

Ebike Community Advisory Committee

Meeting #6



**MARIN MUNICIPAL
WATER DISTRICT**

February 11, 2020

Marin Municipal Water District Watershed Lands

MMWD's enacting legislation under Municipal Water District Law of 1911 provides the district with authority to provide water services to Marin County residence.

Watershed Lands:

- 21,000 acres
- 7 Water storage reservoirs
- 79,566 acre-feet of storage

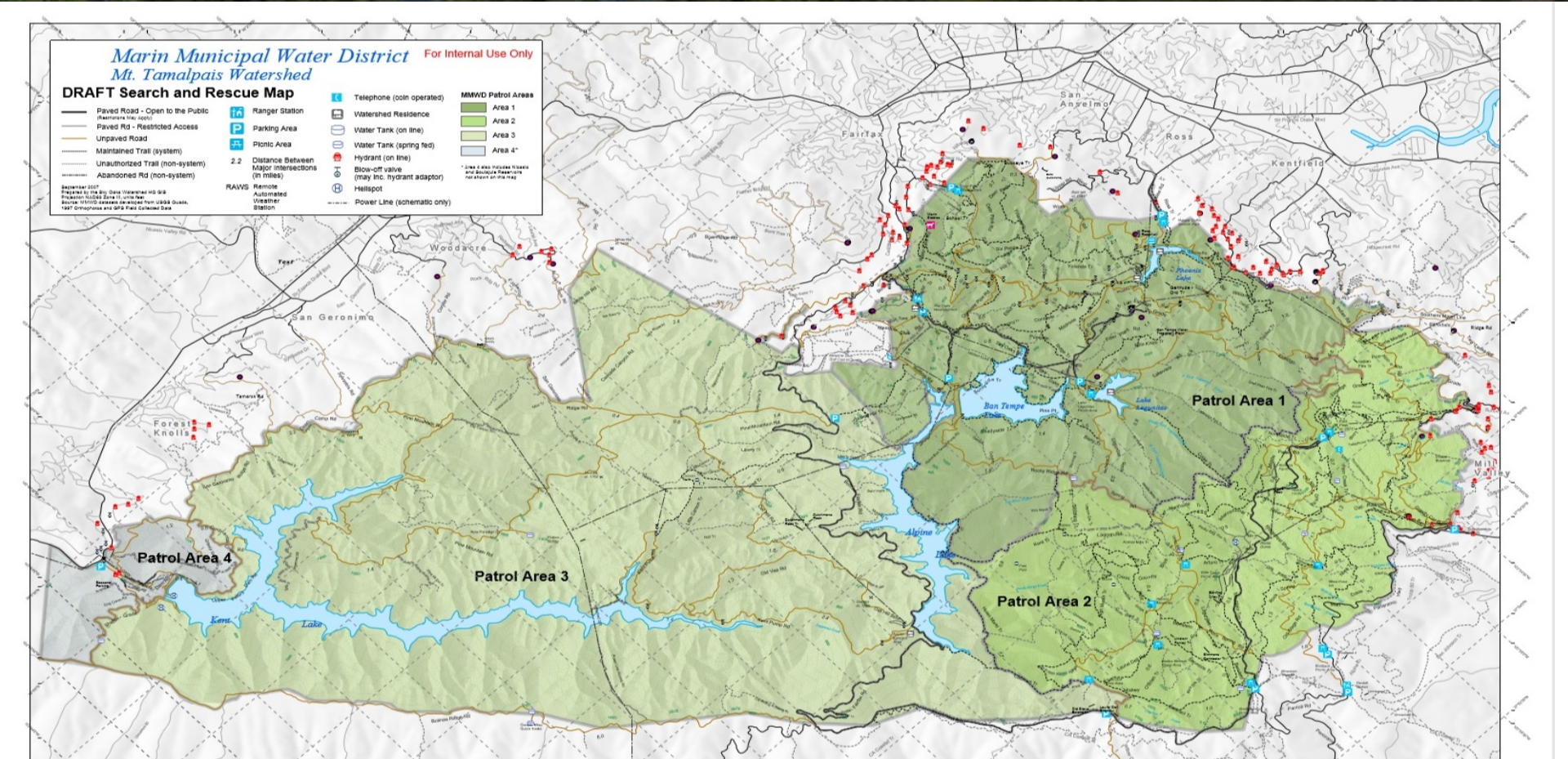
Watershed Facilities:

