



## Project File Exhibit Q-22

# FNF Road Closure Monitoring and Road Treatment Examples

## Background

The FNF has monitored and annually reported on effectiveness of road closures since 1993. Some road closures have a history of vandalism or noncompliance. Inspection and evaluation of the effectiveness of road restrictions and barrier devices was reported in the FNF's annual A19 monitoring reports. Data was collected and reported thru 2016, except for no data in 1999 and 2001. Sampling efforts varied from year to year. The amount noted as ineffective were tallied differently for the period prior to 2005 and the period from 2005 forward. Prior to 2005, if the device was ineffective but fixed before the inspector left, the device was noted as effective. From 2005 forward, if the device was ineffective upon inspection, the device was noted as ineffective whether it was fixed on site. Generally, ineffective closure devices were fixed immediately, if possible. If not, devices were repaired as soon as possible, in compliance with The USFWS term and condition #5 in the 2013 BO on Amendment 19 of the former Flathead Forest Plan:

“T & C #5. The first restriction device on any road shall be inspected annually and kept in good repair. Effectiveness of the barrier to prevent unauthorized access shall be determined and recorded. In the case of an ineffective device, an alternative device, technique, or repair shall be implemented, and implementation of the appropriate remedy shall be considered a priority in the Forest's work scheduling. Human health and safety takes priority over this term and condition.”

Monitoring has shown that from 2005 through 2010, 4 to 13 percent of the barrier devices were found to be ineffective in preventing unauthorized use depending on the year with an average of 9.5 percent per year in this period. The grizzly bear population was growing and expanding in distribution during the time period when this level of road closure ineffectiveness was occurring. There has been no evidence that road closure ineffectiveness is having a negative effect on the grizzly bear population on the FNF.

The 2016 A19 report, Table 8b, shows the results of closure device monitoring on the Flathead National Forest from 2006 through 2015. This table shows from 3-13% of the barrier devices were found to be ineffective in preventing unauthorized use, depending on the year, with an average of 6.9 percent per year from 2006-2015. Since 2011, the average road closure effectiveness has improved, not declined. Since 2011, the average percentage of ineffective closures improved to 5 %. There is no evidence that ineffective road closures are resulting in effects to grizzly bears that were not previously considered. The incidental take statement for the revised forest plan recognizes that negative effects to individual grizzly bears are occurring in grizzly bear subunits which do not meet 19-19-68 for OMRD, TMRD, and core. If 3-13% of the road closures in these subunits are

ineffective, it would not result in levels of take that exceed that which has already been accounted for, so re-initiation of consultation would not be required.

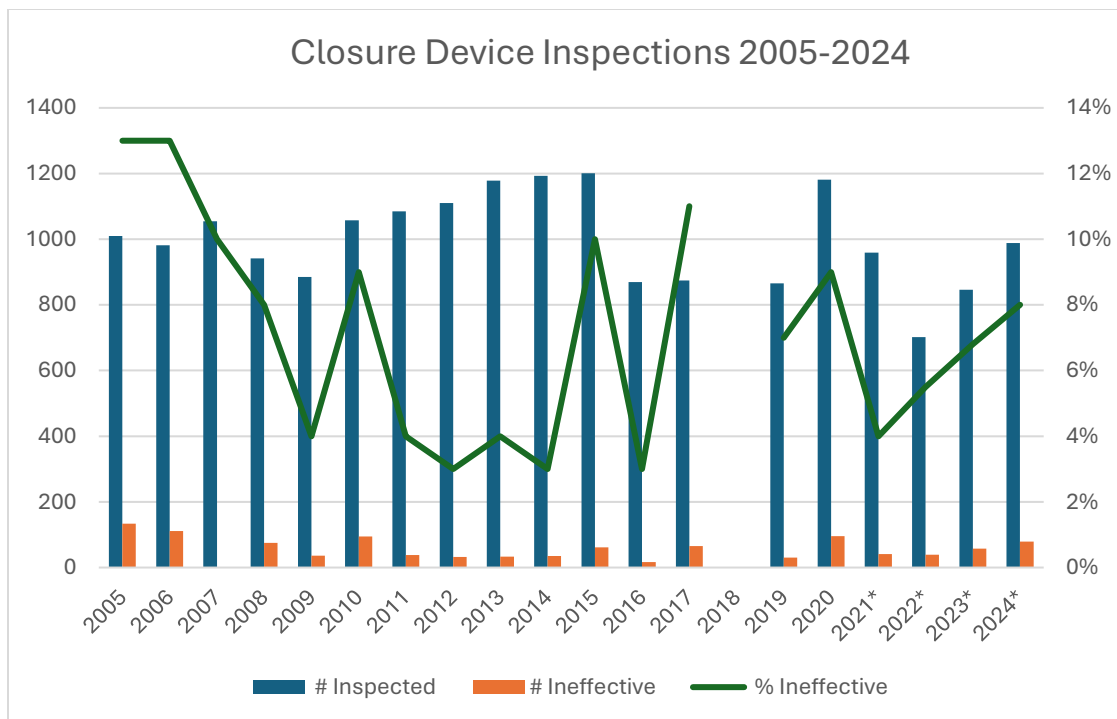
Road closure effectiveness is reported as part of the Biennial Monitoring and Effectiveness Report (See Revised Forest Plan Monitoring Infrastructure Table 60):

