway 89 in northern Plumas County. This location is located southwest of the community of Chester and west of Lake Almanor.

The survey was completed on June 11, 2024, between 9:00 am and 12:00 pm and 1:00 pm and 4:00 pm. A total truck count was completed, and 194 trucks moved through the intersection during the survey. The numbers and types of vehicles carrying hazardous materials through the survey location and the placard designation were also noted. The source and destination of the vehicles were noted.

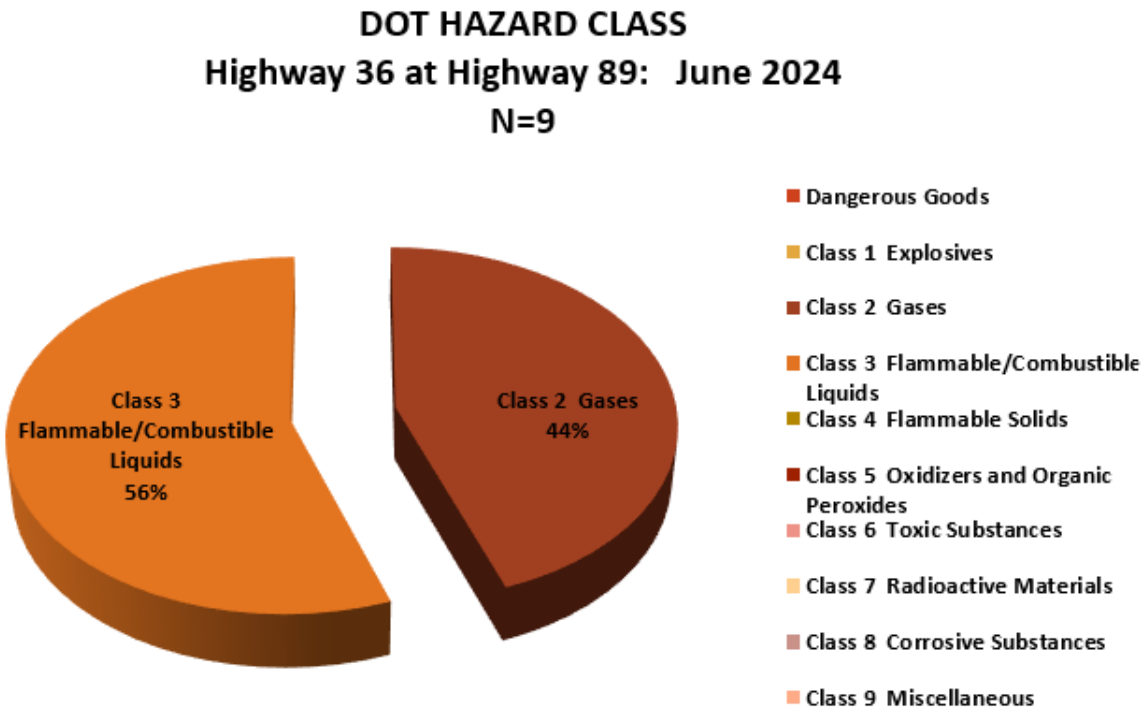
The three major truck categories observed consisted of logging trucks (47), semi-truck trailers (33), and construction vehicles (31). Other vehicles noted included dry bulk cargo vehicles, local delivery vehicles, utility vehicles, other vehicles, and tanker trucks. Eight

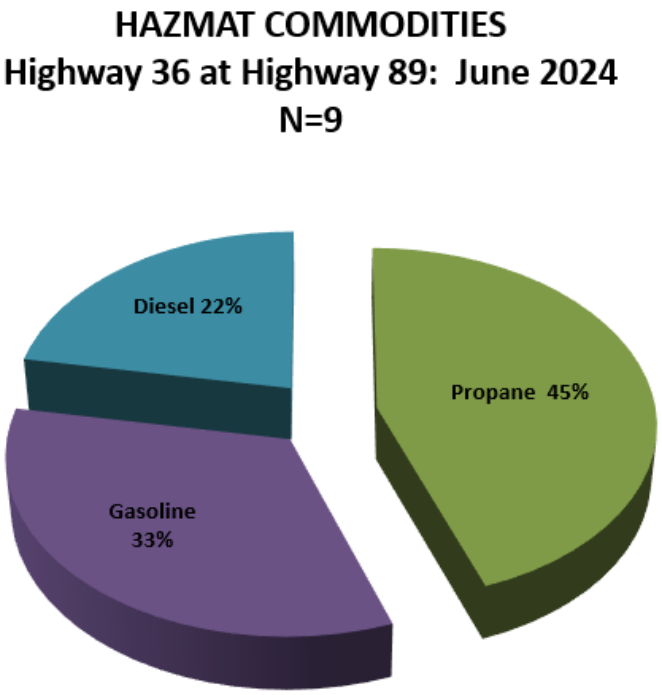
tanker trucks were noted in the intersection. The tanker trucks were the only vehicles observed to be hauling hazardous materials.

Nine vehicles were placarded, and 185 were not placarded. Hazardous materials included:

- Propane (1075): 4 trucks (high-pressure tanker)
- Gasoline (1203): 3 trucks (non-pressure tanker)
- Diesel (1993): 2 trucks (non-pressure tanker)

It should be noted that a large double tanker was carrying both diesel and gasoline in the separate tankers. This vehicle was classified as two vehicles for the purposes of this survey. A graphic presentation of hazardous materials travelling through this area during the survey is shown in the charts below.



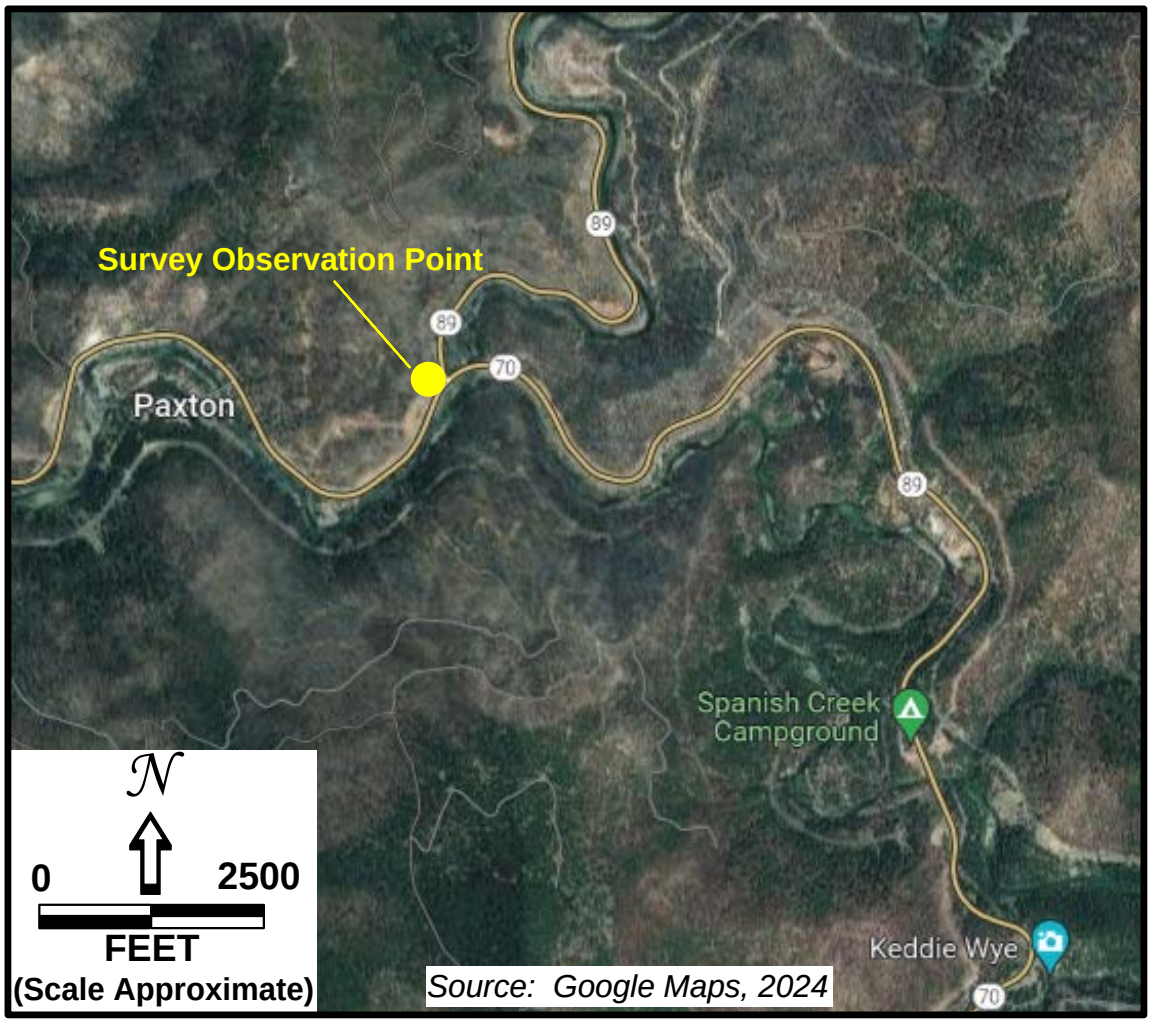


Vehicle source and destination directions are generally equal in all three directions, with the exception of logging trucks. Full logging trucks were directed primarily south along Highway 89 to Quincy, where a large Sierra Pacific lumber mill is located. Some of the full logging trucks were directed east along Highway 36 to Chester where the Collins Pine Company sawmill is located. Empty logging trucks were travelling in the opposite direction. Photographs of the trucks travelling through the intersection are shown below.

It was noted in the 2009 CFS, that fuel trucks at this location were often designated as "pass through" loads with a Lassen County destination.

2.3.2 Highway 70 at Highway 89 (Indian Falls)

One 6-hour placard survey was performed at the 3-way intersection of Highway 70 and Highway 89 in north-central Plumas County. Highway 70 is the main transportation corridor from Plumas County west to Oroville in the Central Valley. During the survey, there was a significant amount of road construction occurring in the area of the survey observation point as well as along Highway 70 to the west. Traffic stoppages were consistent throughout the survey time.



The survey was completed on June 11, 2024, between 9:00 am and 12:00 pm and 1:00 pm and 4:00 pm. A total truck count was completed, and 249 trucks moved through the intersection during the survey. The numbers and types of vehicles carrying hazardous materials through the survey location and the placard designation were also noted. The source and destination of the vehicles were noted.

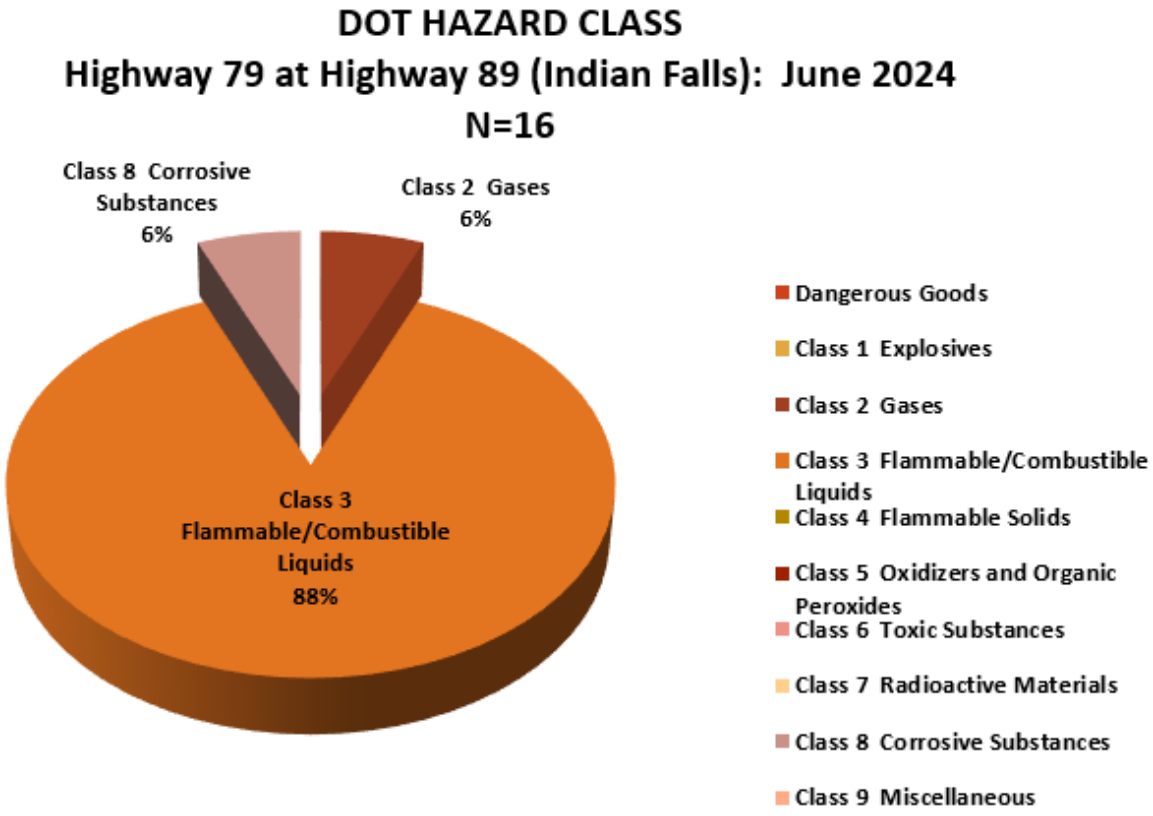
The three major truck categories observed consisted of construction vehicles (64), logging trucks (53), and semi-truck trailers (38). Other vehicles noted included dry bulk cargo vehicles, local delivery vehicles, utility vehicles, other vehicles, and tanker trucks. Sixteen

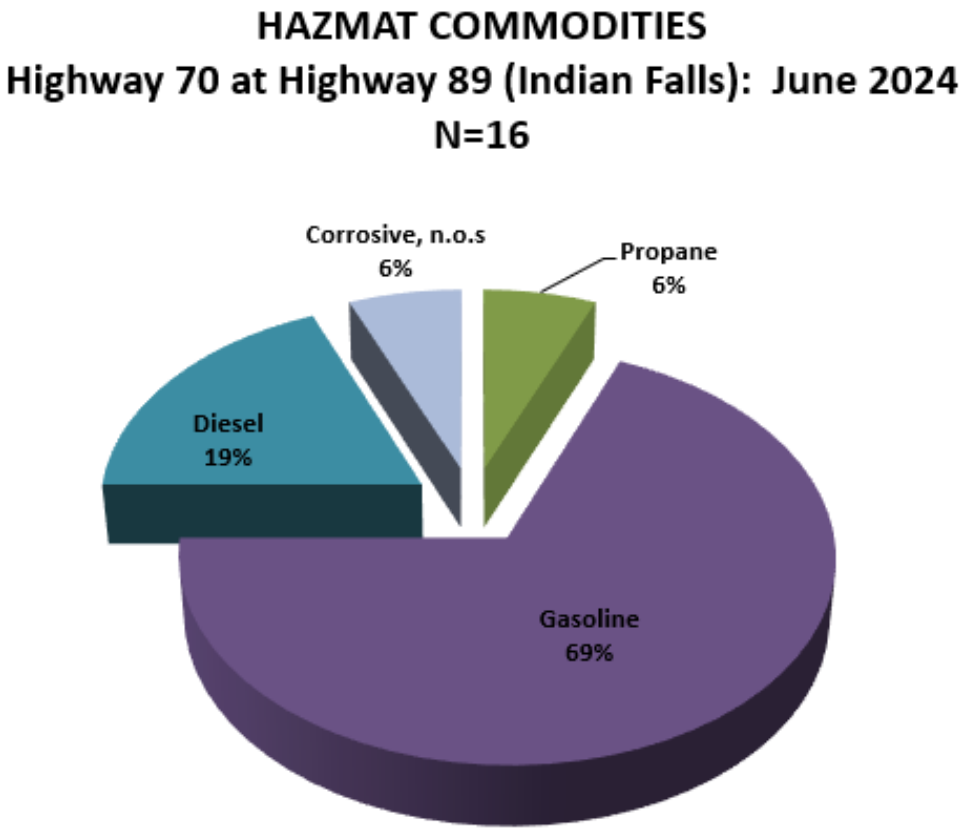
tanker trucks were noted travelling through the intersection. Fourteen of the tanker trucks were placarded with hazardous materials, and two trucks were not placarded. Tanker trucks included both smaller local tankers and larger tanker trucks. In addition, a semi-truck trailer was placarded indicating the transport of hazardous materials.