- 92 miles of service roads
- 60 miles of trails
- 8 picnic grounds





Watershed Patrol Zone Map





MARIN MUNICIPAL
WATER DISTRICT

Bikes on Service Roads



Impacts of Bikes on Service Roads



Impacts of Bikes on Service Roads

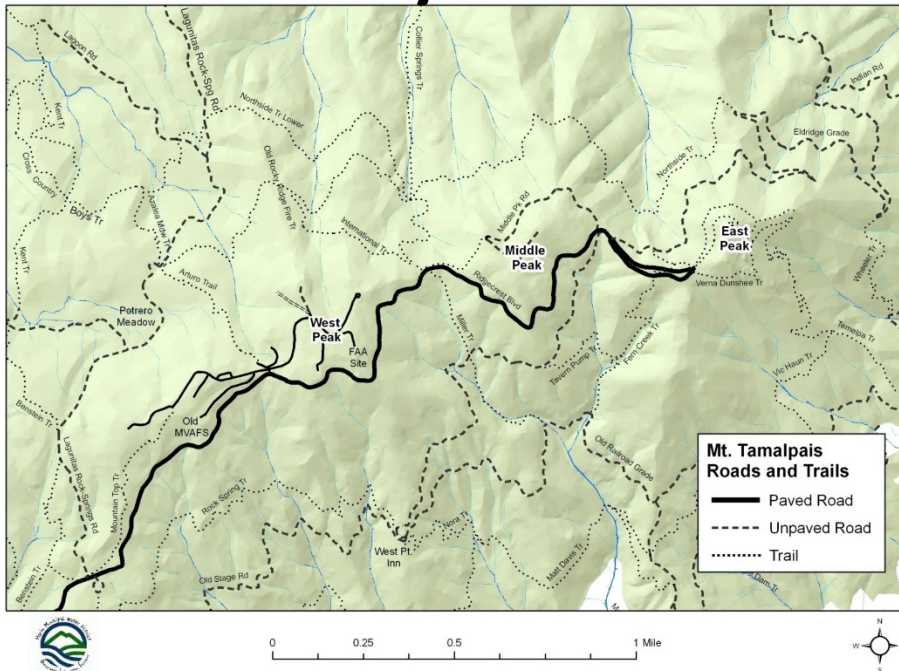


System & Non-System Trails

System Trail

A trail recognized by MMWD as legitimate and maintained by MMWD staff taking into account the ecological ramifications for continued use in the area

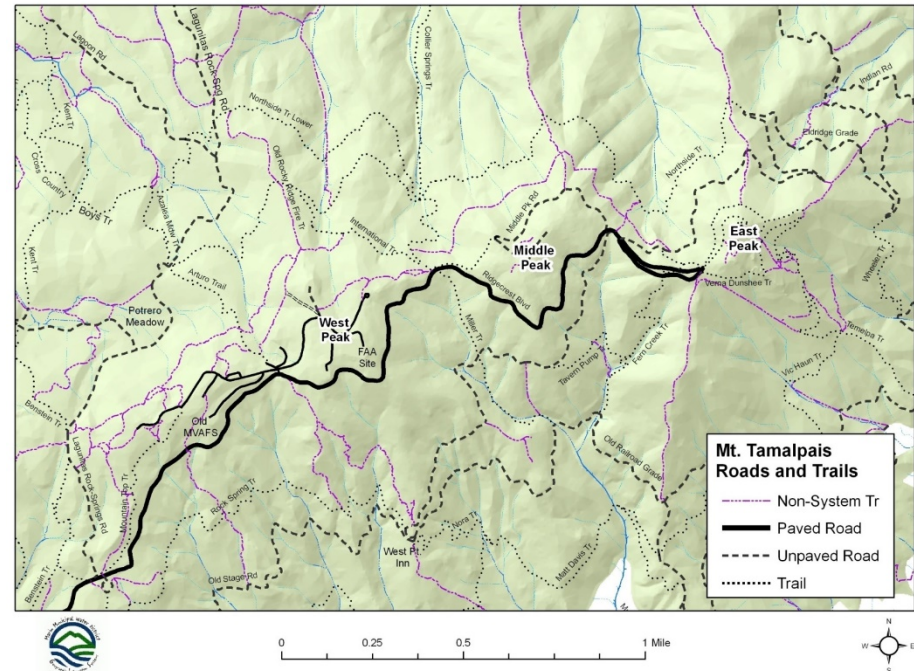
60 miles of system trails



Non-System Trail

An unsanctioned “social” trail that was created through continued use and/or trail-building tools

70 miles non-system trails



Bicyclist Illegal Trail Usage

System and Non-System Trails

WDO 9.04.02(a): Bicycles

- No person shall possess or operate any bicycle or similar vehicle on district lands except upon **public roads, parking lots, or protection roads not signed against such use**; Use may be restricted or prohibited on any or all roads at the district's discretion.



Bicyclist Illegal Usage of System Trails



Bicyclist Illegal Usage of Non-System Trails



Bicyclist Illegal Usage of Non-System Trails



Impacts of Bikes on the Watershed

- Habitat Fragmentation
- Trampling of native plants and sensitive habitats
- Compaction of Soils
- Trail erosion and incision
- Water quality impacts due to sedimentation that can impact aquatic habitat (routes through streams)
- Disturbances to wildlife through ongoing usage
- Pathway for invasive plants
- As non-system trails become more visible there is an increase in usage and impacts



Impacts of Bikes on the Watershed

- Off hour usage of watershed by cyclist
- Large unsanctioned group rides
- Excessive speed by cyclist on services roads, trails and non-system trails
- Vandalism of enforcement signs (not bike signs removed or damaged)
- User conflicts associated with illegal trail usage



Project Restore

Project Restore

Is an effort by MMWD to restore natural habitat by removing environmentally damaging trails on the Mt. Tamalpais Watershed.

