# Protect Kaho'olawe 'Ohana Consultation Report February 20, 2011

# Notes of Consultation with Protect Kaho'olawe 'Ohana Regarding Pōkāneloa Post Closing of Makahiki - February 20, 2011-04-10

KIRC Representative: Kahale Saito

'Ohana Participants: Noa Emmett Aluli, Kaliko Baker, Kaipu Baker, Patti Pali, Nicole Hoku Cody, Laiana Kanoa-Wong, Kama Wong, Momi Wheeler, Kelii Beyer, James Akau, Ed Duncan, Tom Brennon, Kaipo Like, Ikaika Nakahashi, CJ Elizares, John Casson, Kanani Enos, Tina Kekoʻolani, Kepoʻo Keliʻipaʻakaua, Kupono Kon-Kahakai Notes by Davianna McGregor

The group discussed how to document the site as it is and three options for its future placement and stabililzation:

- 1. Leave it alone and let nature take its course
- 2. Stabilize it in place with erosion control and re-direction of the water
- 3. Move the Pōhaku, stabilize the site and bring it back
- 4. Move the Pohaku

#### Documentation

- 1. There are variables to consider, such as if the pōhaku was always here? was it always flat? might it had been vertical? what is under the rock?
- 2. Need to photograph the pōhaku and the surrounding features to develop a 3-D image virtual image. With a 3-D image and program can move it around and place it within different settings and different positions of the sun. With a virtual image and program could develop a curriculum and share it throughout the islands, the U.S., even internationall.
- 3. Hoku Cody knows someone with a 3-D terrestial camera that may be able to help us document the site and features.

- 4. Resources regarding the geology of the area and any past documentation of the geologic changes Juvik, Tom Giambelluca, Carlos Andrade, Lyman Abott
- 5. Resources to assist with 3D image documentation Na'alehu; Film Academy; 'Imiloa Dome
- 6. Documentation: State and Bishop Museum Archives. Look for Old photographs, from different angles; look for past aerial maps; Stearns report his field notes in Bishop Museum;

# **Options**

# Option #1. Let Nature Takes Its Cours Pros

It would be natural

### Cons

- Pualani Kanaka'ole Kanahele and Edith Kanaka'ole Foundation
   Papakūmakawalu team have observed the changes over the years and feel that it is urgent to save this unique instrument passed on from our ancestors. This is a unique Pōhaku which could be lost to future generations
- The erosion has been promoted by human activity, including bombs, so the processes at work are not really natural

# Option #2. Stabilize it in place with erosion control and re-direction of the water

#### Pros

- Stabilization would involve a lot of people in the community and raise awareness about the site. Broaden the number of people who will experience Kahoʻolawe
- · A simple strategy, but it involves a lot of cost and work
- Preserve that mana put here when placed. Kupuna placed it in place for a reason, with a ceremony. Moving it may dislocate this mana.

#### Cons

- A lot of work for nothing
- · A lot of effort and the result may still be the same
- There has been a lot of change over the past 2 years, pointing out the urgency of moving the pōhaku.
- The 'Ohana was brought here by Kalei several years ago. Efforts were made to stablize the pōhaku in place with pili grass. No methodology or strategy for stabilization has been developed.
- Even though the placement will be lost, can still learn a lot from the pōhaku
- Stablizing it will take a long time. A hundred year rainstorm could take the pohaku at one time.

Option #3. Move the Pōhaku, stabilize the site and bring it back 2 Methods – Move with a helicopter or with a JCB. The rigging would be the same.

# Helicopter

The helicopter would be ideal. Need to come up with an accurate weight for the rock to see if a helicopter could lift the pohaku.

### **ICB**

Would have to move some of the surrounding rocks for the JCB to have a path to get close enough to lift he pōhaku

# Comparison

The helicopter would have less impact, would be less invasive. Might still need to use the JCB to set the rock. Discussed the possiblity of pouring a concrete slab or making an ahu of pohaku at the site where the pōhaku will be relocated. Will need to see the under part of the rock and what is underneath the rock. Would be good to live on the island and to study the site to understand it's function.

# Edith Kanaka'ole Foundation Consultation Notes June, 22, 2011

Pōkāneloa Notes Saturday 06-22-2011

Recorder/PKO: Katie Kamelamela

Edith Kanaka'ole Foundation: Pua Kanahele, Huihui Kanahele, Ku'ulei Kanahele, Kekuhi

Kanahele, Kalei Nu'uhiwa, Baby Luka Kanahele KIRC: Commissioner Baker and Kahale Saito

#### Pōkāneloa

-marked Winter/Summer Solstices and Equinoxes
-didn't need to build a site possibly because Mauna Kea site existed

# **Immediate Observations by EKF**

- -looked at ridge in front and back of site
- -pōhaku in big bowl between ridges
- -agrees with moving pohaku, but must move it back
- -Is there a larger circle outside of Kāneloa?
- -Is it the center of the circle?
- -would like to see it elevated
- -would like to see the outward parameters
- -have a sense of value, pōhaku must be used
- -can have an intelligent argument from a Hawaiian point of view
- -the angle of the pohaku is unknown
- -measures the movement of the sun
- -only for sunrise
- -most places have upright alignments
- -taught EKF the ke'e
- -bring boundaries into one pōhaku
- -what does it mean in the wider parameter? Back ridge? Front ridge?
- -need more time to study pohaku before it is moved
- -exhaust all possibilities but we are going according to what ancestors say
- -measure stick to pohos when sun moves in canvas form or other
- -part of east-west corridor
- -fabricate pōhaku in different places
- -move pōhaku due east
- -story of hawai'i during ice age??