Sixteen vehicles were placarded, and 233 were not placarded. Hazardous materials included:

- Propane (1075): 1 truck (high-pressure tanker)
- Gasoline (1203): 4 trucks (non-pressure tanker)
- Diesel (1993): 10 trucks (non-pressure tanker)
- Corrosive materials n.o.s: 1 truck (semi-truck trailer)

A graphic presentation of hazardous materials travelling through this area during the survey is shown in the charts below.





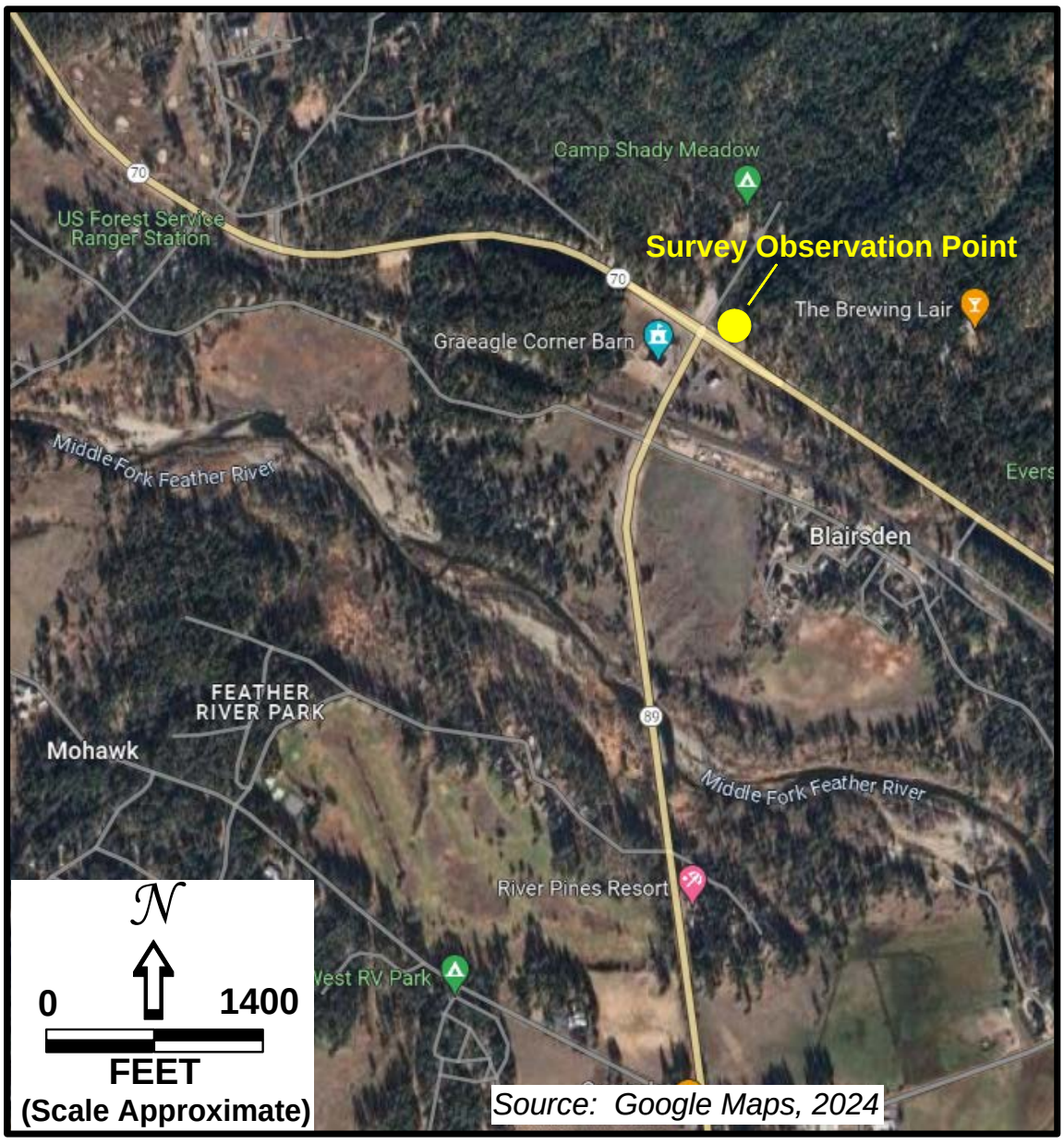
Vehicle source and destination directions are generally equal in all three directions, with the following exceptions:

- Full logging trucks were directed east to Quincy, where a large Sierra Pacific lumber mill is located. Most of the logging trucks originated from the north along Highway 89. Empty logging trucks were travelling in the opposite direction.
- The bulk of the tanker trucks were observed travelling westbound on Highway 70 early in the survey. The fuel tanker trucks were noted travelling eastbound on Highway 70 during the latter part of the survey. It was noted in the 2009 CFS that the tankers were travelling to a bulk storage facility in Butte County and returning to Plumas County filled with fuel.

Photographs of the trucks travelling through the intersection are shown below.

2.3.3 Highway 70 at Highway 89 (Graeagle)

One 6-hour placard survey was performed at the 3-way intersection of Highway 70 and Highway 89 at Graeagle and Blairsden in southeastern Plumas County. Highway 89 is the main transportation corridor from Plumas County south to Interstate 80 at Truckee.



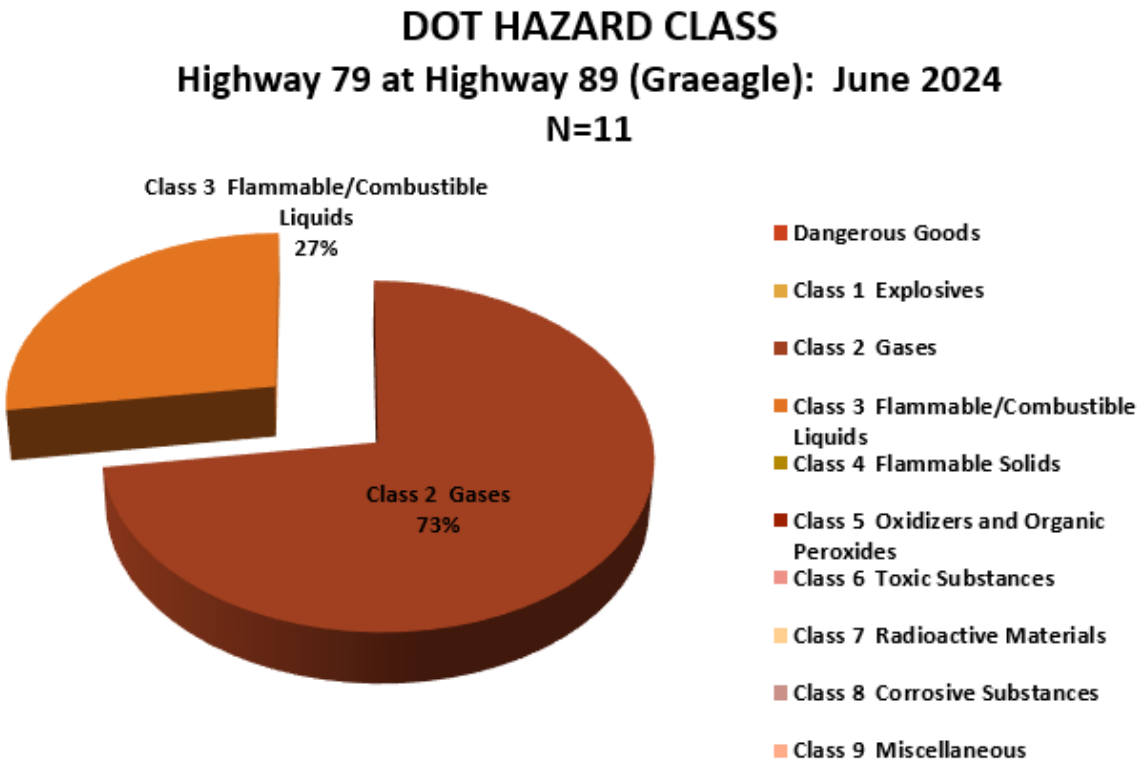
The survey was completed on June 12, 2024, between 9:00 am and 12:00 pm and 1:00 pm and 4:00 pm. A total truck count was completed, and 249 trucks moved through the intersection during the survey. The numbers and types of vehicles carrying hazardous materials through the survey location and the placard designation were also noted. The source and destination of the vehicles were noted.

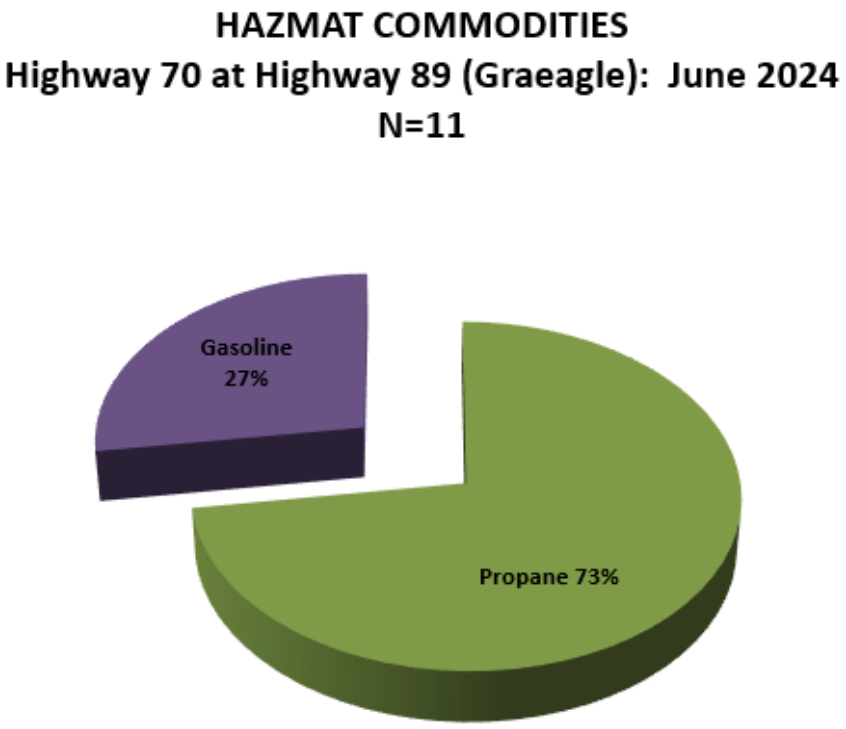
The three major truck categories observed consisted of utility vehicles (77), semi-truck trailers (49), and logging trucks (43). Other vehicles noted included dry bulk cargo vehicles, local delivery vehicles, construction vehicles, other vehicles, and tanker trucks. Twelve tanker trucks were noted travelling through the intersection. Eleven of the tanker trucks were placarded with hazardous materials, and one truck was not placarded. Tanker trucks included both smaller local tankers and larger tanker trucks.

Eleven vehicles were placarded, and 238 were not placarded. Hazardous materials included:

- Propane (1075): 8 trucks (high-pressure tanker)
- Gasoline (1203): 3 trucks (non-pressure tanker)

A graphic presentation of hazardous materials travelling through this area during the survey is shown in the charts below.





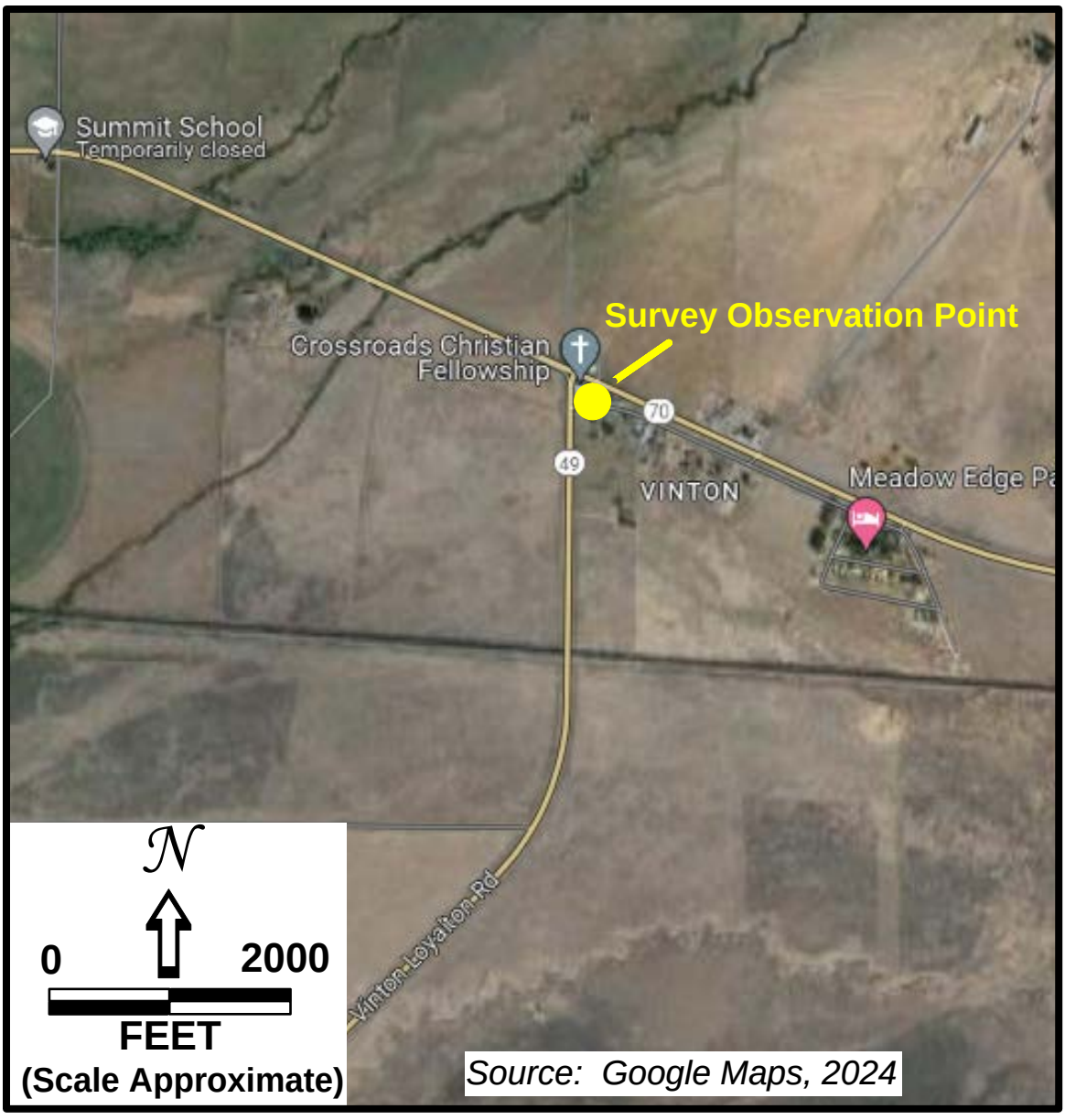
Vehicle source and destination directions are generally equal in all three directions, with the exception of logging trucks. Full logging trucks were directed west to Quincy, where a large Sierra Pacific lumber mill is located. Empty logging trucks were travelling in the opposite direction. Photographs of the trucks travelling through the intersection are shown below.