1. Area is closed
2. Trail decommission and restoration of area
3. Monitoring and Patrol



Project Restore

Restoring natural habitat by removing environmentally damaging trails



MAKING HABITATS WHOLE AGAIN

This year "Project Restore" will be near Eldridge Grade and Tucker Trail (see map). The main objectives are to:

- 1) decommission non-system trails through sensitive habitats;
- 2) eliminate hazardous trails,
- 3) minimize erosion.

You can help by respecting the closures so the restored areas will be able to flourish. Please make use of the 150 miles of roads and trails on the Watershed designated and maintained for your use.

For more information, please contact Sky Oaks Watershed Headquarters at (415) 945-1190 or watershed@marinwater.org

HOW TRAILS CAN DAMAGE THE WATERSHED

The Mount Tamalpais Road and Trail Plan identified over 50 miles of unofficial trails on Watershed lands. Unauthorized trails have continued to expand, which Project Restore aims to control. These trails are undesirable for many reasons:

- Fragmentation of native habitat and disruption of wildlife populations
- Increased erosion
- Negative impacts on sensitive habitats such as wetlands and creek corridors
- Provides pathways for invasive weeds to penetrate native wildlands
- Damages scenic beauty
- Increase risk of trail users getting lost because of unclear trail routes

For more information, please see the Road and Trail plan on the web: www.marinwater.org

Project Restore - Mt. Tamalpais Watershed per the Mt. Tamalpais Watershed Road and Trail Management Plan