MON-IFS-01: Number and percentage of road closure devices effective at restricting closure devices checked and percentage public motorized use

IND-IFS-01: Number and percentage of road closure devices checked and percentage determined to be effective at restricting public motorized use

Ineffective closure devices varies in both space (across the forest) and by year. Figure 1 displays road closure device inspections, number of ineffective devices and the percentage of ineffective devices detected between 2005-2024. Inspection data from 2018 could not be located. Numbers of ineffective devices and percentages between 2021-2024 are currently draft and being reviewed.

**Figure 1.** Number of inspections, number ineffective and percentage ineffective by year across the Flathead Forest. Data is draft for the years with an asterisk.

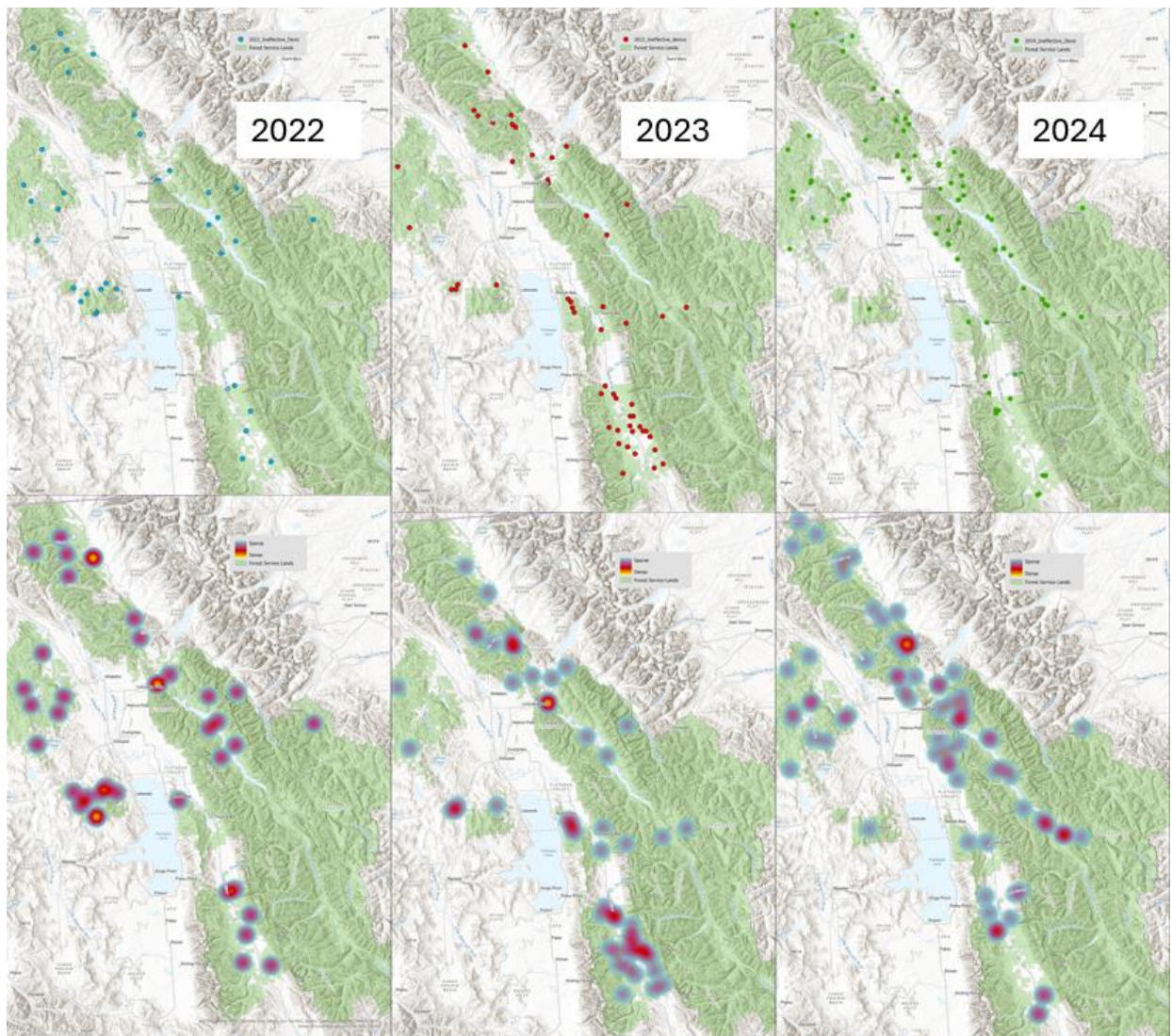


Under the revised Flathead Forest Plan (2018-2024), ineffectiveness is estimated to range 4-9%. This range remains consistent with ineffective devices detected between 2005-2011 when the grizzly bear population was known to exceed recovery goals and increasing in size (Table 1).

**Table 1.** Comparison of inspections and ineffective rates between 2005-2010 and 2021-2024.

Closure Effectiveness	2005-2011	2019-2024
Average	9% Ineffective	7% Ineffective
Range	4% to 13%	4% to 9 %
Median	8%	7%
95% Confidence Interval	+/-2.05%	+/-1.46%
Average Devices Inspected	906	935
Range of Devices Inspected	729 - 1,052	702 - 1,181

**Figure 1.** Point locations and density of locations of ineffective road closure devices between 2021-2024 on the Flathead Forest.



Ineffective devices occur throughout the forest and vary spatially each year. Some parts of the forest may have more ineffective closures than others in any particular year. These devices are repaired only to have hot spots show up in another geographic area the next season making



predicting and preventing unauthorized use incredibly difficult. Figure 1 displays three years of ineffective closure locations from annual forest monitoring. The top photo shows individual ineffective device locations and the bottom photo displays the density of these locations (number per square mile) where warmer colors are higher densities and cooler colors are lower densities. This figure demonstrates that ineffective devices are spread across the forest each year but have spatially variability on where unauthorized motorized use is occurring.