AmeriGas


ACE
The helpful place.
www.acehardware.com

2.3.4 Highway 70 at Highway 49

One 6-hour placard survey was performed at the 3-way intersection of Highway 70 and Highway 49 at Vinton in southeastern Plumas County. Highway 70 proceeds east from here where it intersects with U.S. Highway 395 in Lassen County enroute to Reno, Nevada.



The survey was completed on June 12, 2024, between 9:00 am and 12:00 pm and 1:00 pm and 4:00 pm. A total truck count was completed, and 126 trucks moved through the intersection during the survey. The numbers and types of vehicles carrying hazardous materials through the survey location and the placard designation were also noted. The source and destination of the vehicles were noted.

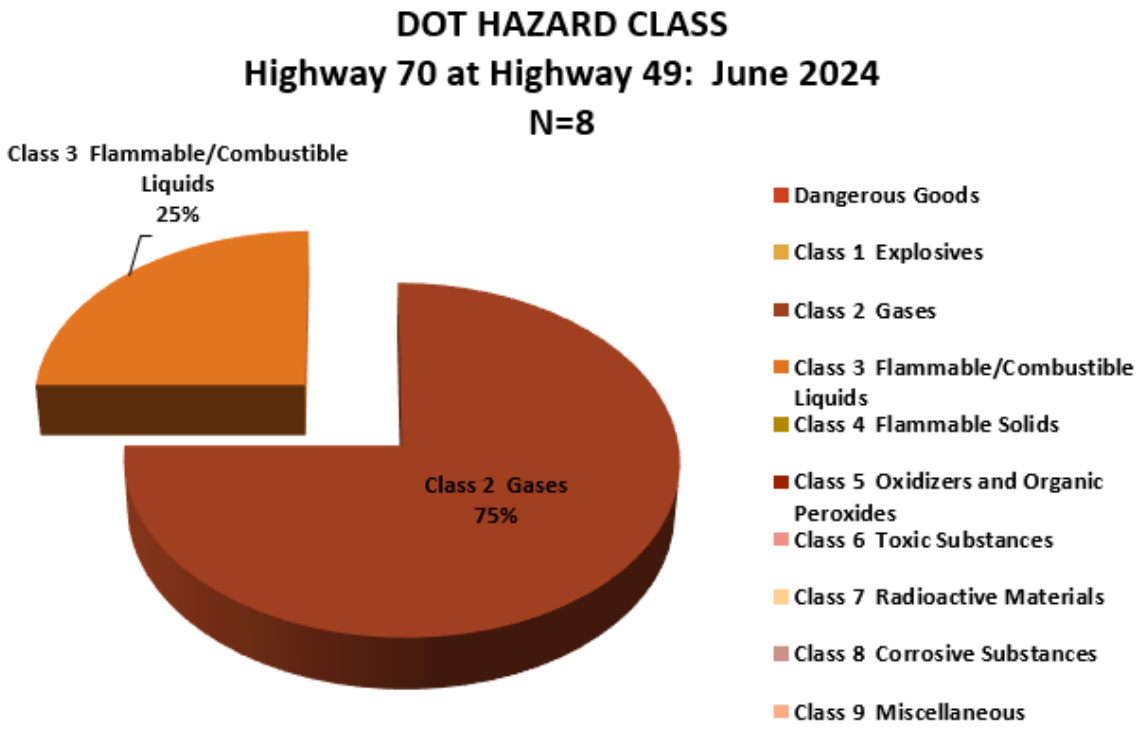
The three major truck categories observed consisted of semi-truck trailers (36), other vehicles (20), and local delivery vehicles (19). Other vehicles noted included dry bulk cargo vehicles, logging trucks, construction vehicles utility vehicles, and tanker trucks.

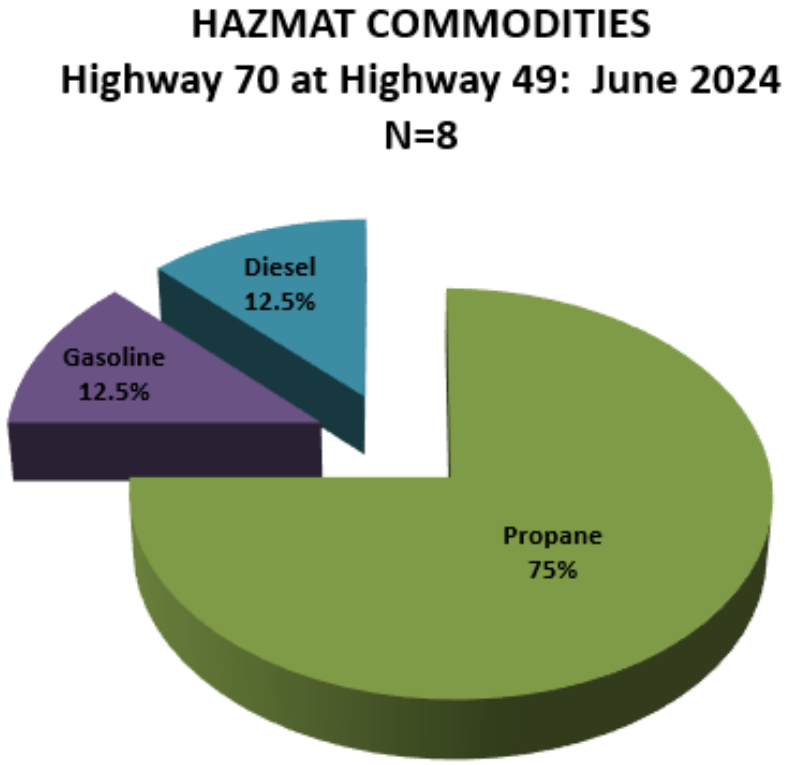
Nine tanker trucks were noted travelling through the intersection. Eight of the tanker trucks were placarded with hazardous materials, and one truck was not placarded. Tanker trucks included both smaller local tankers and larger tanker trucks.

Eight vehicles were placarded, and 118 were not placarded. Hazardous materials included:

- Propane (1075): 6 trucks (high-pressure tanker)
- Gasoline (1203): 1 truck (non-pressure tanker)
- Diesel (1993): 1 truck (non-pressure tanker)

A graphic presentation of hazardous materials travelling through this area during the survey is shown in the charts below.





Vehicle source and destination directions are generally equal in all three directions, with the exception of logging trucks. Full logging trucks were directed west to Quincy, where a large Sierra Pacific lumber mill is located. Empty logging trucks were travelling in the opposite direction. Photographs of the trucks travelling through the intersection are shown below.


HIGH SIERRA
GAS

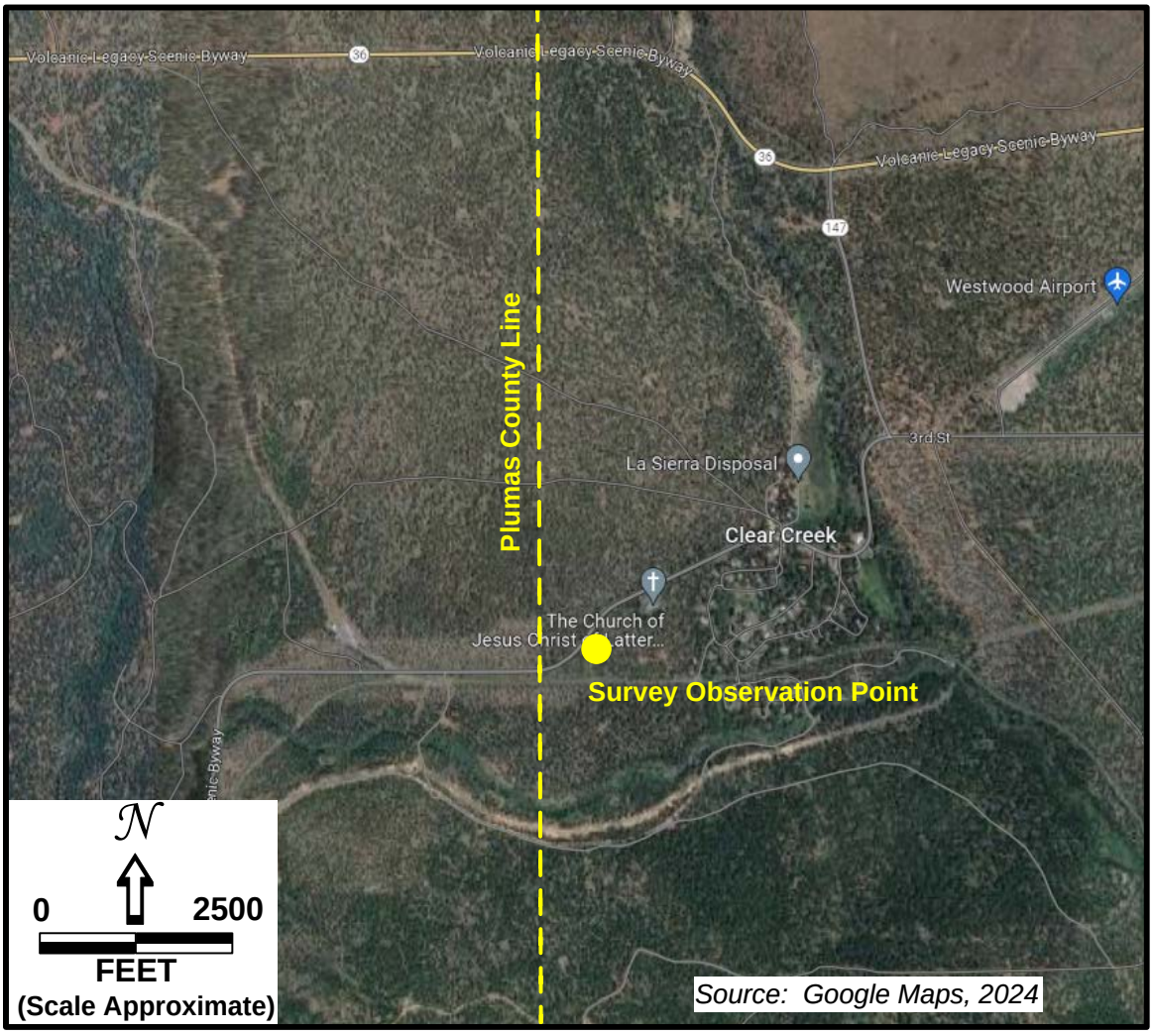

1203


1993


ODORIZED GAS
1075
PROPANE

2.3.5 Highway 147 at County Line

One 6-hour placard survey was performed at the County Line along secondary Highway 147 in northern Plumas County north of Lake Almanor.



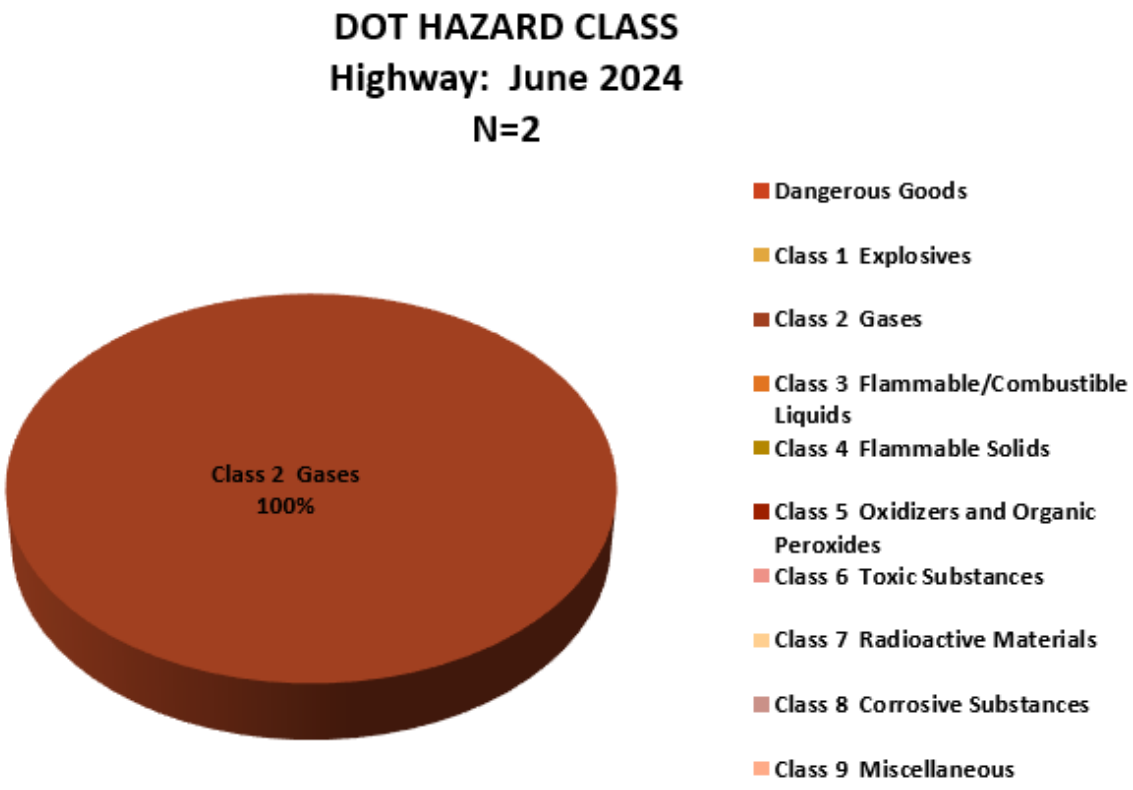
The survey was completed on June 13, 2024, between 9:00 am and 12:00 pm and 1:00 pm and 4:00 pm. A total truck count was completed, and 113 trucks moved through the intersection during the survey. The numbers and types of vehicles carrying hazardous materials through the survey location and the placard designation were also noted. The source and destination of the vehicles were noted.