Special Thanks to:
Conservation Corps
North Bay



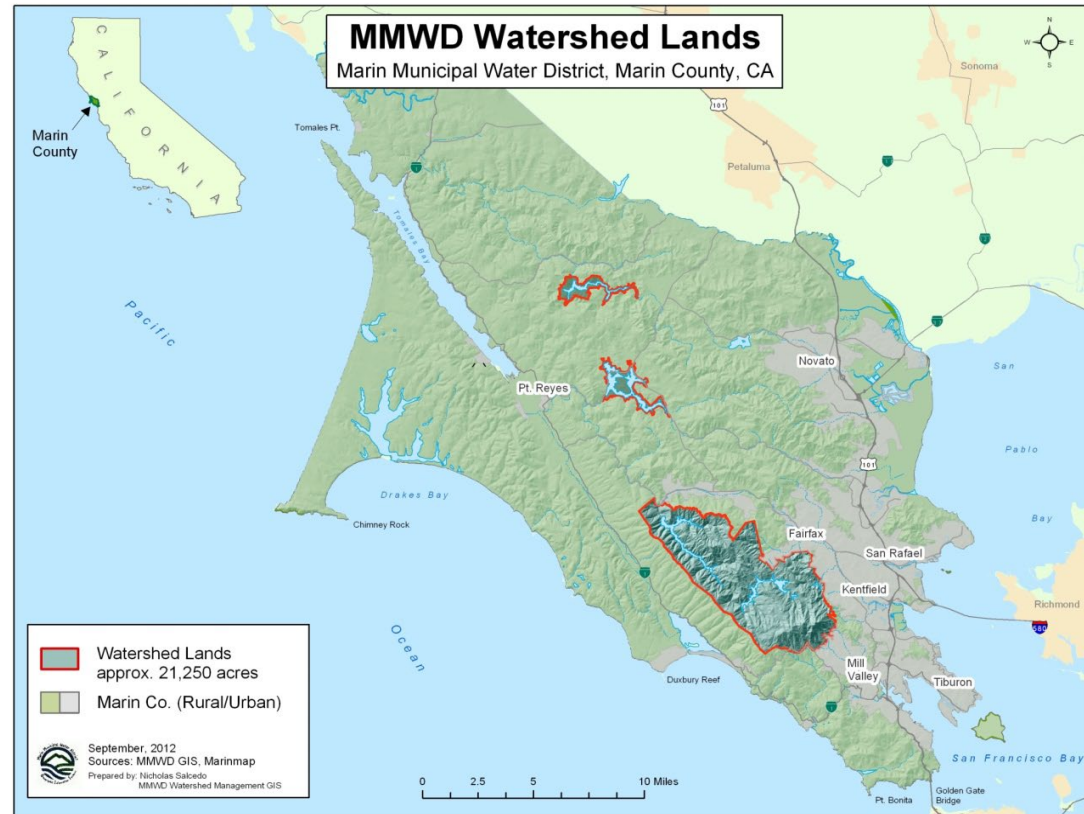
Photo: M. Stone 2012



Watershed Protection Staff & District Watershed Lands

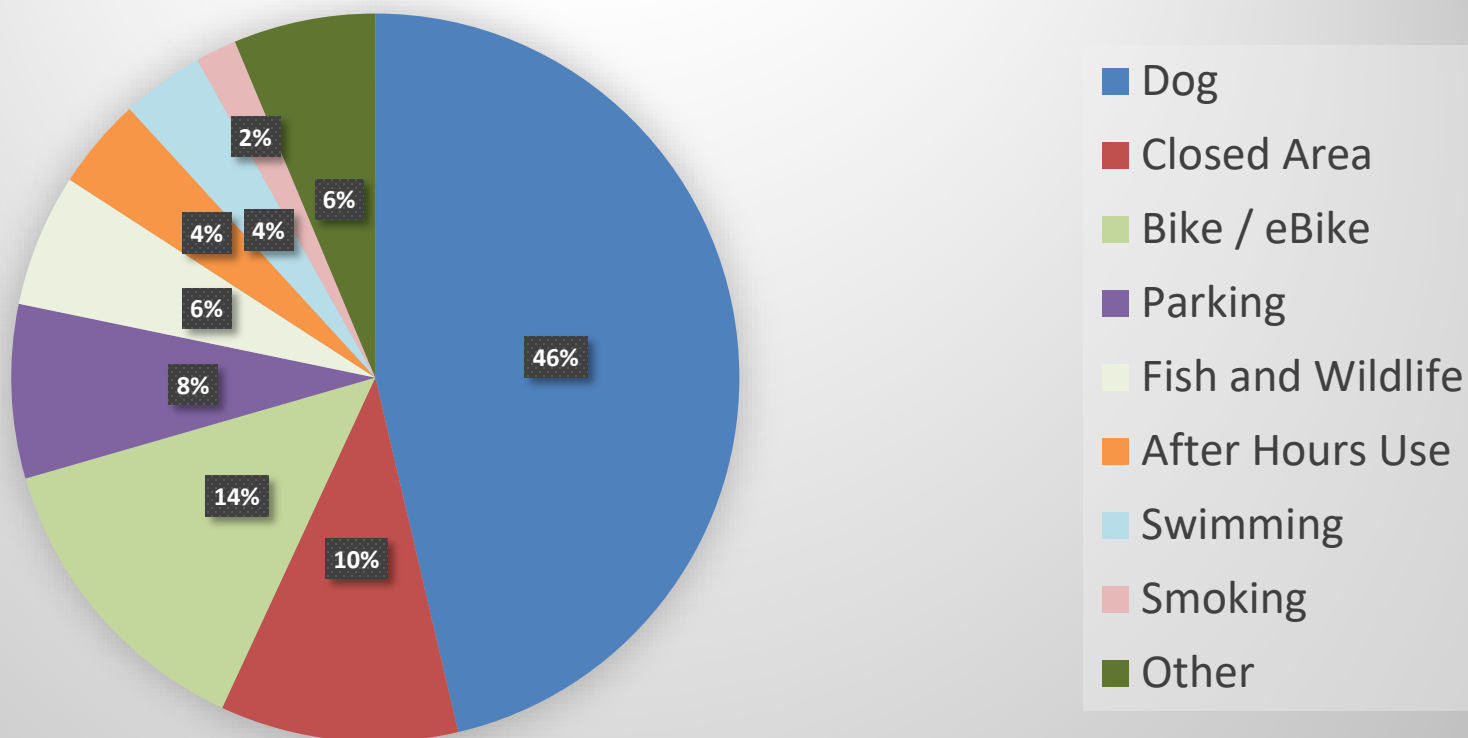
Patrol Staff:

- Seven Rangers (6 rangers & 1 deputy)
- Operational periods (sunrise to sunset) varies from 11 hours in the winter to 15 hours in the summer
- Average of 4 Ranger staff on duty during operational hours



MMWD Ranger Enforcement Overview

Warnings Issued for Water District Ordinance Violations
(953 Total)



