

## Overview,

### July 23, 2008 Kaumana Drive Flood Project

- The Natural Resources Conservation Service (NRCS) explained that because of the cost and benefits of the various proposed phases of the Wailuku-Alenaio Watershed flood project, the best value for the Federal government was the Kaumana Drive Flood Project
- Federal funds are based on Congressional approval. This varies year to year and it dictates the amount and type of NRCS Flood project work for that year.
- NRCS has received money for the planning. Expenses for the design and other preliminary work have been requested for the 2009 fiscal year. Construction funds will be requested after that.
- NRCS will pay for construction of most of the flood control structures. However, NRCS doesn't pay for structures related to modification of roads and utilities. The County pays for this, acquires land, and is responsible for obtaining permits and maintaining drainage improvements.
- Existing flood zones are along Kaumana Drive. The Belt Collins Hawaii study follows the NRCS study which proposed to build levees on the Hamakua side of the existing homes, since the runoff flowed in the Hamakua to Puna Direction.
- Puainako Street Extension was built after the 2000 floods. This road has the potential to prevent runoff from flowing toward Kaumana Drive.
- Water also flows from Puna to Hamakua direction. The culvert along Wilder Road was examined. This culvert does not have adequate capacity and is suspected to be a major cause of flooding of homes along Kaumana Drive. Replacement of this culvert is recommended.
- The excess runoff collects within Kaumana Drive which may result in damage to the homes along Kaumana Drive.
- An improvement being considered includes rebuilding the ditch that diverts flow into Kaluiki Stream. The impact of the diversion would be limited and result in a reduction of the flow toward the homes along Kaumana Drive.
- Although there are lava tubes in the area, the discharge of runoff into lava tubes will not be utilized in the drainage improvement plan. All runoff shall be kept on the surface.
- **Other possible improvements:**
  - Replace culvert on Akala Road. This culvert does not appear to have adequate capacity. Field observations indicate excess flow overflows toward adjacent homes.
  - Improve the ditch on the Hamakua side of the homes makai of Kaumana Caves.

From the environmental studies, the proposed improvements would not impact any rare or endangered plant or wildlife species. There were a couple sightings of Hawaiian Hawk in the study area but these species are widespread in the region. Although none were sighted, certain seabirds are known to fly over the area. A stream assessment study was conducted on

Kaluiki Stream and found that aquatic life would not be significantly impacted by any project improvements. The archaeological survey with its limited coverage revealed no significant features or sites in the area.

**Questions:**

Diversion A— the diversion ditch has a low side. Flooding occurs on the opposite side of my house because the ditch is not maintained, erosion sets in and there is a breach in this ditch.

*Answer: This is a reason for improving the ditch. One diversion will direct the flow into the existing Kaluiki Stream.*

Why water can't go to Wailuku River?

*Answer: It's a good idea. However, NRCS was not able to get the Federal money to pay for this project.*

Water has no where to go on Akala Road. It was huge. Will the diversion at the top help?

*Answer: Yes.*

Problem—water flows into their homes. We are losing huge amounts top soil. Are there any interim solutions to fix the problem?

*Answer: this relates to the home owners and stream maintenance issue which is a tricky situation.*

Notice more water coming onto lower Kaumana below Chong Street. We have had three floods. Water flowed through my living room and rapids through the backyard. What can a homeowner do?

I live above Chong Street—how tall is the culvert?

*Answer: 6'x6'.*

Diversion changed the flow of water. It doesn't run year round only when it rains it floods, a lava tube was altered.

I live in the Chong subdivision next to the stream just above Chong Bridge. During the last big storm earlier this year there was a lot of water in the stream but a few feet downstream there was just a narrow flow.

Water is coming from the forest. Must get above Kaumana, above the forest and look at the total solutions

Cut into the forest. There no houses at the top. February rains, gets an inch of water that is level with the garage.

*Answer: Any water will affect lower Kaumana. Diversions should divert but no guarantees it will diver the water from flowing into lower Kaumana.*

#### Statements made by the community

1. We rely too much on Alenaio. Without diversion, water still flows into Chong Bridge.
2. Akolea Road—below Wilder—big patch belongs to the County. Water comes out of there. Flooded two homes.
3. Rapids coming onto the Puainako Street extension—water is coming off Kaumana Drive.
4. Water pops up from the ground.
5. Water from upper Kaumana settles behind my house in a ditch that is 20' wide by 12' deep. The water was so strong it moved big boulders.
6. At Bay View Terrace Drive the land is sinking.
7. Above Kaumana Drive by the school, water is running in the direction of Hamakua to Puna, right above Wilder Road.
8. In the west Na'a area, rains the water comes down West Na'auao Street. It's coming from different property and into West Na'auao Street.