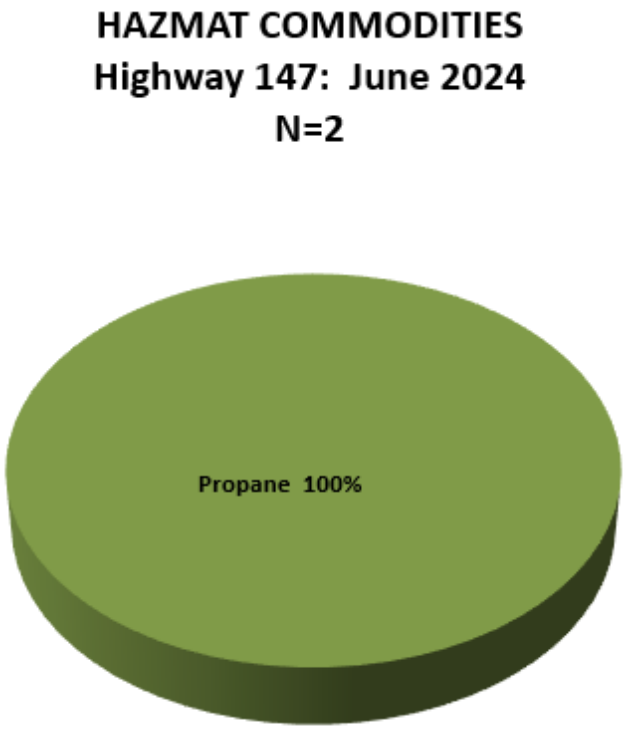
The three major truck categories observed consisted of construction vehicles (40), logging trucks (21), and semi-truck trailers (14). Other vehicles noted included local delivery vehicles, utility vehicles, other vehicles, and tanker trucks. One tanker truck was observed travelling through the survey point. The tanker truck was placarded with hazardous materials. In addition, one local delivery truck was placarded with propane and was carrying Blue Rhino propane tanks.

Two vehicles were placarded, and 118 were not placarded. Hazardous materials included:

- Propane (1075): 1 truck (high-pressure tanker)
- Propane (1075): 1 truck (Local delivery vehicle)

A graphic presentation of hazardous materials travelling through this area during the survey is shown in the charts below.





Vehicle source and destination directions are generally equal in both directions, with the exception of logging trucks. Full logging trucks were directed south and east to Quincy, where a large Sierra Pacific lumber mill is located. Empty logging trucks were travelling in the opposite direction. Photographs of the trucks travelling through the intersection are shown below.

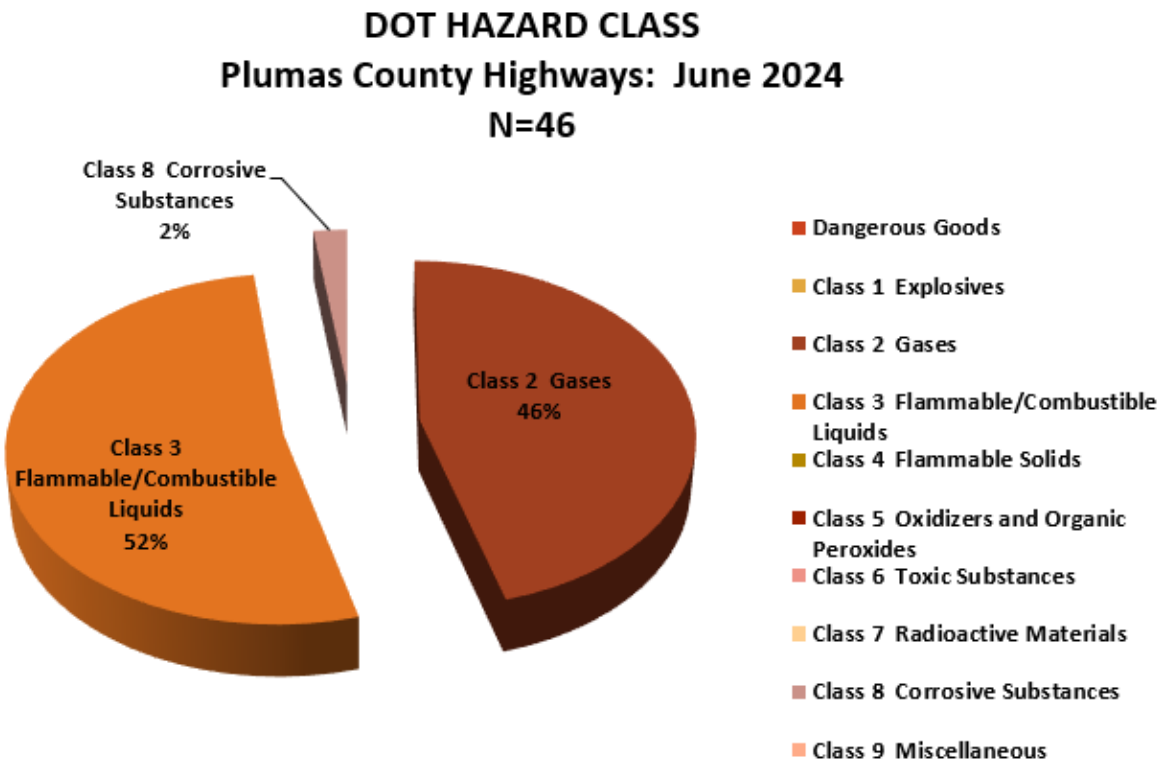

1-800-PROPANE
Suburban Propane

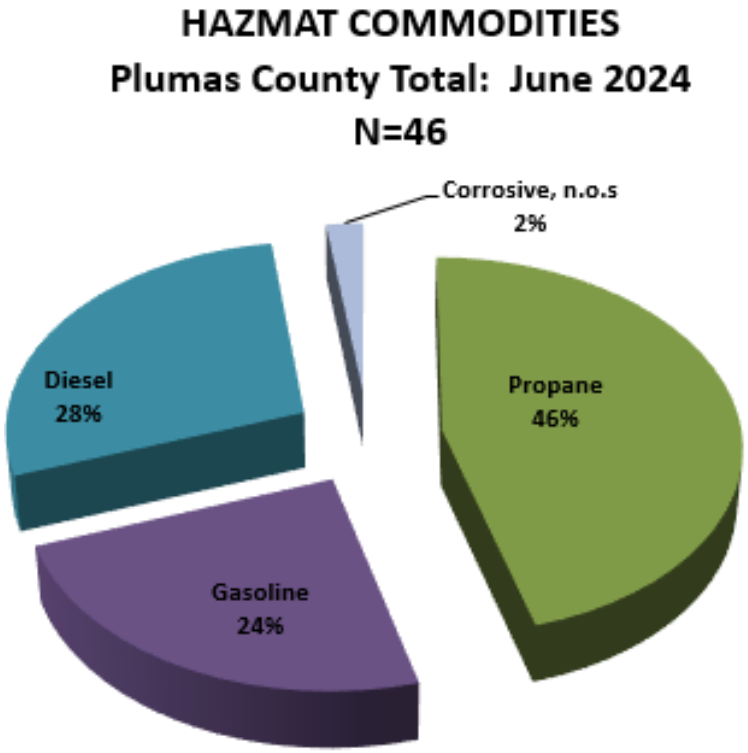

PAR
WEST

2.3.6 Highways and Roadways Summary

An evaluation of the hazardous materials transportation along the highways and roadways within Plumas County is provided based on the information contained above in Sections 2.3.1 through 2.3.5. A total of 931 trucks travelled through these observation points during the survey, and 45 of the vehicles were placarded with hazardous materials.

A summary of the general categories of hazardous materials travelling along the highways and roadways of Plumas County during the survey are shown in the charts below.



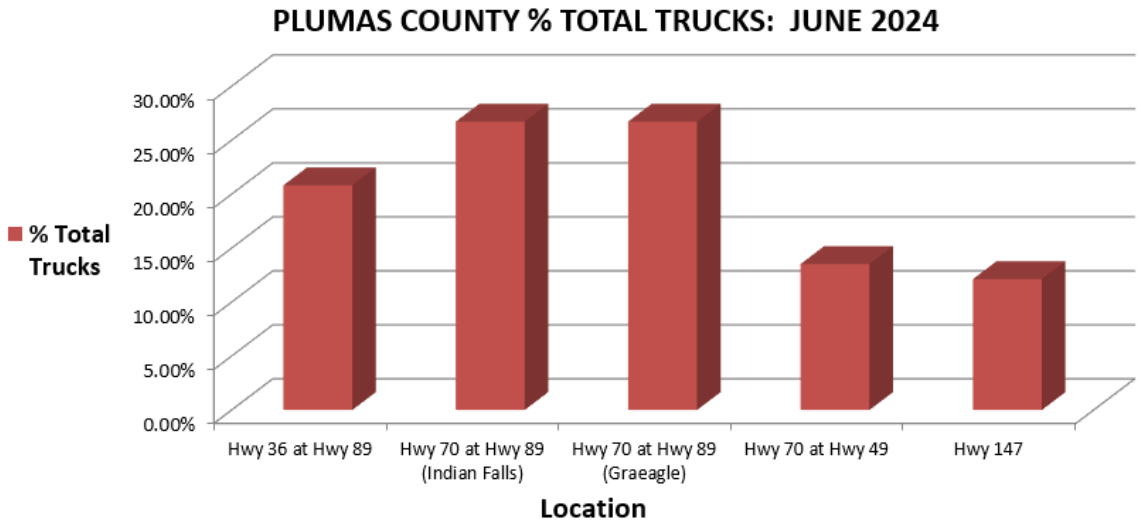


2.4 Traffic Patterns

Total truck traffic patterns were determined from the survey data obtained from each of the highway placard survey observation points. These data are discussed in the following sections from both a total truck standpoint and a hazardous cargo standpoint.

2.4.1 Total Truck Traffic Data

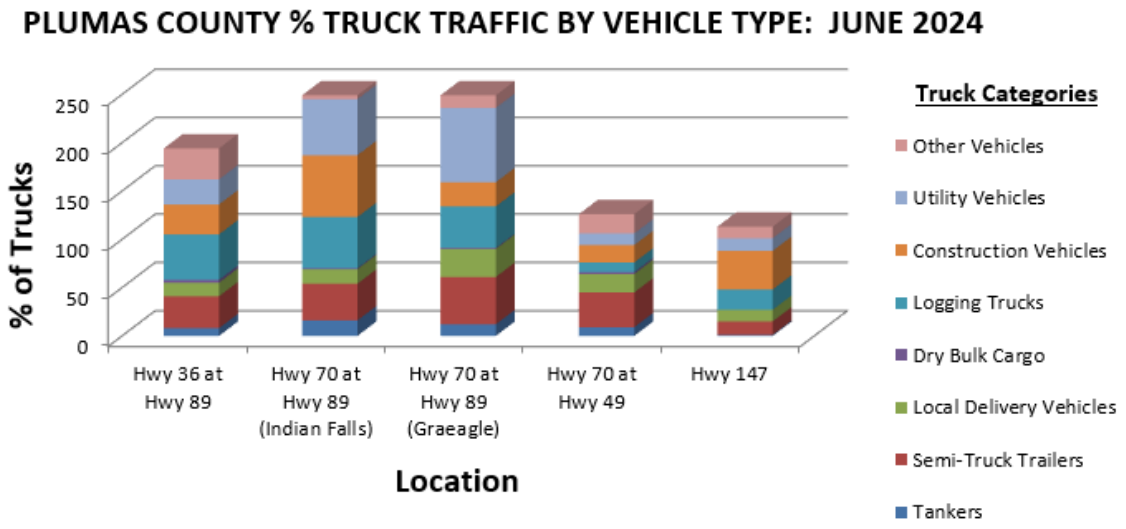
During the survey, most of the truck traffic (53%) was observed along the combined Highway 70 and Highway 89 corridor between Indian Falls and Graeagle. The amount of truck traffic was lighter in the eastern part of the County. A compilation of the truck traffic is shown in the following chart.



Trucks were categorized by the types of vehicles as discussed in Section 2.2. The truck type categories have been generalized as follows:

- Tankers (all types)
- Semi-Truck Trailers
- Local Delivery Vehicles
- Dry Bulk Cargo Carriers
- Logging Trucks
- Construction Vehicles
- Utility Vehicles
- Other Vehicles

A plot of the percentage of the truck types as a function of the total truck traffic at each of the survey locations is shown in the chart below.



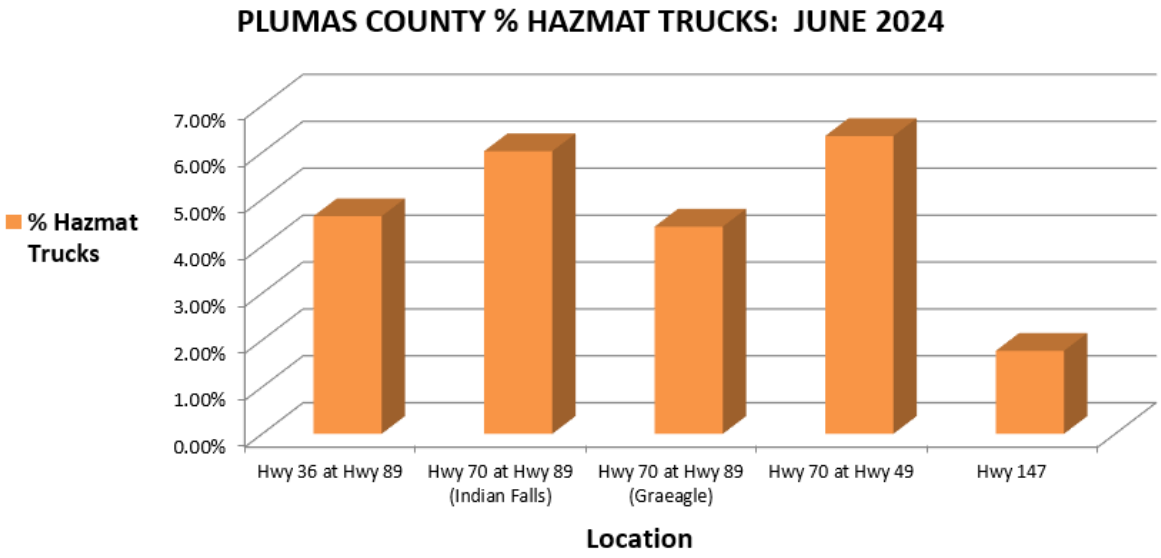
Total truck traffic as shown in the above chart can be summarized as follows:

- Truck traffic was heaviest along the Highway70-Highway 89 corridor.
- Construction and other vehicles were observed on all highways, were most numerous along the Highway 70-Highway 89 corridor, where most of the construction activity was occurring.
- Logging trucks were observed in all of the highways.
- Tanker traffic was noted in all of the survey points

2.4.2 Hazardous Materials Truck Traffic Data

Of the survey locations along the highways in Plumas County, the highest percentage rate of truck traffic containing hazardous cargo was noted at the Highway70-Highway 89 junction at Indian Falls and at the Highway 70-Highway 49 junction in the southeastern part of the County.