# Edith Kanaka'ole Foundation Consultation Notes July 23, 2011

Pōkāneloa Notes

Saturday 07-23-2011

Recorder/PKO: Tamra Probst

Edith Kanaka'ole Foundation: Kekuhi Kanahele, Kalei Nu'uhiwa, Pua Louis (cartographer),

Mark Buckley (economist), Chris Heider (ecologist), Ed Salminen (hydrologist)

KIRC: Kahale Saito

# 11:30am Meeting- Briefing

- A. History of Petroglyphs:
  - 1) Realms of Kāne and Kanaloa; Kāneloa occurs when Kāne goes into Kanaloa realm
  - 2) Kāneloa is a time of momentum, to move forward/move
- B. Environment assessments:
  - 1) Located on a low point
  - 2) Windy, progresses erosion; wind increases across gulch
  - 3) Springs??? Keeping into account where springs are located Kūheia, Hakioawa, Kanapou, etc.
  - 4) Pōhaku sits next to a gulch; gulch grew significantly in the past year. The pōhaku is shifting down towards the gulch, a significant shift was noted last month
- C. Brainstorming
  - 1) What is known and unknown about the pohaku can be documented
  - 2) Planting techniques for erosion control
    - a. navy-tiers & hau
    - b. dry forests will still keep ground cool and attract clouds
  - 3) If transferred take into account sight lines changes, climate differences (wind/rain/sun exposure), and a plan to develop gradual improvement in habitat situation.
  - 4) Documentation
    - a. time changing (night &day) Video 24hrs of light changes on pōhaku, maybe with the kuhaku –any studies on Hāpaiali'i Heiau restoration in Kona that can help?
    - b. measurements-carbon dates, weathering, or soil results

# 1:30pm Fieldwork

#### A. Observations

- 1) Pōhaku is of Iron content= heavy; becoming unstable-sliding into gulch (all surrounding pōhaku are also shifting)
- 2) Gulch is rapidly growing due to flash flood starting above gulch -> Change drainage? Redirecting will not change the rate of growth
- 3) Gulch takes on characteristics of a creak (original water source)
- 4) The pōhaku sits low therefore the ground is cooler than across the gulch
- B. Recommended immediate Studies and Recordings
  - 1) Studies on movement of the moon in relation with pōhaku
  - 2) Realizing the direct point of pōhaku; is it in the middle of important points?
  - 3) Measurement of the amount of movement that occurs during a big rainstorm.

### C. Options

1) Moving pōhaku; moving pōhaku is a short-term solution, long-

term is also required (re-vegetation efforts, establishing future goals/ use of pōhaku)

\*It was recommended to create a replica of pōhaku and place it in position of 'new home'. The idea is to compare differences (climate, wind, rain, shifting) of points to see if new place is compatible with original.

2) Letting nature take its course

\*anchoring pōhaku in place will not work; it is not natural and it would only be a matter of time before all efforts fail (equivalent of fighting mother nature).

# D. Vegetation efforts

- 1) Re-vegetation will slow the process of erosion, although inevitable
- 2) Slowing growth of gulch is priority
- 3) Knowing history of land use to help vegetation efforts; knowing probability of chemical residue, soil readings, change in climate due to landscape changes, may help planting.

# 8:30pm Final Discussion

### A) Questions:

- 1) What is the description of erosion situation?
- 2) What plans to gather Data?
- 3) What is the bigger picture that needs to be looked at?
- B) Land must be returned to original state
  - 1) Gulch is a force that shows the lands change through climate, vegetation, bombing, and ranching changes.
  - 2) Goal is to slow rapid rate of change

# C) Setting Boundaries

- 1) What is the actual use of the pōhaku
- 2) Understanding if it does/doesn't belong in its current situation
- 3) All solution options violate natural state/boundary of pōhaku

### D) Collecting Data

- 1) Measurements of rod/kuhaku; comparisons of new/old points with sun and moon changes
- 2) Documentation of measurements and original point where it lays

### E) Short-term VS Long-term

- 1) Moving pōhaku is short-term engineering question, using it after it has moved is a long-term commitment
- 2) Meaning of moving the stone must be looked at by both perceptions
  - a. Quick fix for short-term but is it pono in its actions? Will long term be continually important as short-term will be?
  - b. Re-vegetation will help if Kāneloa survives in environment
  - c. Focus is on making practitioners to carry on with kuleana for long-term success
- F) Creating a cultural use by using it after it is moved is the focus!
  - 1) How can you use it as a tool in context of today
  - 2) Building mana'o from the core understandings for today