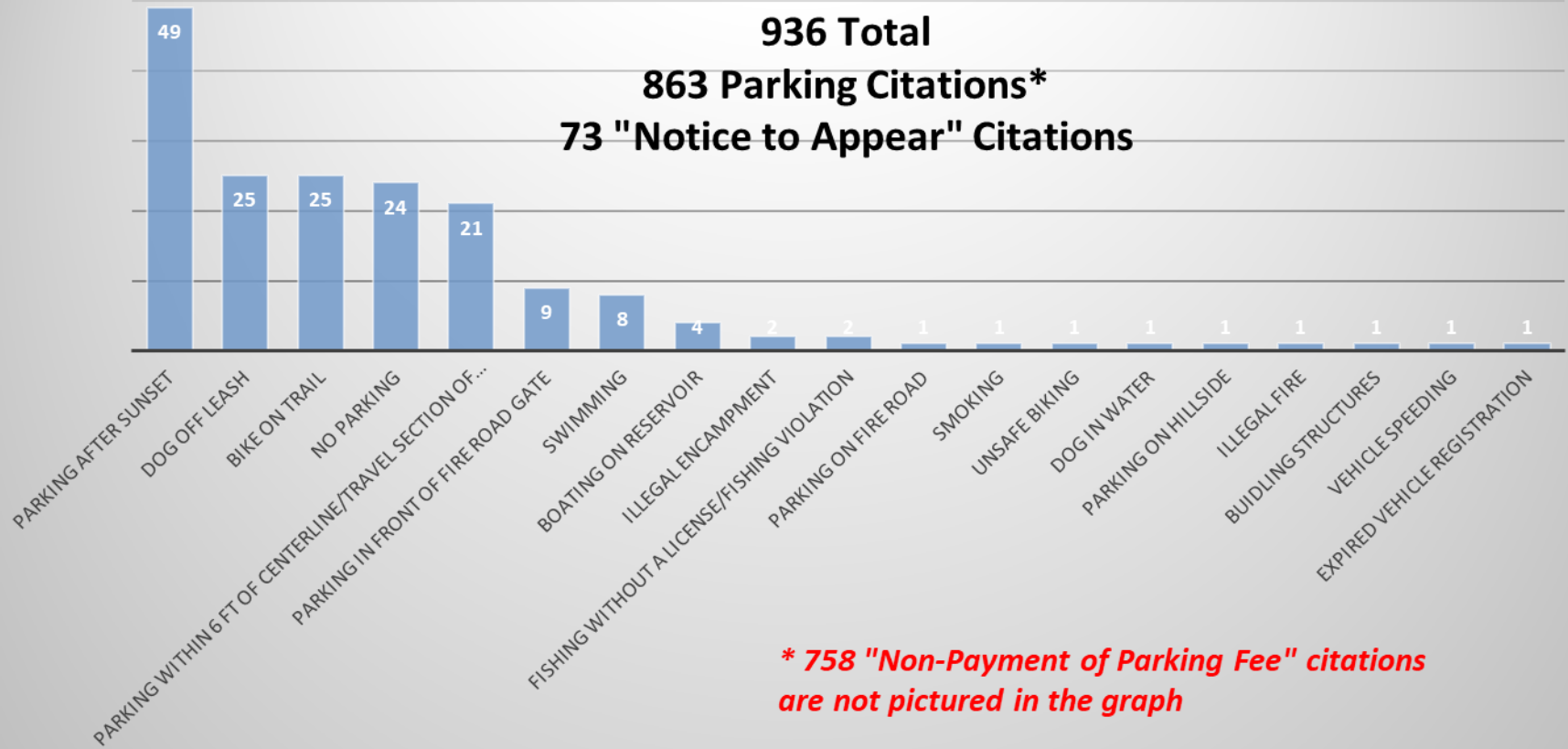
MMWD Ranger Enforcement Overview

Citations Issued in 2019

936 Total

863 Parking Citations*

73 "Notice to Appear" Citations

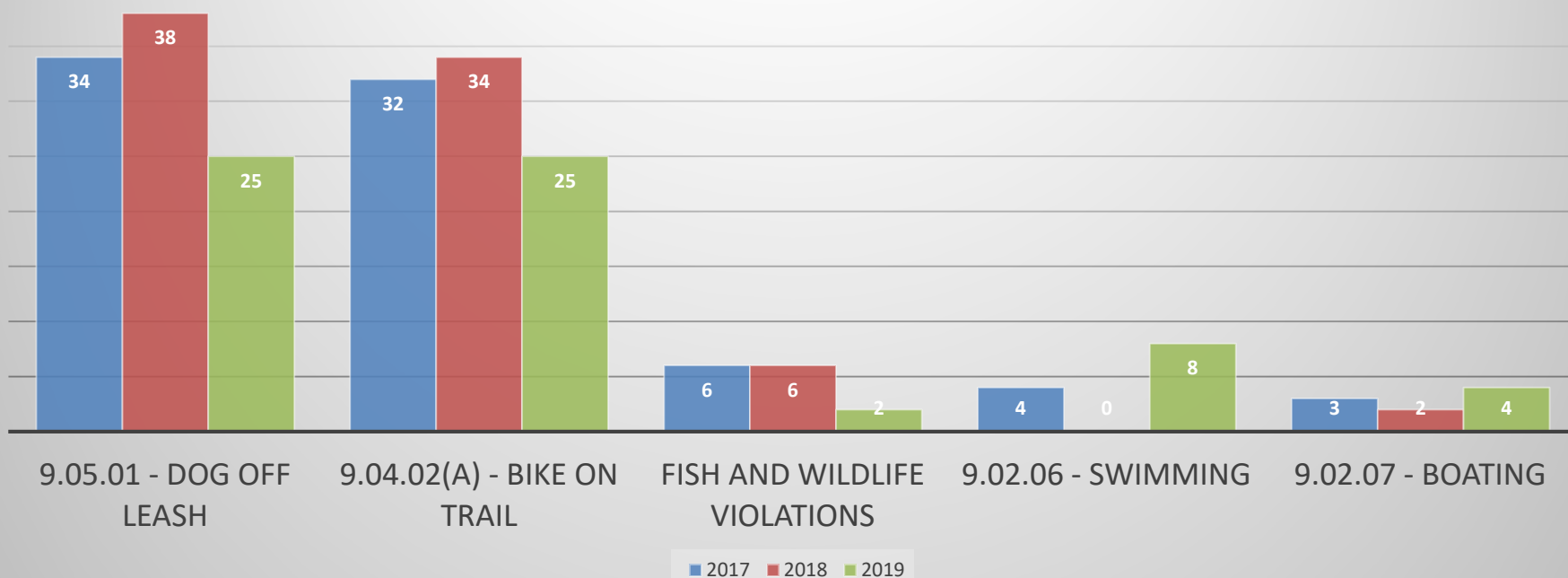


MMWD Ranger Enforcement Overview

Violation	Fine
Dog Off Leash	\$158
Bike On Trail	\$158
<i>2nd Violation (Bike on Trail & Dog Off Leash)</i>	<i>\$773</i>
Closed Area	\$158
Swimming	\$158
Fishing Without a License	\$485
Boating	\$158
Revocation of Privileges	\$773
Parking After Sunset	\$50
Parking Prohibited 6' of Center	\$100
Park within Posted "No Parking" Areas	\$53