The movement of hazardous materials through Plumas County as a percentage of the total truck traffic is summarized in the following chart.


PLUMAS COUNTY % HAZMAT TRUCKS: JUNE 2024
% Hazmat Trucks
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
Hwy 36 at Hwy 89
Hwy 70 at Hwy 89 (Indian Falls)
Hwy 70 at Hwy 89 (Graeagle)
Hwy 70 at Hwy 49
Hwy 147
Location

3.0 Railroad Hazardous Materials Transportation

Railroad transportation within Plumas County occurs along two major rail lines. The Union Pacific Railroad (UP) main line runs adjacent to and parallel to Highway 70 and along Highway 89 in the central part of the County. The Burlington Northern and Santa Fe Railroad (BNSF) main line runs generally adjacent to and parallel to Highway 89 in the northern part of the County, and BNSF has track rights along the UP main line along Highway 70. The Quincy Railroad (QRR) operates a 3.27-mile spur line in Quincy that connects the Sierra Pacific lumber mill with the UP main line. A map showing the rail lines in Plumas County is shown below.

Information concerning the transportation of hazardous materials via rail is generally not available to the public. Its availability is restricted to first responders and other regulatory agencies that have a right to know. Commodity Flow Studies have been recently prepared by UP and BNSF for Plumas County, and they are contained in Appendix C, which is restricted to individuals authorized to view the data.

Some rail information was available in the 2009 CFS, and the following sections are quoted directly from that document.

> Union Pacific Railroad
> *"The Union Pacific rail line trends east and west across Plumas County and is known as the Feather River Route. It connects the Sacramento Valley to Northern Nevada. Although UPRR would not provide specific quantities of hazardous materials in transportation, Sandra Covi, Union Pacific Hazardous Materials Manager, was able to identify the most commonly transported hazardous materials. The top ten hazardous*

commodities transported through Plumas County, listed in alphabetical order, are:

- *Alcohols, N.O.S (not otherwise specified)*
- *Anhydrous Ammonia*
- *Elevated Temperature Liquid, N.O.S*
- *FAK (freight of all kinds) Hazardous*
- *Liquefied Petroleum Gas*
- *Molten Sulfur*
- *Phosphoric Acid Solution*
- *Refrigerated Liquid Carbon Dioxide*
- *Sodium Hydroxide Solution*
- *Sulfuric Acid"*

Burlington Northern and Santa Fe Railroad

"The primary Burlington Northern Santa Fe (BNSF) rail line trends north and south in Plumas County, starting near the town of Keddie. The BNSF route north from Keddie is known as the "High Line". BNSF currently has an agreement with Union Pacific to lease track time for all of UPRR rail lines in Plumas County. BNSF's highest traffic section of leased line is the Feather River Canyon Route, which connects to the High Line route near Keddie. According to Patrick Brady, BNSF Hazardous Materials Manager, the top ten hazardous commodities transported through Plumas County, also listed in alphabetical order, are as follows:

- *Alcohols N.O.S*
- *Anhydrous Ammonia*
- *Butane*
- *Chlorine*
- *Elevated Temperature Liquid, N.O.S*
- *Gasoline*
- *Hydrocarbons, Liquid N.O.S*
- *Liquefied Petroleum Gas*
- *Styrene Monomer, Stabilized*
- *Sulfuric Acid"*

General Railroad Information

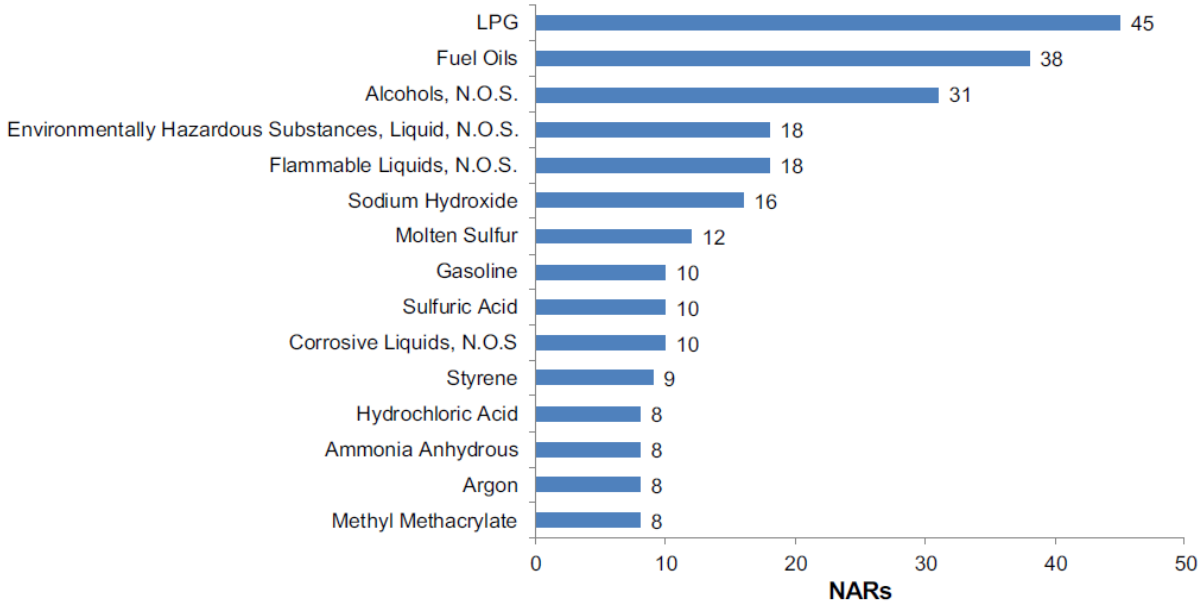
General transportation of hazardous materials by rail in the United States and Canada is presented in the following document:

Association of American Railroads, Bureau of Explosives, July 2020, Annual Report of Non-Accident Releases of Hazardous Materials Transported by Rail 2019. Available online at https://www.aar.org/wp-content/uploads/2021/02/BOE-19-2-2019-Annual-Leak-Report-2020-07-17-FINAL.pdf.

This document contains valuable data of a general nature concerning rail transport of hazardous materials throughout the United States and Canada for 2019. Exhibit 5 of this document, which

is shown below, lists the top-ranked commodities involved in tank car non-accident releases (NARs) in the U.S. and Canada in 2019.

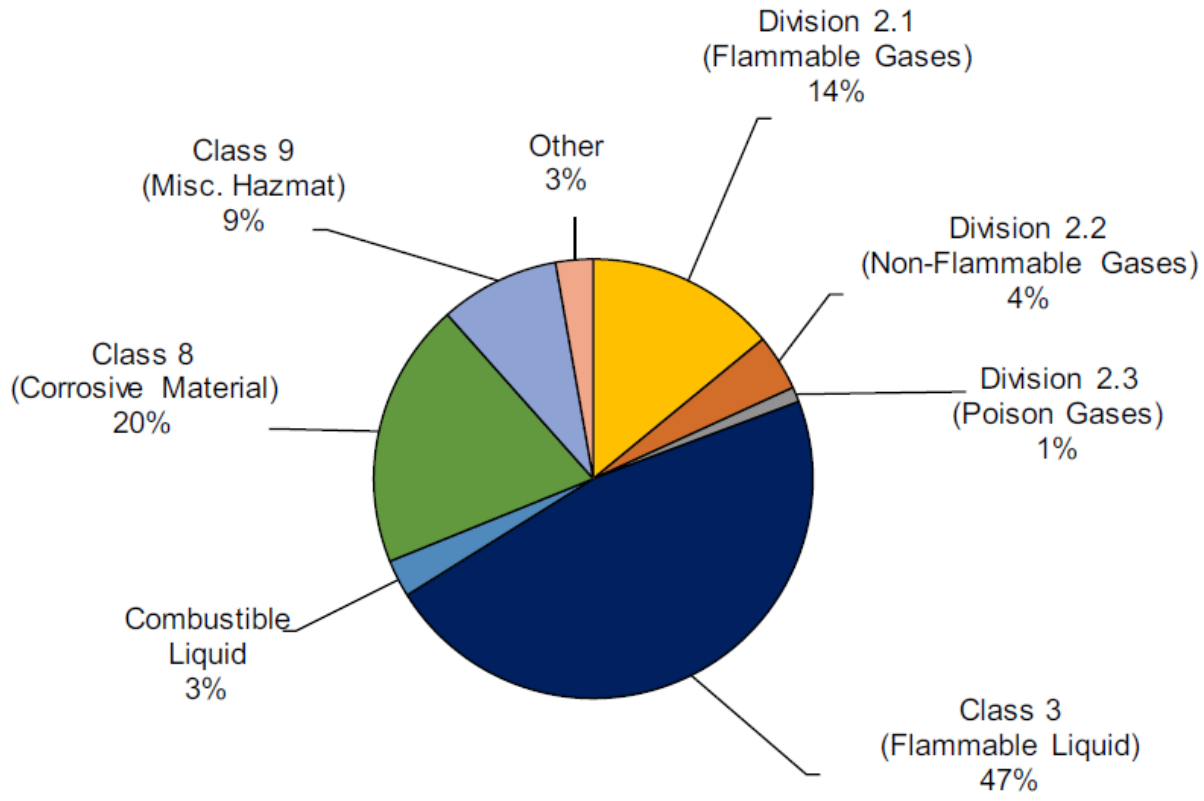
Exhibit 5
Top Ranked Commodities Involved in Tank Car Non-Accident Releases
U.S. and Canada: 2019



It should be noted that the top two commodities (LPG and Fuel Oils) are the dominant hazardous materials being transported through Plumas County. NARs in California for 2019 included: tank car (42) and intermodal (26) for a total of 68 releases incidents.

Exhibit 4 of this report shows the Tank Car NARs by Hazard Class, and this is shown below:

Exhibit 4
Tank Car Non-Accident Releases by Hazard Class
U.S. and Canada: 2019



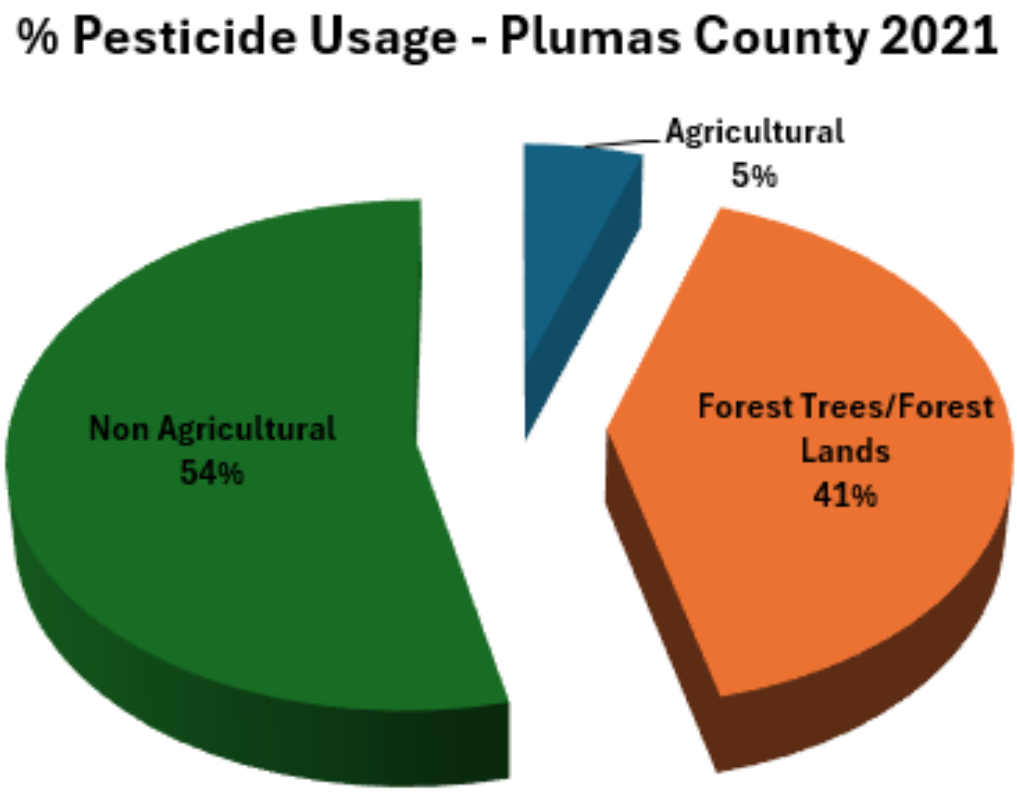
The report lists the following information with respect to hazard class:

- Division 2.1: Flammable Gases
- Division 2.2: Non-Flammable Gases
- Division 2.3: Poison Gases
- Class 3: Flammable Liquid (would also include Combustible Liquid)
- Class 8: Corrosive Material
- Class 9: Miscellaneous Hazmat
- Other: Includes other Hazard Classes

5.0 Agricultural Chemical Use Patterns

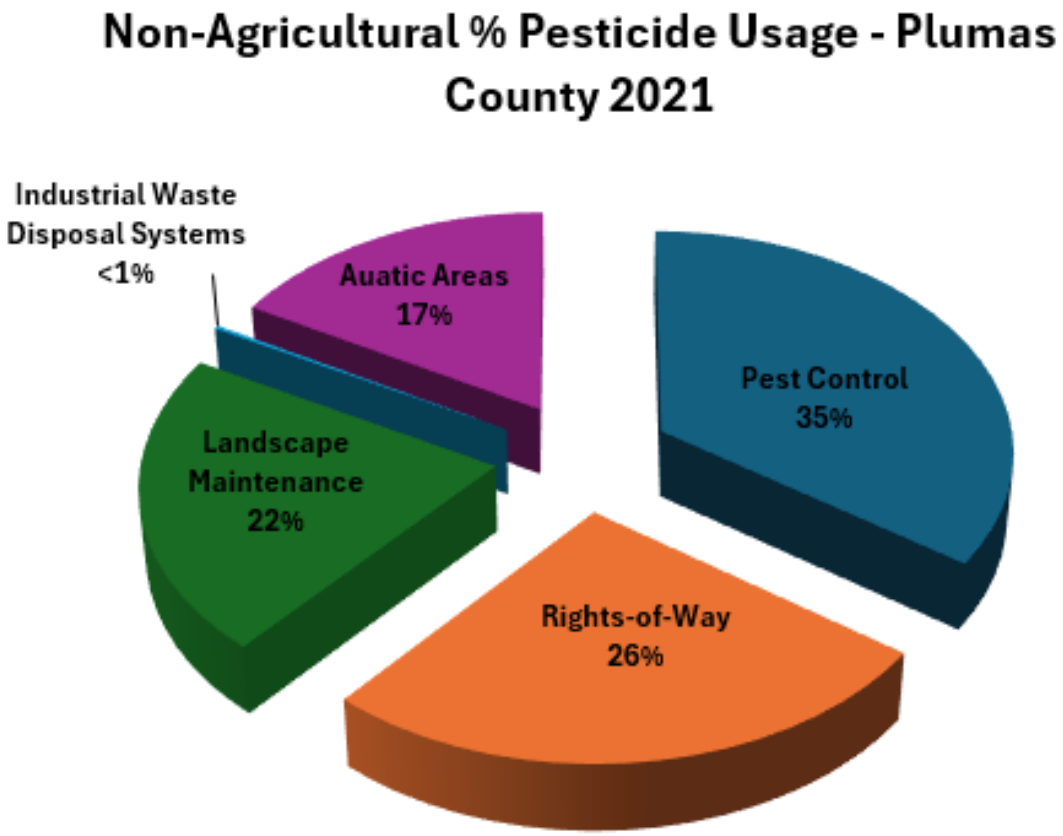
Information for agricultural usage within Plumas County was obtained from the State of California Department of Pesticide Regulation Pesticide Information Portal (CalPIP) (http://calpip.cdpr.ca.gov/main.cfm). According to the Pesticide Use Annual Report 2021 Data Summary (CalPIP), Plumas County ranks 47th for pesticide usage within California. In 2021, 90,640 pounds of pesticides were used in the County.

