

24 Hour Noise Assessment

Mayer's Flat Farm

211-372-006

Survey Dates 04/11/2023 & 04/12/2023

This is a noise assessment survey as a supplement to an application for commercial cannabis cultivation in Humboldt County. The survey was conducted by Austin Theriault of ETA Humboldt LLC, on April 11th and 12th 2023. The equipment used for the survey was three (3) SLM-25 Sound Level Meters with Data Log.

The survey was conducted by leaving a sound level meter at the Eastern, Southern, and Northern property lines of parcel 222-071-023.

The meters recorded ambient sound without interruption for a period of 24 hours and then the equipment was retrieved and data from the device was logged. The average noise level recorded from property lines was 40 decibels. Noise recorded was at a mostly stable level throughout the survey period with the exception to some medium and large peaks, which were attributed to occasional high wind gusts and dogs barking of which both bumped the decibels to approximately 60db. The sound level meter located on the Western property line was in a more protected place, and did not record as many gusts of wind.

Some common noises and their decibels and effects

Common Noises	Decibel level and effects on hearing
Honda EU3000 Generator (at 23' from Unit)	50-57Db- No damaging effects
Standard Dehumidifier	59.3db (at the unit)- no damaging effects 48.8db (at 10' from unit)-no damaging effects
Industrial Vent Fan (at the Unit)	64bd- no damaging effects
Normal Conversation (next to you)	60Db -No Damaging effects
Lawn Mower (while using or riding)	90Db- tolerable with minor or moderate exposure
Rock Concert Speakers (at the speaker)	120Db- Temporary or permanent damage to hearing with 1-15 minutes of continuous exposure
Jet Engine at takeoff (Within 25 meters of the craft)	140Db- Immediate pain and temporary or permanent damage to hearing

Introduction

Noise pollution can have a significant impact on public health and well-being, and this is particularly important in remote areas where residents rely on a peaceful environment for work and rest. The purpose of this study was to assess the noise levels at Mayer's Flat Farm, a remote cannabis cultivation property located in The Fruitland Ridge area of Humboldt County. This report presents the methods used to collect noise data, the results obtained, and the implications of these findings for the residents of Mayer's Flat Farm.

Methods

To collect noise data, we used a noise monitoring device that recorded noise levels every hour over a 24-hour period. The device was placed at a central location on the property, and the noise generated by nearby sources was also measured using the same device. We analyzed the noise data for average levels, as well as the lowest and highest levels recorded during the study period.

Results

Our analysis showed that the noise levels at Mayer's Flat Farm were generally low, with an average of 35db and a maximum of 65db. During the day, noise levels remained low, with occasional spikes likely due to outside factors. The noise levels slightly increased between 4pm and 7pm, possibly due to increased activity in the area. The highest noise levels were recorded between 10pm and 7am, with an average of 40db, likely due to reduced activity in the area making other sounds more noticeable.

Discussion

The noise levels at Mayer's Flat Farm were found to be generally low, with occasional spikes in noise that remained within acceptable limits. However, some residents may still be concerned about the occasional noise spikes or the noise generated by nearby sources. It is important to note that noise levels can be affected by various factors, including time of day, weather, and the presence of nearby sources of noise. As such, it is essential to consider these factors when interpreting the noise data.

Conclusion

In conclusion, the noise levels at Mayer's Flat Farm, a remote cannabis cultivation property located in The Fruitland Ridge area of Humboldt County, were found to be generally low, with occasional spikes in noise that remained within acceptable limits. Further measures could be taken to address specific concerns, such as nearby sources of noise, if residents desire. It is essential to consider noise levels when designing remote properties and to take measures to reduce noise pollution, which can have serious implications for public health and well-being.

Data

Sound Level Tester One- Eastern Property Line (40.0058, -123.8333)

Observed sounds- occasional gusts of high wind.

Average ambient sound recorded by the device was 40db.

Hourly Average- 39.8db

Sound Level Tester Two- Southern Property Line (40.0038, -123.8363)

Observed sounds- occasional gusts of high wind.

Average ambient sound recorded by the device was 38db.

Hourly Average- 37.88db

Sound level tester Three- Western Property line (40.0054, -123.8408)

Observed sounds- occasional gusts of wind.

Average ambient sound recorded by the device was 41db.

Hourly Average- 39.6db

Hour	Eastern Property Line	Southern Property Line	Western Property line
10am	38	36	38
11am	39	37	44
12pm	41	38	40
1pm	42	39	43
2pm	39	40	45
3pm	43	37	39
4pm	38	35	41
5pm	37	40	40
6pm	42	37	39
7pm	39	38	43
8pm	40	39	38
9pm	41	36	45
10pm	38	40	41
11pm	42	35	40
12pm	37	38	39
1am	40	37	40
2am	39	40	42
3am	42	39	45
4am	41	37	40
5am	39	41	42
6am	43	34	43
7am	36	39	41
8am	41	38	38
9am	40	39	44

10am	38	38	40
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