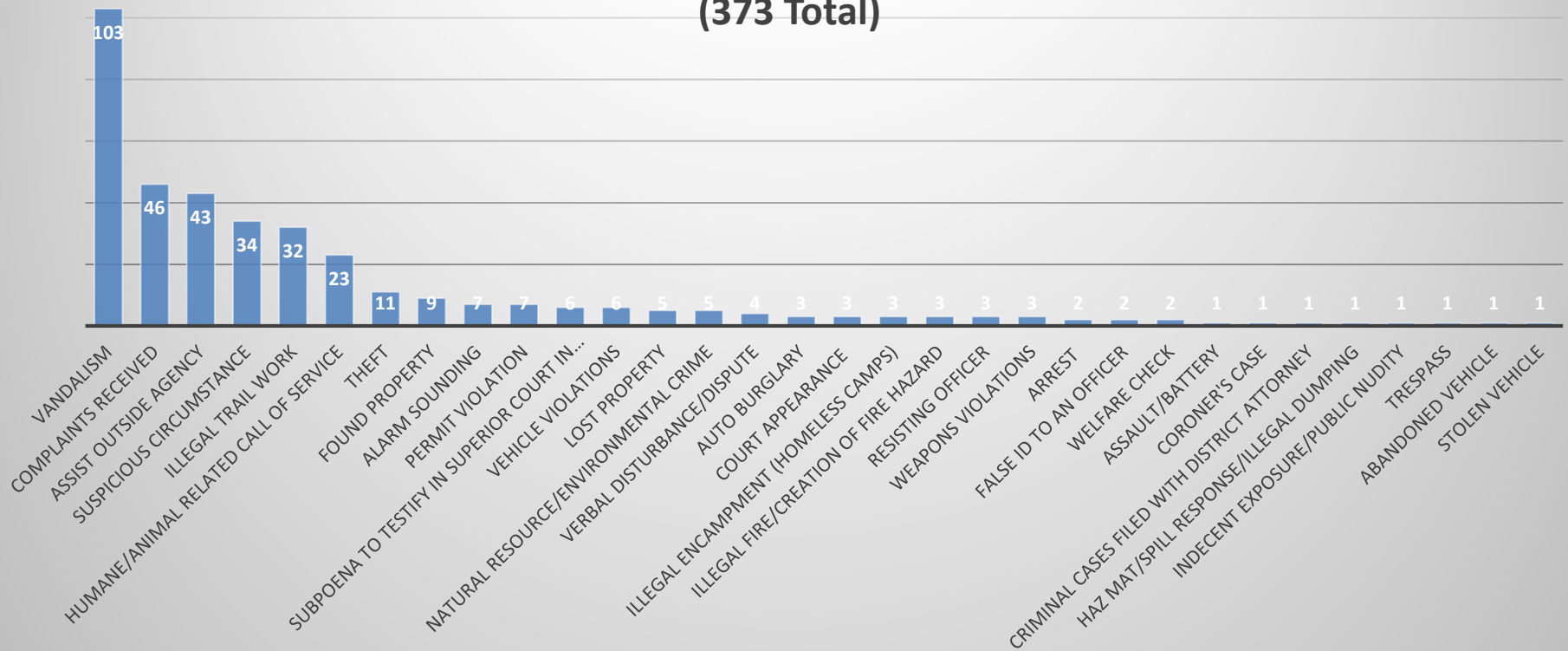
MMWD Ranger Enforcement Overview

**Yearly Breakdown of Most Common Citations
2017-2019
(Excludes Parking Citations)**



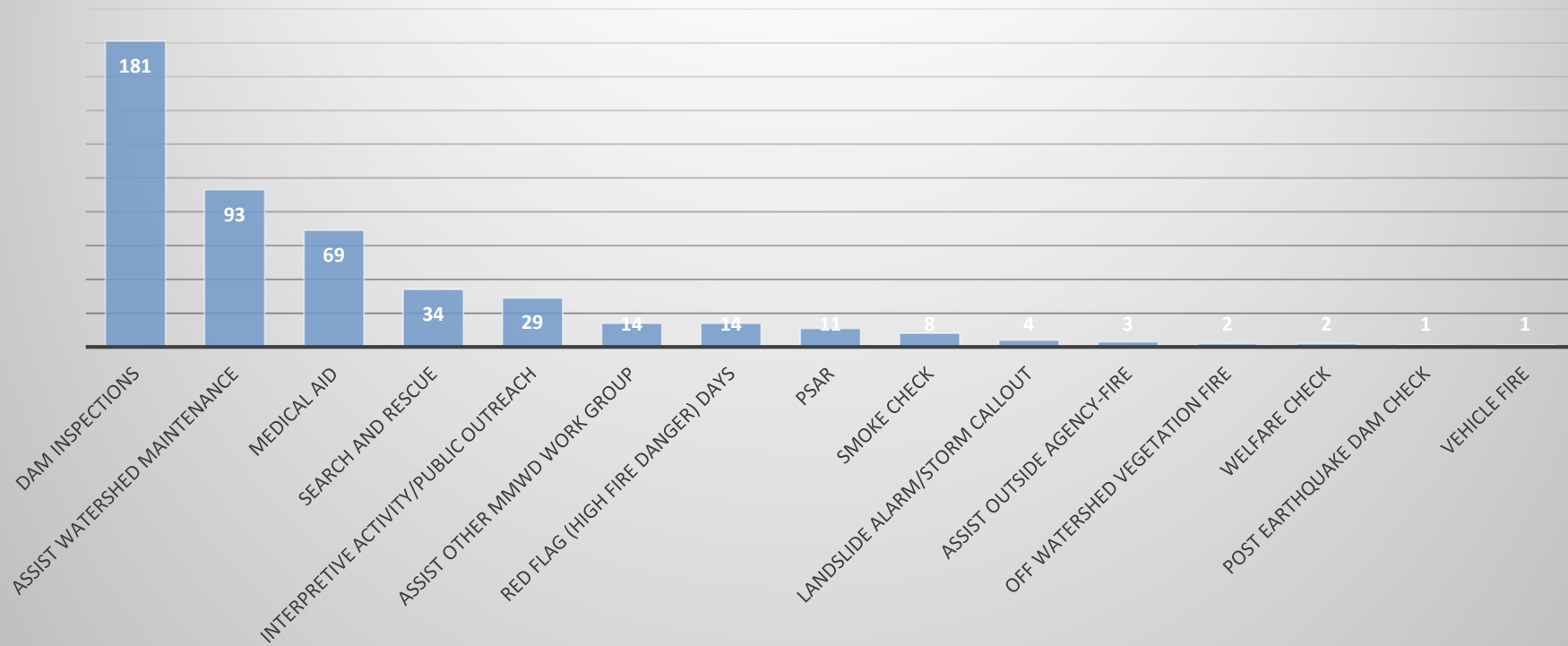
MMWD Ranger Enforcement Overview

Documented Law Enforcement Incident's and Report's Completed For 2019 (373 Total)