Based on the information contained in the 2021 Pesticide Data Tables, which were available online at https://urldefense.proofpoint.com/v2/url?u=http-3A__calpip.cdpr.ca.gov_download.cfm-3Fid-3D252177455451011-5F240702090525&d=DwIFAQ&c=euGZstcaTDllvimEN8b7jXrwqOf-v5A_CdpgnVfiiMM&r=DApT6T5NV5IntdFJlO4HdXRYClvLdqCBEchS_rtTmOw&m=WMp728_hGx-ABoWcfEzghcFUafMc7vc3joK2wWJi_Ca9CcbfA8pjtHRK19GAl44t&s=gwWXdfMGLqx9N8NYZNRxRXqK3kcIBC2Vv2DJSs3YRCM&e=, the major usage of pesticide chemicals within Plumas County is primarily non-agricultural (54%). Agricultural usage made up 5% of the total pesticide usage within the County and included usage in greenhouses and ornamental turf. In addition, due to its location in the Sierra Nevada Mountains, forest usage was considered separately (41%). The breakdown of agricultural, forest and non-agricultural pesticide usage in Plumas County is as follows:



Non-agricultural usage of chemicals exclusive of the Forest Trees/Forest Lands includes the following areas:

- Pest Control
- Rights-of-Way
- Landscape Maintenance
- Industrial Waste Disposal Systems
- Aquatic Areas



The use and transportation of agricultural chemicals varies by location. In general, agricultural chemical transportation is from the vendor to the user, and this is usually completed by shipping small quantities of chemicals throughout the area, as necessary. No placarded trucks containing pesticides were observed during the survey.

The Plumas County Office of the Agricultural Commissioner website (https://www.plumascounty.us/73/AgricultureWeights-Measures) did not contain any data directly related to transportation of pesticides through the County. The website contained brochures on medusahead, pepperweed, Scotch broom, and yellow starthistle, each of which contained chemical methods for managing these invasive plants. Chemicals noted included glyphosate, 2,4-D Amine, as well as other non-specific herbicides.

The Agricultural Commissioner's office issues Operator Identification Numbers (OINs) and Restricted Materials Permits (RMPs) for pesticide usage in the County. Issuance of RMPs is generally to certified commercial or private applicators to allow for applications of California Restricted Materials.

Transportation of pesticides through the County to areas for application may cover a wide area of transportation routes. Placard identification of pesticides in transit is dependent upon type and quantity.

6.0 Pipeline Data and Other Underground Lines

Information concerning underground pipelines in Plumas County was obtained from the website of the National Pipeline Mapping System (NPMS) at https://www.npms.phmsa.dot.gov/. The website notes that Plumas County "does not contain any gas transmission or hazardous liquid pipelines in the NPMS national data layer".

Pacific Gas & Electric (PG&E) is currently in the process of burying powerlines along Highway 70 and Highway 89 in an effort to reduce the risk of wildfire from electrical equipment (https://plumassun.org/2024/05/21/pge-resumes-undergrounding-efforts/). The ongoing construction projects in these areas were being completed at the time of the commodity flow study survey, and PG&Es contractors accounted for the large nuber of construction vehicles present in these areas. Numerous PG&E utility vehicles were also observed in these areas.

7.0 Fuel Delivery Infrastructure in Plumas County

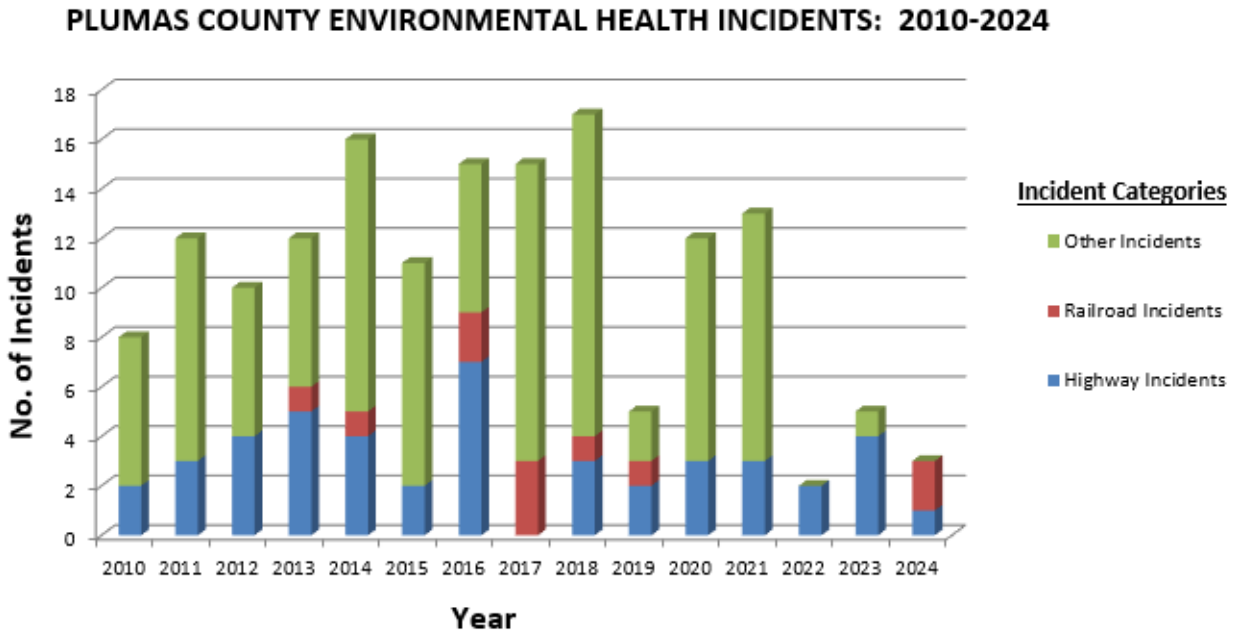
The local fuel distribution in Plumas County is primarily covered by truck delivery. During the survey, it was noted that with one exception, all hazardous materials being transported along the highways in Plumas County consisted of propane, gasoline, and diesel. Because of the absence of natural gas or hazardous liquid pipelines in the County, distribution of fuel, particularly propane covers essentially all of the roadways in the County. A list of propane distributors in Plumas County is contained in Attachment D.

8.0 PCEH Incidents in Plumas County

A listing of incidents or oversight that required a response from PCEH from 2010 to 2024 (to date) is contained In Appendix E. These incidents can be broken down into 3 categories as follows:

- Highway Incidents
- Railroad Incidents
- Other on-site incidents/oversight (spills, underground storage tank removal, etc.)

A total of 156 incidents occurred over the 2010–2024-time frame that included 45 Highway Incidents, 11 Railroad Incidents, and 100 Other incidents. A chart showing the Incident distribution is shown below.



There is variability in the transportation incidents throughout the time frame; however, the highway incidents occur more frequently than the railroad incidents.

9.0 Summary

The results of the hazardous materials commodities flow study for Plumas County are summarized in the following sections.

Highway Placard Study

A hazardous materials placard survey of trucks travelling through the County was performed from June 11 through June 13, 2024. The results of the highway placard survey are covered in the following sections.

- The survey points were undertaken at the five (5) following locations:
    - Highway 36 at Highway 89
    - Highway 70 at Highway 89 (Indian Falls)
    - Highway 70 at Highway 89 (Graeagle)
    - Highway 70 at Highway 49
    - Highway 147 at County Line
- Trucks were categorized as to the types of vehicles are generalized as follows:
    - Tankers (all types)
    - Semi-Truck Trailers
    - Local Delivery Vehicles
    - Dry Bulk Cargo Carriers
    - Logging Trucks
    - Construction Vehicles
    - Utility Vehicles
    - Other Vehicles
- All of the surveys were six (6) hours in length to allow for direct correlation of the data between survey location points.
- The percentage of hazardous materials trucks travelling through the County, as a function of the total truck traffic, as observed during the study was as follows:
    - Highway 36 at Highway 89: 4.64%
    - Highway 70 at Highway 89 (Indian Falls): 6.02%
    - Highway 70 at Highway 89 (Graeagle): 4.42%
    - Highway 70 at Highway 49: 6.35%
    - Highway 147 at County Line: 1.77%
- The study identified the hazardous cargo through 3 hazard classes are as follows:
    - Class 2: Gases
    - Class 3: Flammable/Combustible Liquids
    - Class 8: Corrosive Substances

- The study also identified the hazardous cargo through 4 specific and general categories. These 4 categories are as follows:

    - Propane/Liquefied Natural Gas
    - Gasoline
    - Diesel
    - Corrosive n.o.s.

- With the exception of one semi-truck trailer that was carrying corrosive materials and one local delivery vehicle transporting propane cannisters, all of the remaining trucks transporting hazardous materials were tanker trucks. High-pressure tankers were transporting propane, and non-pressure tankers were transporting gasoline and diesel.

- Overall, tankers represent a small percentage of the total truck traffic (5%), although they transport a majority of hazardous materials (96%).

- Gasoline and diesel were the most abundant hazardous cargo being transported through County (52%). These fuels are usually transported in non-pressure tankers ranging from smaller tankers to standard single tankers to double trailer tankers. The number of gasoline and diesel carriers was notably higher in the northern part of the County.

- Fuel tanker trucks were noted travelling eastbound on Highway 70 during the latter part of the survey. It was noted in the 2009 CFS that the tankers were travelling to a bulk storage facility in Butte County and returning to Plumas County filled with fuel.

- Full logging trucks on the highways were directed to Quincy, where a large Sierra Pacific lumber mill is located. Empty logging trucks were observed travelling in the opposite direction.

- A large number of construction vehicles were present primarily along the Highway 70-89 corridor due to the significant construction activity in that area during the time of the survey.

- Propane was the second most abundant hazardous material transported through the County (46%). Propane was noted at all survey points but was the dominant hazardous commodity in the southeastern part of the County. Propane was generally transported in high-pressure tankers both large and small. One local delivery vehicle containing numerous Blue Rhino containers was observed along Highway 147.

- The current survey for the commodity flow study was undertaken during the summer months, and it does not take into account diverted traffic along Highway 70 during a closure of Interstate 80 at Donner Summit. An additional survey is recommended in the event that Donner Summit is closed, likely during the winter months.

<u>Railroad Hazardous Materials Transportation</u>

- There are 2 major railroads currently operating in Plumas County; Burlington Northern & Santa Fe (BNSF) and Union Pacific (UP). BNSF has track rights along the UP main line along Highway 70.

- Hazardous cargo is typically not made available to the public by the railroads; however, first responders and other agencies can request the information if required. Commodity Flow Studies have been recently prepared by UP and BNSF for Plumas County, and they are contained in Appendix C, which is restricted to individuals authorized to view the data.

- The 2009 CFS noted that the top ten hazardous commodities transported along the UP line through Plumas County, listed in alphabetical order, were:

    - Alcohols, N.O.S (not otherwise specified)
    - Anhydrous Ammonia
    - Elevated Temperature Liquid, N.O.S
    - FAK (freight of all kinds) Hazardous
    - Liquefied Petroleum Gas
    - Molten Sulfur
    - Phosphoric Acid Solution
    - Refrigerated Liquid Carbon Dioxide
    - Sodium Hydroxide Solution
    - Sulfuric Acid"

- The 2009 CFS noted that the top ten hazardous commodities transported along the BNSF line through Plumas County, listed in alphabetical order, were:

    - Alcohols N.O.S
    - Anhydrous Ammonia
    - Butane
    - Chlorine
    - Elevated Temperature Liquid, N.O.S
    - Gasoline
    - Hydrocarbons, Liquid N.O.S
    - Liquefied Petroleum Gas
    - Styrene Monomer, Stabilized
    - Sulfuric Acid"

<u>Agricultural Chemical Use Patterns</u>

- Plumas County ranked 47th in terms of the amount of pesticide usage by county in California in 2021.

- Pesticide usage Plumas County for 2021 was as follows:

    - Agricultural (5%)
    - Non-Agricultural (54%)
    - Forest Trees/Forest Lands (41%)

- Non-agricultural usage of chemicals exclusive of the Forest Trees/Forest Lands includes the following areas:

    - Pest Control

- Rights-of-Way
- Landscape Maintenance
- Industrial Waste Disposal Systems
- Aquatic Areas

Pipeline Data

- Plumas County does not contain any gas transmission or hazardous liquid pipelines in the NPMS national data layer.

- Pacific Gas & Electric (PG&E) is currently in the process of burying powerlines along Highway 70 and Highway 89 in an effort to reduce the risk of wildfire from electrical equipment.

- Because of the absence of natural gas or hazardous liquid pipelines in the County, distribution of fuel, particularly propane covers essentially all of the roadways in the County.

10.0 Summary Statement

The information outlined in Sections 2.0 through 8.0 of this report will be made available to emergency responders to increase awareness, mitigation, and response to hazardous materials emergencies. This study can also be used by local planning officials to demonstrate the risk mitigation potential and commodities involved in specific areas of Plumas County. This study will allow for the understanding of flow patterns of hazardous materials through County, to analyze traffic patterns, better match planning programs to existing needs within communities, and reduce the potential for releasing incidents to occur.

The surveys for the current commodity flow study were completed during the summer in Plumas County. Traffic closures along Interstate 80 over Donner Summit typically occur during the winter months. Resulting truck traffic may be diverted along Highway 70 in Plumas County and would flow through the City of Quincy. A traffic flow survey is recommended during the time that Donner Summit is closed to determine the amount and types of hazardous materials flowing through the County during the closure. The survey could be undertaken in Quincy, where the speed of the trucks is reduced, and a more accurate truck and placard count could be completed. Results of this survey could be appended to this report.