Monitoring of closure devices was reviewed for the project area. Illegal motorized access is a fluctuating stressor which is difficult to predicts for time and location for when it may occur. Review of the monitoring data does not review any persistent breaches in the analysis area and identified closure devices that have unauthorized motorized use have either been repaired or are actively prioritized in this present field season for repair.

Between 2022-2024, 232 devices were inspected in the Cyclone Bill analysis area. Of these devices, 18 were found to be ineffective with evidence of unauthorized motorized use either breached through the closure device or around it (Table 1).

**Table 1. Summary of road closure device monitoring in the project analysis area.**

Year	Number Inspected	Number Found Ineffective	Percent Effectiveness
2022	64	5	8%
2023	53	4	8%
2024	115	9	8%

Examples of breaches and other road management treatments are included in Appendix A. When private individuals illegally bypass or breach a closure device or drive in an area that is not authorized for such use, the information on such use is not as easily obtained. Flathead Forest monitoring is the assessment of the points where illegal motorized access starts at inspected closure devices. However, it is not known the distance traveled, the number of illegal trips or exact time and dates the illegal motorized activity occurred. Closure device monitoring the analysis area does not reveal any trends indicating that illegal activity is unique or different in the project analysis area than that observed forestwide throughout documented periods of grizzly bear population growth.



## Appendix A. Examples of Effective and Ineffective Closures





### Ineffective barrier

- Barrier driven over
- Worn down
- Trees cut in depression for driving over
- Evidence of motorized tracks behind barrier



### Effective barrier

- Barrier intact
- No evidence of motorized use around barrier
- No motorized use on road behind rock barrier







**Effective Closure**

- No gate or barrier present
- Road completely grown in and not able to be driven.





### Effective Barrier

- No evidence of barrier being driven over or around.
- Barrier intact.
- Additional obstacles on road.



### Effective Gate

- Gate closed, locked and operational.
- Room on left side to go around with two wheeled vehicle.
- No motorized tracks on trail to the left side.







#### Effective Gate

- Gate closed, locked and operational.
- Room on right side to go around with four wheeled vehicle
- Evidence of motorized tracks around the gate to use the road.



#### Effective Barrier

- Rock barrier in place
- No evidence of motorized use through, around or past barrier



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