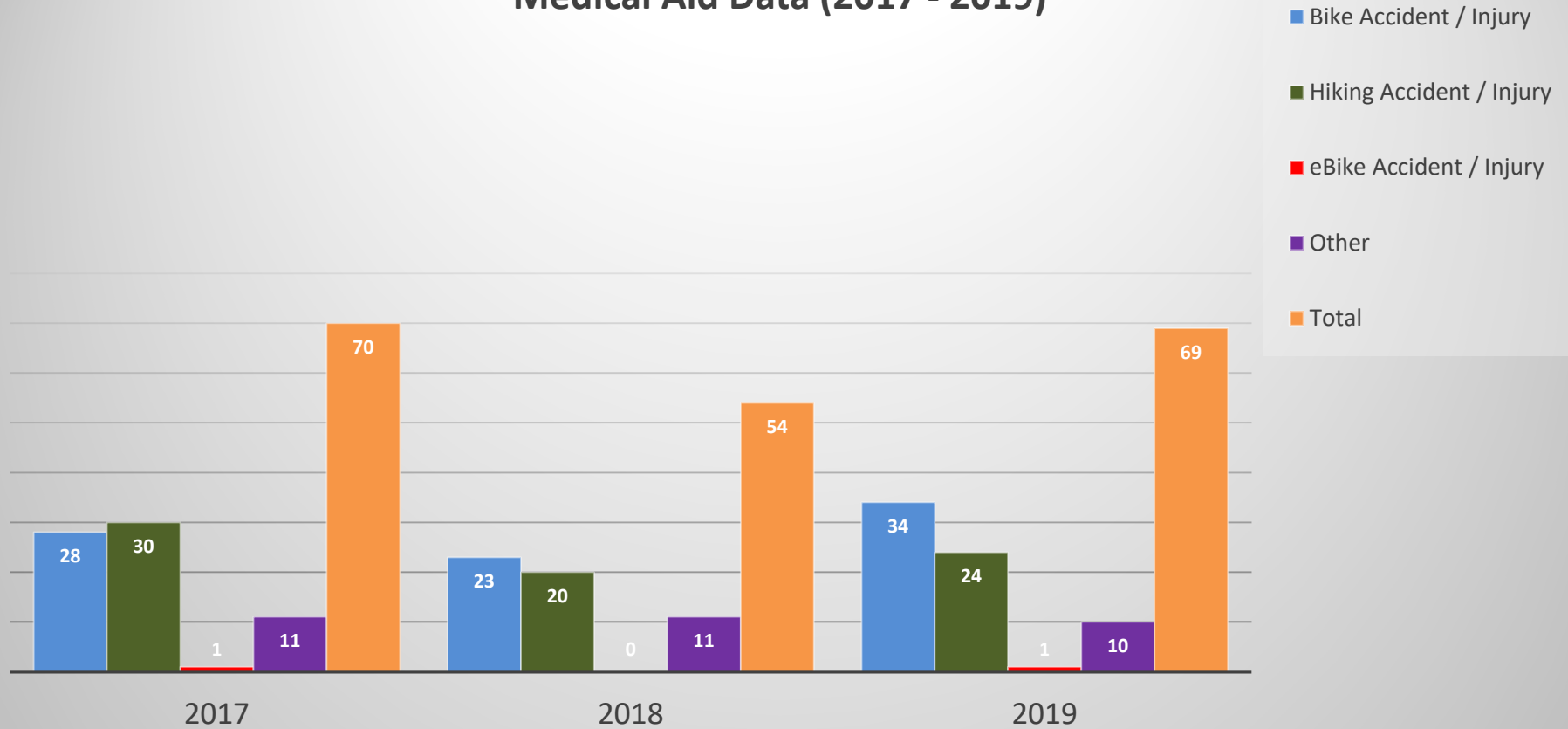
MMWD Ranger Enforcement Overview

Additional Ranger "Call's For Service" 2019 (466 Total)



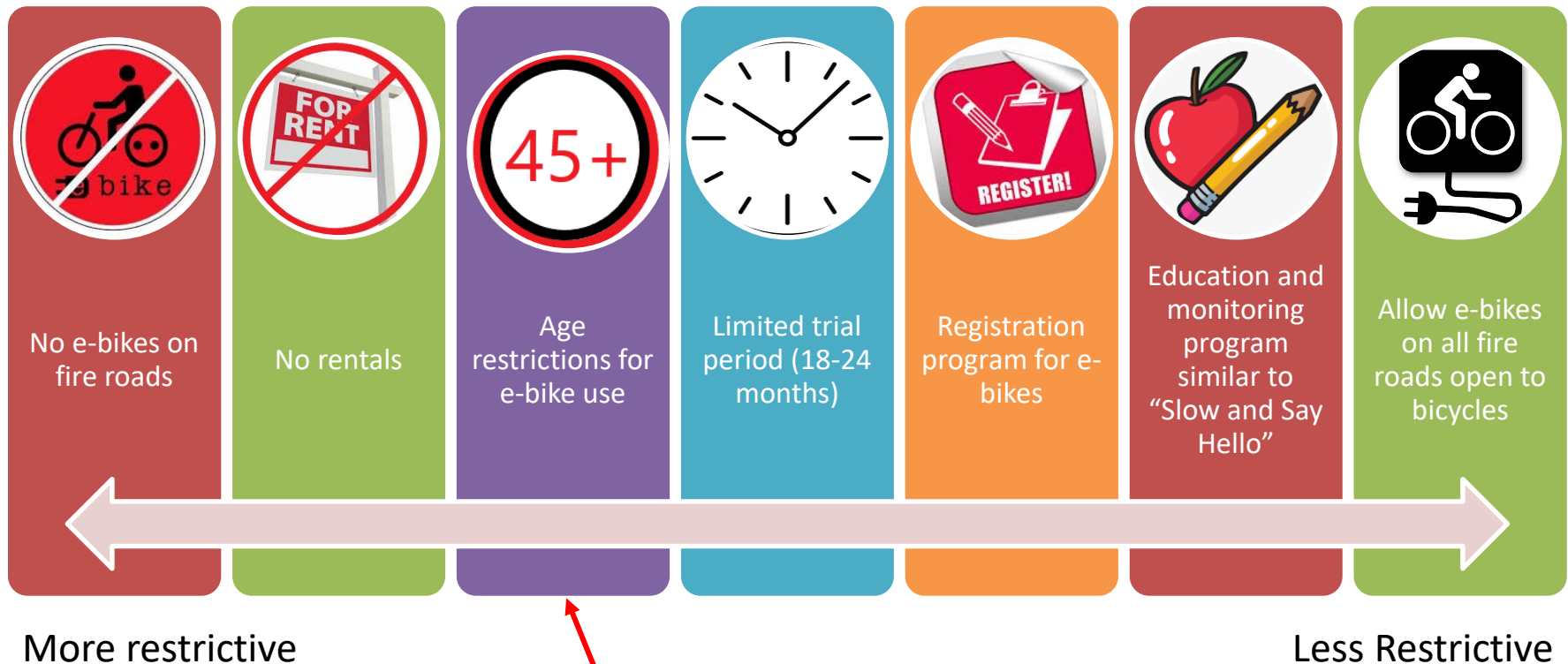
MMWD Ranger Response to Medical Aid Overview

Medical Aid Data (2017 - 2019)



CAC Member Recommendations

Summary of ideas suggested by E-Bike CAC representatives



CAC Member Recommendations (cont.)

- Other observations:
 - Support or opposition to E-bikes is equally divided among CAC members
 - Information on unique impacts to fire roads by E-bikes vs regular bikes is inconclusive. Responses highlight anecdotal information and personal observation
- Recommendations were generally similar to December 2018 MMWD public workshop input including:
 - Distance into watershed travelled by e-bikes
 - Fire danger
 - Concerns regarding rapidly expanding rental market

Potential Range of Alternatives

Stronger strategic enforcement	Education and etiquette outreach program	Allow e-bikes on all roads currently open to bicycles
Limit access to specific fire roads	Fee based registration for e-bikes	Monitoring for impacts
No e-bikes allowed on MMWD lands	Prohibit e-bike rentals	Fire risk reduction (sand buckets, water station, education)

