

Community Input on the Future of Lava-Covered Roads in Leilani Estates

On August 28, 2020. The board adopted a policy to keep the barricades up and to prohibit grading of roads in the eruption area pending a study of the consequences of opening these roads. Read the policy [here](#).

This latest update is the 4th monthly follow up regarding research into the consequences of opening roads. It also addresses steps for prevention of nuisance behaviors on the new lava which has caused problems for other Hawaii neighborhoods in similar situations.

Much of the lava area is treacherous to walk on. There are hot spots, soft footing and unseen voids covered by thin crusts which can collapse if someone steps or drives on them. It is certainly not suitable for safe recreation for families and visitors.

I. Goals

1. Minimize the negative effects for residents living near the lava-covered area, including noise, dust, trespassing, tour buses, parked cars, dumping, disrespectful behaviors, violations of privacy.
2. Permit owners of lava-covered properties access to visit their land while discouraging trespassers from driving on private property of others as well as keeping off-road vehicle activity out.
3. Discourage camping, squatting, building shacks, car dumping, garbage dumping, parking on private properties, and generator noise on the lava-covered properties.
4. Encourage the development, by the county, of a site outside of Leilani residential area where tourists can safely get a good view of Fissure Eight and other fissures.
5. Show respect for the eruption site as a natural feature that has both scientific and educational value. Destruction of the volcanic features should not be allowed.
6. Encourage respect for the LCA members who lost their homes to the lava by not allowing large groups or ORV use in the area.

II. Recommended Management Practices

1. Maintain barricades to prevent driving on lava fields.
2. Prohibit grading and opening of any roads covered by lava and pumice unless approved by a vote of the members and the Board of Directors of LCA. Any grading of roads that is approved must be done by a licensed, insured construction company, dust abatement plan put in place, and yearly upkeep for road bed stability factored into the yearly costs.
3. Encourage residents of Nohea, Luana, Ho'okupu and Kaupili streets to create a gate system that discourages trespass by cars, trucks, tour vans and buses. The gate at Makamae lowered visitation to their street by 80% while allowing easy passage to residents.

4. Work with the county to locate and help design a site for viewing Fissure 8 and the entire lava field. The county has funding for "Access points" for viewing of volcanic and other features. The chosen site should not compromise any LCA resident's privacy.
5. It should not be the duty of residents living near the eruption site to manage undesirable or nuisance behaviours. It is unreasonable to expect LCA board members to police the area. The county police do not enforce nuisance behaviors as crimes. They will investigate break-ins and thefts, but they are not willing to apprehend joy-riders or investigate dumping incidents. See section III below under Security.

III. Estimates of new expenses anticipated if the 750 feet of the lava-covered roads are opened.

A. Possible Ongoing Expenses to be covered by LCA, requiring increases in dues

1. Security: LCA may have to hire personnel to prevent squatting, camping, groups hiking in dangerous areas, building of shacks, dumping of garbage. Neighborhood watch is not a security service, and it is not set up to monitor the lava covered areas. Local security services charge \$50 per hour per security employee, but none at this level of expense are trained for dealing with criminals. No options for hourly security personnel at this level have been found. Many communities hire employees for security purposes. Each employee can cost the association over \$100,000 per year in wages, benefits and FICA taxes.
2. Removal of rubbish, junk, garbage, car bodies etc.: Companies on the Big Island charge \$100 to \$400 per load depending on the size of the materials to be taken to the dump and scrap metal companies. Some types of materials require dumping fees, which is why trash is put on the roadside in the first place. The yearly cost is estimated to be about \$31,200 per year if two pickup loads per week are required. Derelict vehicles will cost \$300-\$500 each to remove depending on the size. If two vehicles are dumped per week, this yearly cost will be \$41,600. Volunteer or employee time is required to manage the pickups of junk and car body removals.
3. Volcanic Dust abatement. This is usually handled on roads by spraying road beds with water. HPP lists dust abatement as one of their major expenses. If motorcycles and off road vehicles are stirring up dust, then another method must be employed. Cost: unknown
4. Liability Insurance. LCA is responsible for safety in the lava areas. If roads are opened, persons who are injured in the area may hold LCA liable for accidents, even if "enter at your own risk" signs are put up. Opening the roads can be taken as an assurance that the area is safe for walking and driving. Possible results for LCA could include cancellation of our policy and expensive lawsuits.
5. Upkeep of opened roads: placing new base course layer on top of the soft pumice, re-grading depending on amount of use. Cost estimate: \$6,695 for one 750 foot road by Earth Karvers.

6. Total estimated yearly cost for Luana Street: \$79,495 which would raise dues by \$60 per lot per year. This does not include dust abatement, security for trespassing and nuisance behaviors, increased insurance costs or possible lawsuits.

B. One-time Expenses that will require a Special Assessment

1. Typical Projected Cost for grading, not paving, of Luana Street, 750 feet long, 20 feet wide, satisfying LCA insurance requirements for quality and safety. Cost \$40,021.00 (estimated by Earth Karvers). For grading all 5 of the lower Malama area roads: \$200,105.00 if only 750 feet of each are graded.

2. Prepare a geotechnical hazards report summarizing site observations and opinions about the various geotechnical, seismic, and volcanic hazards anticipated during and after road grading and other activities anticipated in the area on Luana Street \$8,650.00 (Stuart Engineering, Kailua HI). To determine the hazards on all five lower Malama Streets: \$43,250.00

3. Environmental Impact Statement. Health effects of volcanic dust, disruption of area by ORV use, safety of visitors. Cost unknown, depends on the number of impacts studied. (Kaimana Environmental Solutions LLC.)

4. Total estimated one-time cost: \$48,671.00 (for one road) - \$243,355 (for 5 roads) each 750 feet long. That would be \$37.00 per lot for Luana street and \$184.00 per lot to do all 5 streets. Not included are environmental impact and health studies regarding lava dust and geologic hazards.

IV. Additional Considerations

The person requesting to have the road opened pointed out that improving their lava-covered lots will allow LCA to charge these owners yearly dues. The board decided in 2018 to not charge dues if a member had any lava on their property. Future boards may modify this policy. At the present rate of \$200 per year for each developed lot, it would take 397 developed lots in order to pay for the expenses of Luana street yearly.

The Board has asked the county to announce whether or not it will allow permits for home building on the new lava. The new Public Works director is presently developing policy on this issue.

The county has announced its intention to buyout lava-covered properties from willing sellers. On those properties, the county will not allow the rebuilding of homes or any other structure. The eruption area is by no means dormant. Hot lava is still present at Fissure 8 and the Kilauea system in the national park is now very active. There is a direct conduit for hot lava between the main crater of Kilauea and the Leilani fissure system. Eruptions in Kapoho in 1955 were followed by further eruptions in 1960, only 5 years apart. Promoting redevelopment encourages property owners to make high risk decisions.

The source of this information has been:

- a. The Roads Poll taken online by LCA members between August and October, 2020
- b. Interviews with residents living near the lava
- c. Input from members at monthly meetings
- d. Discussion with geologists (UH Hilo, Hawaii Volcanoes Observatory)
- e. Consulting with local road building companies
- f. Phone calls to the county Public Works Department, Security companies and trash hauling companies as well as the scrap yard services.
- g. Discussion with County elected representatives, and department managers

Submitted by the LCA Board on December 26.

To provide input (comments, suggestions, questions) on this document, please contact the board of directors by sending an email to: admin@leilaniestates.org, Please indicate "Lava-covered Roads" in the subject line.