

CALIFORNIA WILDFIRE ANALYSIS (2013-2024)

1. YEAR WISE CASES REGISTERED:

SELECT YEAR(DATE), COUNT(*) AS TOTAL FROM WILDFIRE GROUP BY
YEAR(DATE) ORDER BY YEAR(DATE);

year(date)	total
2014	13
2015	9
2016	9
2017	5
2018	12
2019	8
2020	8
2021	13
2022	12
2023	11

2. LOCATION WISE AVERAGE AREA OF ACRES BURNED

SELECT LOCATION, AVG(AREA_BURNED_ACRES) FROM WILDFIRE GROUP BY
LOCATION ORDER BY AVG(AREA_BURNED_ACRES) DESC;

LOCATION	AVG(AREA_BURNED_ACRES)
Orange County	31473.0000
Mendocino County	30901.0909
Santa Barbara County	29796.1667
Butte County	29250.4545
Riverside County	27241.6250

Napa Valley		26614.5000	
Shasta County		25423.0714	
Los Angeles County		23923.7143	
San Diego County		22853.2500	
Sonoma County		20644.9167	
+-----+			

3. TOTAL DEATHS FROM 2013-2014

SELECT SUM(FATALITIES) TOTAL_DEATHS FROM WILDFIRE;

+-----+	
TOTAL_DEATHS	
+-----+	
993	
+-----+	

4. TOTAL FINANCIAL LOSS OCCURRED FROM 2013-2014

SELECT SUM(FINANCIAL_LOSS) AS AMT_LOSS FROM WILDFIRE;

+-----+	
AMT_LOSS	
+-----+	
239609.93059921265	
+-----+	

5. TOTAL VEHICLES DAMAGED FROM 2013-2024

SELECT SUM(VEHICLES_DAMAGED) AS TOTAL_VEHICLES_DAMAGED FROM
WILDFIRE;

+-----+	
TOTAL_VEHICLES_DAMAGED	
+-----+	
15033	
+-----+	

6. CAUSE WISE HOME DESTRUCTION DATA

SELECT CAUSE, SUM(HOMES_DESTROYED) AS TOTAL_HOMES_DESTROYED FROM
WILDFIRE GROUP BY CAUSE;

CAUSE	TOTAL_HOMES_DESTROYED
Lightning	30422
Human Activity	33432
Unknown	30335

7. INCIDENTS WITH THE HIGHEST NUMBER OF FATALITIES TILL NOW.

SELECT INCIDENT_ID, LOCATION, DATE, FATALITIES FROM WILDFIRE WHERE
FATALITIES=(SELECT MAX(FATALITIES) FROM WILDFIRE);

INCIDENT_ID	LOCATION	DATE	FATALITIES
INC1099	Mendocino County	2021-03-20	20

8. TOTAL FINANCIAL LOSS IN A SPECIFIC LOCATION (E.G., "LOS ANGELES COUNTY").

SELECT SUM(Financial_Loss) AS TOTAL_LOSS, LOCATION FROM WILDFIRE
WHERE LOCATION='LOS ANGELES COUNTY';

TOTAL_LOSS	LOCATION
16599.430046081543	Los Angeles County

9. ALL INCIDENTS WHERE MORE THAN 45,000 ACRES WERE BURNED.

```
SELECT INCIDENT_ID, DATE, LOCATION, Area_Burned_Acres FROM WILDFIRE WHERE
Area_Burned_Acres>=45000;
```

INCIDENT_ID	DATE	LOCATION	Area_Burned_Acres
INC1005	2023-05-17	Butte County	48348
INC1021	2015-03-20	Mendocino County	45742
INC1034	2015-02-20	Riverside County	49008
INC1039	2018-12-29	Santa Barbara County	47883
INC1048	2015-07-08	Butte County	48680
INC1055	2019-04-05	Shasta County	46290
INC1056	2020-05-12	Butte County	46294
INC1058	2014-02-03	Santa Barbara County	47674
INC1078	2023-02-08	Napa Valley	45821
INC1089	2016-05-15	Shasta County	49653

10. FATALITIES WITH CAUSE

```
SELECT SUM(FATALITIES) AS TOTAL, CAUSE FROM WILDFIRE GROUP BY CAUSE;
```

TOTAL	CAUSE
283	Lightning
345	Human Activity
365	Unknown

11. ADD EXTRA COLUMN NAMED AS STATUS BASED ON BUSINESS DESTROYED.

MORE THAN 400 SET STATUS AS BIG LOSS AND OTHERS AS NORMAL LOSS

```
ALTER TABLE wildfire
```

```
ADD COLUMN status VARCHAR(10);
```

```

UPDATE wildfire
SET status = CASE
    WHEN businesses_destroyed > 400 THEN 'BigLoss'
    ELSE 'NormalLoss'
END;

```

Field	Type	Null	Key	Default	Extra
Incident_ID	text	YES		NULL	
Date	text	YES		NULL	
Location	text	YES		NULL	
Area_Burned_Acres	int	YES		NULL	
Homes_Destroyed	int	YES		NULL	
Businesses_Destroyed	int	YES		NULL	
Vehicles_Damaged	int	YES		NULL	
Injuries	int	YES		NULL	
Fatalities	int	YES		NULL	
Financial_Loss	float	YES		NULL	
Cause	text	YES		NULL	
status	varchar(10)	YES		NULL	

```

+-----+
| status |
+-----+
| BigLoss |
| NormalLoss |
| NormalLoss |
| NormalLoss |
| BigLoss |
+-----+

```

12. FINDING NUMBER OF BIG AND SMALL LOSSES

**SELECT STATUS, COUNT(*) AS TOTAL FROM WILDFIRE GROUP BY STATUS ORDER
BY TOTAL;**

+-----+-----+	
STATUS	TOTAL
+-----+-----+	
BigLoss	18
NormalLoss	82
+-----+-----+	