APPENDIX A

HIGHWAY PLACARD SURVEY DATA COMPILATION TABLE

APPENDIX A: HIGHWAY PLACARD SURVEY DATA COMPILATION TABLE - PLUMAS COUNTY

	June 11-13, 2024			
Survey Location	**Placard Class**	**Placard No.**	**Common Name**	**No. of Trucks**
Highway 36 at Highway 89				
	2.1	1075	Propane	4
	3	1993	Gasoline	3
	3	1203	Diesel Fuel	2
	Subtotal Placarded Trucks			**9**
	Subtotal Trucks Not Placarded			**185**
	TOTAL TRUCKS			**194**
Highway 70 at Highway 89 (Indian Falls)				
	2.1	1075	Propane	1
	3	1203	Gasoline	4
	3	1993	Diesel Fuel	10
	8	N/A	Corrosive n.o.s	1
	Subtotal Placarded Trucks			**16**
	Subtotal Trucks Not Placarded			**233**
	TOTAL TRUCKS			**249**
Highway 70 at Highway 89 (Graeagle)				
	2.1	1075	Propane	8
	3	1203	Gasoline	3
	Subtotal Placarded Trucks			**11**
	Subtotal Trucks Not Placarded			**238**
	TOTAL TRUCKS			**249**

APPENDIX A: HIGHWAY PLACARD SURVEY DATA COMPILATION TABLE - PLUMAS COUNTY

	June 11-13, 2024			
Survey Location	**Placard Class**	**Placard No.**	**Common Name**	**No. of Trucks**
Highway 70 at Highway 49				
	2.1	1075	Propane	6
	3	1203	Gasoline	1
	3	1993	Diesel Fuel	1
	Subtotal Placarded Trucks			**8**
	Subtotal Trucks Not Placarded			**118**
	TOTAL TRUCKS			**126**
Highway 147 at County Line				
	2.1	1075	Propane	2
	Subtotal Placarded Trucks			**2**
	Subtotal Trucks Not Placarded			**111**
	TOTAL TRUCKS			**113**
All Sites	**Total Placarded Trucks**			**46**
	Total Trucks Not Placarded			**885**
	TOTAL TRUCKS			**931**

APPENDIX B

TRUCK CLASSIFICATION DATA

APPENDIX B1: TOTAL TRUCK CLASSIFICATION DATA - PLUMAS COUNTY

	TANKERS	SEMI-TRUCK TRAILER	LOCAL DELIVERY VEHICLES	DRY BULK CARGO	LOGGING TRUCKS	CONSTRUCTION VEHICLES	UTILITY VEHICLES	OTHER VEHICLES	TOTALS
Highway 36 at Highway 89	8	33	14	3	47	31	26	32	194
Highway 70 at Highway 89 (Indian Falls)	16	38	15	1	53	64	58	4	249
Highway 70 at Highway 89 (Graeagle)	12	49	29	1	43	25	77	13	249
Highway 70 at Highway 49	9	36	19	2	10	18	12	20	126
Highway 147 at County Line	1	14	12	0	21	40	13	12	113
TOTALS	**46**	**170**	**89**	**7**	**174**	**178**	**186**	**81**	**931**

APPENDIX B2: HAZMAT TRUCK CLASSIFICATION DATA - PLUMAS COUNTY

	TANKERS	SEMI-TRUCK TRAILER	LOCAL DELIVERY VEHICLES	DRY BULK CARGO	LOGGING TRUCKS	CONSTRUCTION VEHICLES	UTILITY VEHICLES	OTHER VEHICLES	TOTALS
Highway 36 at Highway 89	9	0	0	0	0	0	0	0	9
Highway 70 at Highway 89 (Indian Falls)	14	1	0	0	0	0	0	0	15
Highway 70 at Highway 89 (Graeagle)	11	0	0	0	0	0	0	0	11
Highway 70 at Highway 49	8	0	0	0	0	0	0	0	8
Highway 147 at County Line	2	0	0	0	0	0	0	0	2
TOTALS	**44**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**45**

APPENDIX C

RESTRICTED RAILROAD DATA

APPENDIX D

PROPANE DISTRIBUTORS IN PLUMAS COUNTY

Name	Street	City
AmeriGas Propane	74424 Hwy 70	Portola
AmeriGas Propane - Beckwourth Yard	82488 Hawley Rd	Beckwourth
Amerigas Propane- A001	330 Black Oak St	Chester
Amerigas Propane-Quincy	1745 E Main St	Quincy
Bi State Propane	74554 Highway 70	Portola
High Sierra Propane	95 Industrial Way	Beckwourth
Hunt Propane- Quincy	477 N Mill St	Quincy
Suburban Propane-Portola	217 W Sierra St	Portola
Suburban Propane-Quincy	132 Crescent St	Quincy
Hunt & Sons LLC Crescent Street	188 Crescent St	Quincy
Hunt & Sons LLC Portola	73880 State Route 70	Portola
Hunt Andy's Way Bulk Plan #56	197 Andys Way	Quincy
Hunt Crescent Street Bulk Plant #43	188 Crescent St	Quincy
Ferrellgas Quincy	291 Crescent St	Quincy
Ferrellgas LP	160 Richardson Way	Chester
ThompsonGas, LLC Bulk Storage Quincy	1279 Industrial Way	Quincy

APPENDIX E

PCEH INCIDENTS 2010-2024

2015-01	2/6/2015	Indian Falls, Third St & Shannon	40.056629	-120.96492		Indian Falls	PCB Oil / PG&E Transformer ~629ppm 7gal	
2015-02	2/8/2015	333 Crescent St, Quincy	39.940874	-120.953242	115-180-001	Quincy	State Warning Center (COMPLAINT) Sqts waste oil	No oil observed
2015-03	4/8/2015	Ariba & Bella Vista	39.810716	-120.497449	125-413-020	Portola	Sewage Overflow (Approx. 150 Gal)	
2015-04	4/20/2015	BNSF Derailment				Greenville	State Warning Center	non-haz incident
2015-05	5/22/2015	Lake Almanor West Boat Ramp/Osprey Loop				Chester	Truck pushed into the Water	no sheen/hazmat in water
2015-06	6/3/2015	545 Ponderosa	40.268354	-121.13178	104-401-008	Lake Almanor	Abandoned Under Ground Oil Tank	EPA Referred
2015-07	9/24/2015	6 Quincy Junction Rd.	39.938859	-120.936658	115-130-017	Quincy	Asbestos in the ceiling. Frmr Art Building/Round room	mitigated w/consultant
2015-08	9/30/2015	1825 Marie Dr.	40.082425	-120.886252	111-200-003	Taylorsville	Diesel Spill - Truck bed tank for logging equip refueling	unknwn quantity
2015-09	11/9/2015	1 Park Ave. UPRR Storage Yard	39.802692	-120.477512	126-050-037	Portola	UPRR Engine Oil Release	Stained soil, not active
2015-10	8/20/2015	241 & 265 Commercial St.	39.806076	-120.469497	126-075-006/-005	Quincy	Fire Downtown Buildings	asbestos survey
2015-11	1/13/2015	Feather Fork Mine, La Porte	39.769937	-120.933198	008-140-USA	Laporte	Diesel Containment Pond Remediation/Assessment	USFS
2015-12		Asbestos QHS Work Release (2015-07)						
2014								
2014-01	1/15/2014	Highway 89 - Wolf Creek				Greenville	RP Reports Big Rig in Creek - 35 gal fuel in Creek	
2014-02	2/8/2014	Hwy 89-1 mi S. of Canyon Dam	40.174658	-121.063371	001-360-ROW	Canyon Dam	Diesel spill from Semi Truck	125 gal diesel
2014-03	2014	481 E. Quincy Street	39.81344	-120.46449	125-215-011	Portola	Home kerosene spill - Site investigation for Susan Realty	site investigatoin in folder
2014-04	3/12/2014	Sierra Pacific - 1530 Lee Rd			117-350-003	Quincy	Demolition Project (Asbestos & Lead Paint)	
2014-05	3/20/2014	Safeway Shopping Center	39.937575	-120.937387	226-292-005	Quincy	Oil/Diesel Spill in Parking Lot	
2014-06	5/20/2014	227 Kinder Avenue				Greenville	Power Pole - Transformer leak / No PCB's	
2014-07	6/13/2014	Antelope Lake				antelope lake	Car Fire	minimal petrol.
2014-08	7/1/2014	Crescent Mills MP 194.9	40.098521	-120.908436		Crescent Mills	Burlington Northern Fuel Leak, RR	20-25gal likely
2014-09	5/29/2014	Plumas & Lassen Co's				Quincy	Lumber Company DTSC Envirostor Complaint - Dyr Mtn.	used oil dumped in forest
2014-10	8/5/2014	Rock Creek Powerhouse				Rock Creek	Vehicle off road into reservoir	5 gal
2014-11	8/18/2014	Lake Almanor - West shore				Lake Almanor	Boat release north of Rocky Point CG	
2014-12	9/3/2014	Chester Transfer Site	40.306302	-121.143005	001-450-013	Chester	Household hazardous waste disposal	hauled off
2014-13		Sloat Bridge			122-070-027	Sloat	Dioxin debris piles	Reuse at quarry
2014-14	12/7/2014	Rich Bar Road & Highway	40.006933	-121.193265		Rich Bar	12 Car Derailment	no hazmat involved
2014-15	12/1/2014	Redberg Ave & Hwy 70	39.934429	-120.90879		Quincy	Propane Spill	100-120 gal propane
2014-16	12/6/2014	Blairsden, Feather River				Blairsden	Single vehicle accident into FR	
2013								
2013-01	1/22/2013	Buchanan & Bucks Lake Rd	39.936597	-120.950112		Quincy	Diesel Odor & Sheen in storm drains	Var. around Dame Shirley
2013-02	1/25/2013	MP 268.5 Canyon Rail Road	40.022636	-121.163836		Rich Bar	3200 Gal Diesel/Locomotive hit by rock	RR. NFA issued
2013-03	1/31/2013	Marble Hot Springs Rd - Steel Bridge					Unknown - Oil /Gray/Yellow Material on Ice	Biological Material/Natural
2013-04	3/27/2013	Near 2nd and Colorado St	39.803925	-120.473751	126-050-015	Portola	Portola soil contaminant (126-050-015)	
2013-05		Blairsden				Blairsden	Train Car Derailment DRILL	RR
2013-06	8/27/2013	Mistle Toe Lane			117-370-011	Quincy	State Warning Center - Historical Spill (Not Investigated)	kerosene 4 years prior
2013-07	9/9/2013	Quincy High School	39.804212	-120.473183	115-130-017	Quincy	Diesel Storage tank - Pin hole leak from snow plow	
2013-08	10/28/2013	Highway 70 - Rock Creek	39.966592	-121.27469		Rock Creek	Big Rig Over Bank 100 gal diesel	
2013-09	11/7/2013	Highway 70 - Paxton				Paxton	Big Rig overturned into river - 50 Gal spill	no spill indicated
2013-10	12/16/2013	Hwt 70-2 mi W of Grnvl Wye				Hwy 70	PG&E Truck into River	Hydraulic leak, unkn qnty
2013-11	12/15/2013	490 Main St (Pizza Factory)	39.936475	-120.947346	115-062-001	Quincy	Downtown fire	asbestos/metals
2013-12	Missing file	Sloat Bridge				Sloat	Sloat bridge replacement - Dioxin Contaminated soil	
2012								
2012-01	1/30/2012	A-24 Beckwourth				Beckwourth	Abandoned chemicals on A-24. No release	2, 5-gal buckets removed
2012-02	3/20/2012	Dame Shirley Plaza	39.936535	-120.949658	115-053-001	Quincy	800-gal heating oil tank & contamination	Investigated, Closed RWB
2012-03	4/19/2012	Greenville High School	40.140971	-120.944871	110-150-003	Greenville	Diesel Spill (Approx. 75 Gal) - Overfill of AST	
2012-04	7/25/2012	Bulk Fuel (Hunt & Sons) 73815 S Delleker	39.803405	-120.498578	125-420-037	Delleker	Gasoline leak from pipe fitting - INSIDE Containment	15 gallons
2012-05	8/14/2012	UP Tracks MP 255-280					Diesel Spill - OES #124782	NO SPILL
2012-06	9/10/2012	CHP Office, 86 w main st	39.937135	-120.939485	115-290-001	Quincy	UST Tank Removal - Release from tank Rinseate	5 gal rinsate. Closed-RWB
2012-07	9/18/2012	Butt Lake Boat Ramp				Butt Lake	Diesel Spill from water truck parked near boat ramp	20 gallons
2012-08	11/19/2012	348 Questa Drive	39.812278	-120.501188	125-403-020	Delleker	Propane release from delivery truck	2800 gal propane truck
2012-09	11/2/2012	Lake Cove				Lake Almanor	Excavator into Lake, some sheen.	followup monitoring
2012-10	12/10/2012	Hwy 89-Wolf Creek-N of Grnvl				Greenville	Truck crash; Diesel Spill into Creek, 20 gal	
2011								
2011-01	2/4/2011	Hwy 70 - 8 mi of Twain (MPM 22.4)	40.027003	-121.138043		Highway 70	Diesel Spill - Approx. 70 Gal. - no cleanup info	OES #11-0693
2011-02	2/21/2011	Sierra Energy Bulk Plant	39.938694	-120.949967	115-012-032	Quincy	50-100gal kerosene spill into secondary (UST Closure Site)	see 1998-10 for UST Closure
2011-03	2/28/2011	Feather Rvr College Equestrian Center	39.949348	-120.967635		Quincy	Fuel Oil Leak - Approx. 30 Gal.	NFA Letter issued
2011-04	6/28/2011	Collins Pine Property Near Rd 110A				Chester	Meth Lab Dump Site, not cook site.	DOJ removed debris
2011-05	8/15/2011	Chips Creek / Highway 70				Highway 70	Car into River - CAL EMA #11-4783	minimal cleanup req.
2011-06	8/27/2011	Devils Elbow / Spanish Crk				Spanish Creek	Car into Creek	no hazmat involved
2011-07	9/2/2011	Cal Trans Wet land	40.096065	-120.907504		Crescent Mills	Buried drums near old mill site. Soils not impacted	Geocon Cleanup.
2011-08	10/30/2011	Hamilton Branch Boat Launch				Hamilton Branch	Motor home launched at boat ramp	no release/sheen
2011-09	2011	2221 E. Main St - Sierra Energy			116-142-005	Quincy	UST Removal at Super Stop No. 19. RWB Referred	See Box A - NFA
2011-10	10/20/2010	Portola Landfill	39.823744	-120.447106		Portola	Waste Oil Spill - RWQCB	
2011-11	11/14/2011	Belden Powerhouse				Belden	Food grade grease release. Hydrophobic clumps	self cleanup.
2011-12	3/25/2011	Hwy 147				Lake Almanor	diesel oil, truck accident. ~20gal recovered & mitigated	
2010								
2010-01	1/22/2010	523 Manzanita Way	40.272085	-121.132092	104-384-021	Lake Almanor	Home tank Spill ~120 gal, Self cleanup spring 2011	No followup?
2010-02	2/17/2010	1426 Butterfly Valley Road	40.006752	-120.971945	005-400-012	Butterfly Valley	Meth Lab Site	Cleaned and rehab granted
2010-03	3/24/2010	324 Bella Vista	39.813473	-120.501137	125-402-022	Delleker	Meth Lab Site	RV dismantled, disposed.
2010-04	5/10/2010	PG&E Facility Service Yard - 205 Railway			115-180-019	Quincy	Hydraulic Fluid	10-15g, cleaned up
2010-05	6/2/2010	Highway 70- Rich Bar				Highway 70	Diesel & Motor Oil Spill, 5-10 gal	
2010-06	9/1/2010	Hwy 70 - Rich Bar - MPM 19.53				Highway 70	Diesel & Motor Oil Spill, reported 100, obsrv <20 gal	caltrans hazmat notified
2010-07	2010-ongoing	Sports & Spirits-7640 Hwy 147	40.26868	-121.086669	106-060-004	Lake Almanor	RWCQB Referral - ongoing monitoring as of 2023	UST Removal
2010-08	12/8/2010	Sierra Pacific	39.940381	-120.908571		Quincy	Railroad Tie Burning (Treated Wood Waste)	

