

TO: The Mariposa County Transportation Department.

FROM: Frank Olotu, Geospatial engineer at YAHR

DATE: November 11, 2022

SUBJECT: Potential landslide threat to the Yosemite National Park Arch Rock Entrance

I am writing to inform you that while working on wildfire and landslide risk assessment for the Yosemite All Hazards Region Geospatial Coordination Group (YAHR), I discovered that the Yosemite National Park Arch Rock Entrance, a popular tourist location is a potential landslide threat and I would like to alert you (Mariposa County Transportation Department) and discuss potential safety measures to put in place.

There is an atmospheric river event approaching the region of the Ferguson fire, which the Yosemite National Park Arch Rock Entrance falls into, and as we know from previous events when an atmospheric river event occurs after a fire, it could spell disaster for people in the immediate vicinity of the burned hillsides, such as the mudslides that occurred during the 2018 Southern California debris flow, which affected the Santa Barbara county, destroying over 100 homes and damaged an additional 300. Over forty to forty-five homes were affected in Los Angeles county because of the debris flow. (*"2018 Southern California mudflows," 2022*).

As a geospatial professional I would advise that the Yosemite National Park Arch Rock Entrance be closed for the time being and have tourists redirected to a different entrance, while

the Arch Rock entrance is reinforced to reduce the angle of the slope and create outlets for drainage. I also believe that a protective wall should be built to support the bottom of the slope. (*"Before a landslide," 2018*) I have also included a map I created to communicate the landslide risk to the Yosemite National Park Arch Rock Entrance. If you have any questions, please contact the Yosemite All Hazards Region Geospatial Coordination Group or I, Frank Olotu at folotu@ucmerced.edu .

Works Cited

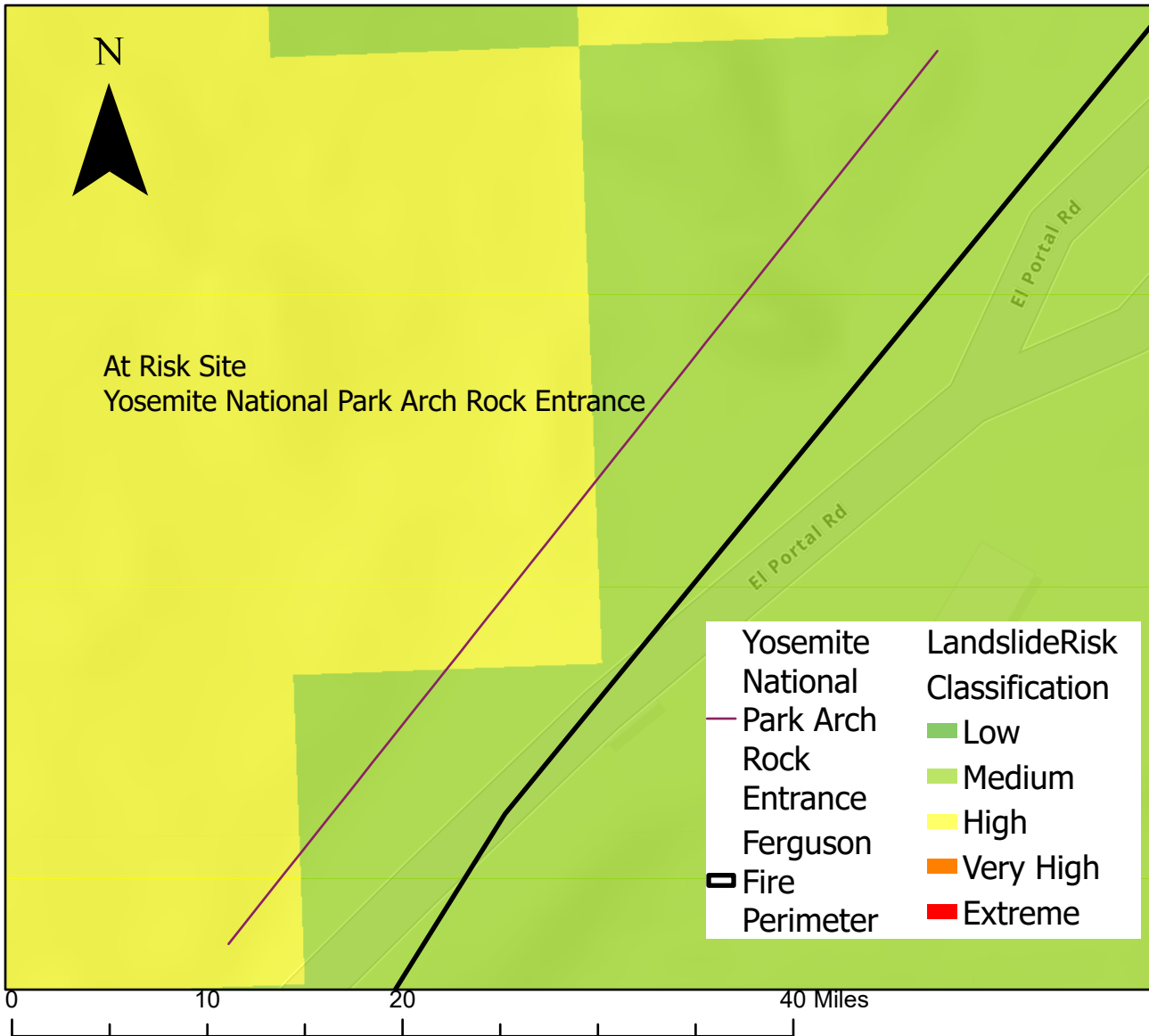
2018 Southern California mudflows. (2022, April 4). Wikipedia, the free encyclopedia.

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https://en.wikipedia.org/wiki/2018_Southern_California_mudflows#Response

Before a landslide. (2018, February 21). Get Prepared / Préparez-vous.

<https://www.getprepared.gc.ca/cnt/hzd/lnsllds-bfr-en.aspx>



Profile Graph

OutputProfileYosemiteNationalParkArchRockEntrance