INCIDENT #	Incident Date	INCIDENT LOCATION	Lattitude	Longitude	APN	CITY	INCIDENT DESCRIPTION	COMMENTS
2019								
2019-01	4/27/2019	BNSF Railway, N of Canyon Dam, MP 177.3	40.17316	-121.068617	001-360-ROW	Canyon Dam	50 Gallons Diesel from mech. Problem: locomotive	
2019-02	3/5/2019	City of Portola	39.80488	-120.4772		Portola	11,600 gal Sewage	
2019-03	8/1/2019	Oakland Camp Road at Bridge river crossing	39.975907	-120.905936		Quincy	11-12 gal gas from vehicle overturned into creek	
2019-04	11/6/2019	Hwy 49 near MP 1.5				Vinton	30 gal diesel overturned cattle truck	
2019-05	7/1/2019	2062 Buckhorn Trail	39.906936	-120.749794	009-390-ROW	Greenhorn	Diesel AST spill	impacted soil remediated
2018								
2018-01	1/28/2018	UP Railroad - Portola	39.80661	-120.47125	125070008	Portola	50 Gallon oil spray release	1-2 gal to environment
2018-02	1/31/2018	123 Crescent St.	39.937859	-120.949589	115012043	Quincy	130 gal diesel spill - Fuel Star Mobil	Delivery error
2018-03	2/20/2018	Hwy 70/ Caribou Road	40.007372	-121.249581	002220PGE	Belden	25 Gal Turbine Oil	Belden power House
2018-04	2/21/2018	190 Industrial Way Beckwourth	39.814741	-120.362566	140060041	Beckwourth	Repair Shop Fire	
2018-05	3/22/2018	California St & West Sierra				Portola	Sewer Main Overflow 200-300 gal	
2018-06	4/22/2018	6784 Indian Hills	40.258089	-121.080024	106114017	Lake Almanor	Transformer caught fire and released 10 gal non PCB transformer fluid	
2018-07	5/18/2018	Indian Creek near Soda Rock	40.053644	-120.971523	005010USA	Indian Falls	Small Petroleum Release - unknown amount	
2018-08	5/30/2018	Bell Lane Bridge	39.945781	-120.913448	117060ROW	Quincy	Pick-up truck in Creek	
2018-09	6/30/2018	Grizzly Lake CSD 130 Escondido Way	39.808512	-120.497291	125371004	Portola	Sewage Spill	
2018-10	7/24/2018	Feather River Canyon - Cresta Dam	39.870353	-121.374564	002290007	Cresta	425 gal Diesel Spill	
2018-11	8/20/2018	North Fork of Feather River - Chester	40.307972	-121.248108	001241006	Chester	Class A Fire Foam <1gal	
2018-12	9/14/2018	Spanish Creek Bridge, S Side - Keddie	40.024735	-120.962788	005-010-USA	Keddie	4660gal diesel & gas - truck overturned	RWB Remediation Ongoing
2018-13	9/20/2018	S side of Golf Club Road, east of Dyer View Rd				Lake Almanor	Motor oil ~1 gallon in dirt from vehicle accident	
2018-14	9/28/2018	Northern shoulder, SR-36, east of A-13	40.30692	-121.138043	103-010-ROW	Lake Almanor	50 gal diesel fuel from water tender truck	
2018-15	10/1/2018	Upstream from Rock Creek Dam	39.988407	-121.284809	002-220-USA	Rodgers Flat	Unknown Sheen on North Fork Feather River	
2018-16	11/9/2018	14723 Highway 70	40.007488	-121.249467	002-220-PGE	Belden	Hydraulic Fluid from failed pump.	
2018-17	12/18/2018	349 E Sierra Ave	39.811968	-120.465635	125-243-013	Portola	Block in sewage line. 150gallons	
2017								
2017-01	3/21/2017	Dirt Rd. Along Wolf Creek near Hwy. 89	40.170076	-120.971414	004-030-USA	Greenville	Abandoned Waste Oil and Filters	
2017-02	4/21/2017	UPRR Railroad Portola	39.802692	-120.477512	126-050-037	Portola	50 Gal Diesel Leak from Locomotive	
2017-03	5/2/2017	Johnsville Mercury Referral	39.761868	-120.689921	006-190-004	Johnsville	Mercury Referral	mercury from mine runoff
2017-04	winter 2017	5445 Main St.	39.760893	-120.695761	006-021-014	Johnsville	Heating Oil Tank Leak at Private Residence	NFA Letter issued
2017-05	6/23/2017	2115 Main St.	39.934184	-120.897648	116-131-036	Quincy	Mercury Spill-Anonymous Complaint	USEPA Criminal Investigation Division
2017-06	9/19/2017	106 Crescent St	39.937964	-120.949554	115-012-043	Quincy	UST Removal frm Fuel Star 76	
2017-07	12/27/2017	UPRR Railyard	39.802692	-120.477512	126-050-037	Portola	50 gal oil to ballast in yard.	only 1-2 gal to soil
2017-08	2017 progress	93232 Highway 70	39.798839	-120.159155	010-190-015	Chilcoot/Vinton	Var. HMBP violations. biodiesel production byproducts	
2017-09	2/9/2017	West Ponderosa Drive. Various.				Indian Valley	Flooding caused sewage system shutdown	
2017-10	2/9/2017	766 Quincy Junction Rd	39.945193	-120.929182	005-310-015	Quincy	Flood caused wastewater spill	
2017-11	3/10/2017	81376 Magpie Rd	39.813845	-120.369891	140-060-018	Beckwourth	500gal sewage breach of holding pond	
2017-12	10/13/2017	PGE Caribou Camp	40.080354	-121.154909	002-140-USA	Caribou	1-2 tbsp elemental mercury	
2017-13	4/21/2017	UPRR Railyard, S Gulling St and Commercial	39.802692	-120.477512	126-050-037	Portola	45 gal oil-water mixture onto asphalt ground	only 1-2 gal to soil
2017-13	6/10/2017	Twain area				Twain	Derailment, no release.	no release
2017-14	6/16/2017	Lake Almanor	40.1947	-121.074		Lake Almanor	Overturned boat in water unkwn amount of petrol	
2016								
2016-01	1/2/2016	Portola UPRR Rail Yard	39.802692	-120.477512	126-050-037	Portola	Diesel Release UPRR Locomotive 300-500 gal	RWQCB referral
2016-02	1/11/2016	Highway 70, MP 54.00	39.882411	-120.779774		Lee Summit	Vehicle Collision with Tractor Trailer	20 gal. Abatement report
2016-03	5/18/2016	Upper Access Road near Hwy. 70 mp 3.5	39.902359	-121.352816		Rock Creek	5-10 Gallons of Diesel Fuel Spilled	Remediated - NRC. 5-10gal
2016-04	6/7/2016	FRC Campus	39.951837	-120.970393	115-350-011	Quincy	Structure Fire-AFFF Foam	20 gal foam
2016-05	7/17/2016	1.5 miles up Big Creek Rd.	39.91943	-121.090794	113-020-USA	Meadow Valley	Gasoline Spill	2-3 gal
2016-06	8/17/2016	150 Pacific St.	39.805767	-120.470511	126-072-002	Portola	Uncovered (2) 200 gallon Steel UST's	RWQCB referral
2016-07	9/7/2016	Hwy. 70 Near Camp Laymen	39.844296	-120.678817		Plumas	30 Gal Diesel Spill	remediated w/consultant
2016-08	7/28/2016	Chalet View Lodge Rd.	39.788027	-120.527691		Maybe	CAL EPA Referral #10081	Grease/oil on RR track
2016-09	?	Rock Creek, CA				Rock Creek	Abandoned Drum Diesel Spill	Cannot locate file
2016-10	9/14/2016	Lake Davis Rd. 1 mile from the Westside of lake	39.865447	-120.495858		Lake Davis	70gal Diesel Spill to roadway	
2016-11	3/10/2016	CR Carmichael Elementary School	39.817964	-120.477625	125-051-070	Portola	Hydrogen Sulfide Odors from Storm Drains	consultant used, see file
2016-12	Cannot locate	274 Stone Ave				Chester	Car Ran into a Oil Tank 5gal Spill	Cannot locate file
2016-13	Cannot locate	Diesel Spill near Crescent Mills MP #10.73				Crescent Mills	Logging Truck Accident 30gal Diesel	Cannot locate file
2016-14	Cannot locate	213 Ariba Ave.				Portola	100gal Sewage Spill	Cannot locate file
2016-15	Cannot locate	Indian Valley Services District				Indian Valley	300 tons Sewage released	Cannot locate file
2015								

INCIDENT #	Incident Date	INCIDENT LOCATION	Lattitude	Longitude	APN	CITY	INCIDENT DESCRIPTION	COMMENTS	EH Prop 65	CHP Prop 65	OnBase
2024											
2024-01	1/22/2024	UPR RR Tracks West of Rock Crest Camp, Storrie	39.925362	-121.31714	002-280-USA	Storrie	unknown amount of jim beam whiskey/vodka	GrayMar Cleanup	Y		Y
2024-02	2/11/2024	UPR RR Tracks MM304.5				Blairsden	Derailment: granular Coal in Feather River	EPA Cleanup	Y		
2024-03	3/19/2024	Hwy 70, MP 9.90, East of Rodgers Flat	39.961063	-121.281236	002-260-USA	Tobin	Overturned semi saddle tank 100 gal diesel	GrayMar cleanup	Y		Y
2023											
2023-01	4/18/2023	Hwy 70 at County Road 508C	39.883569	-120.781122		Spring Garden	<5 gal diesel & motor oil, 200-300 gal deodorizer	Graymar Env. Cleanup			n/a
2023-02	4/26/2023	Feather River East bound HWY 36 after Willow st	40.310515	-121.22845	100-250-ROW	Chester	30 gallons of engine oils		Y		Y
2023-03	6/22/2023	Hwy 70 Feather River	39.908222	-121.335254	002-280-USA	Belden	360 gal of bentonite mixture - unrecoverable	PGE			n/a
2023-04	6/27/2023	Hwy 70 Feather River	39.907491	-121.337776	002-280-USA	Belden	500 gal drilling fluid - unrecoverable	PGE			n/a
2023-05	10/28/2023	1607 Lee Rd (1538 Lee Rd - office)	39.940755	-120.908768	117-350-036	Quincy	2,900 gal turbine oil	SPI	Y		Y
2022											
2022-01	1/28/2022	SR 89 at Forgay (Crescent Grade)				Crescent Mills	Vehicle Collision - 50 gal diesel on dirt shoulder				
2022-02	5/2/2022	Hwy 70 @ Spring Garden Depot Rd	39.89181	-120.784872		Spring Garden	Vehicle Collision - 40-50 gal Diesel	mitigated by caltrans			
2021											
2021-01	2/12/2021	Adjacent to 189 Crescent St			adj to 115-011-039	Quincy	5-15 gal Dyed Diesel				
2021-03	4/19/2021	Var Locations on Peninsula Road			N/A	Lake Almanor	>5gal Hydraulic oil				
2021-04	7/1/2021	W of 700 Old Cromberg Rd			122-090-ROW	Cromberg	Propane leak - Faulty Valve				
2021-05	7/14/2021	Spanish Crk @ Oakland Camp Swimming Hole	39.975478	-120.906588	005-330-USA	Quincy	10gal gas, 2gal Motor Oil				
2021-06	7/20/2021	280 E Sierra Ave			125-311-row/125-282-034	Portola	Firefighting Foam&H2O 2000gal				Y
2021-07	8/5/2021	2950 Quincy La Porte Road	39.81147	-120.465976	006-050-024	La Porte Rd	Vehicle overturn 5-10 gal diesel				
2021-08	8/24/2021	MM 270.38 on the Canyon Sub			002-200-USA	Keddie	60 gal diesel in soil from crane				Y
2021-09	8/13/2021	110 Ayoob Circle			110-120-005	Greenville	41 gal non-PCB mineral oil				
2021-10	7/13/2021	Multiple Locations during Dixie Fire			Various	var.	88.25 gal, 50 locations, non-PCB				
2021-11	9/17/2021	3350 Almanor West Dr.			001-190-PGE	Lake Almanor	1.5 gal Hydraulic Oil				
2021-12	9/21/2021	Off Sheep Camp Rd, E/o Old Haun Rd,			001-200-002	East Shore	30 gal diesel				
2021-13	9/23/2021	3350 Almanor West Dr.			001-190-PGE	Lake Almanor	1 gal Hydraulic Oil into waterway				
2021-14	11/1/2021	940 Hilton Ln			004-050-038	Greenville	Various Chemicals - unkn manufacturing	Sheen obsrvd (Dixie Fire)			
2020											
2020-01		Wirta Logging, Inc. 196 Industrial Dr,	39.815731	-120.36237	140-060-034	Beckwourth	Used motor oil & 55-gal drums				
2020-02		Hunt&Son's, 199 Andys Way	39.938997	-120.948494	115-012-040	Quincy	Small Spill >42gal gas				
2020-03		HWY 70 at Tobin Bridge	39.936868	-121.315857	002-260-USA	Keddie	50gal diesel into river				Y
2020-04		430 Peninsula drive			104-062-002	Lake Almanor	>19 gal gasoline spill in lake				
2020-05		591 & 601 Main Street			115-011-041&051	Quincy	Fire: debris, Pb, ash, asbestos				
2020-06		HWY 70 W of Rogers Flat			002-260-USA	Rodgers Flat	semi accident 15-20 gal petro				
2020-07		SR36 MM 3 E of Tehama County Line	40.262965	-121.348532	001-160-069	Chester	Diesel Fuel Spill 60-70gal				Y
2020-08		7670 Hwy 70	39.948454	-121.302691	002-260-USA	Tobin	Pb&Asbestos Abatement/Demo				Y
2020-09		Various			002-300-005; 003-170-009, -022, -023, -024; 003-190-003, -004	Various locations	North Complex Fire				
2020-10		W end of W Ponderosa Drive			129-010-051	Blairsden	Sewage				