



University of Hawai'i at Hilo

640 N. A'ohoku Place, Room 203, Hilo, Hawai'i 96720

Telephone: (808) 933-0734 Fax: (808) 933-3208

Mailing Address: 200 W. Kawili Street, Hilo, Hawai'i 96720

Minutes Regular Meeting

Mauna Kea Management Board
Tuesday, May 5, 2015

Kukahau'ula, Room 131
640 N. A'ohoku Place
Hilo, Hawaii 96720

Attending

- MKMB:** Chair Gregory Mooers, 1st Vice Chair Herring Kalua, Gregory Chun, Roger Imoto, Douglas Simons, Hannah Kihalani Springer and Lehua Veincent
- BOR:** Barry Mizuno
- Kahu Kū Mauna:** Shane Palacat-Nelsen (via conference call) and Tom Chun
- OMKM:** Wally Ishibashi, Jessica Kirkpatrick, Fritz Klasner, Stephanie Nagata, Scotty Paiva, Dawn Pamarang, Amber Stillman and Joy Yoshina
- Others:** Malani Alameda, Jasmine Cabanilla, Rob Christensen, Jesse Eiben, Ryder Hammer, Tristan Hammer, Cory Harden, Saeko Hayashi, Stewart Hunter, A. Iwashita, Kim Kimi, Breeani Kobayashi, Ka'oi Kualii, Makana Lewis, Kerri Marks, Neal Masuda, Joe McDonough, Nā Wāhine Aloha 'Āina, Atsuko Nitta, Mike Robinson, Hector Suett, Davin Vicente, Dwight Vicente, Leilani Waldron and Ku'uhoni Wong

I. CALL TO ORDER

Chair Mooers called the meeting of the Mauna Kea Management Board (MKMB) to order at 10:00 a.m.

II. APPROVAL OF MINUTES

Upon motion by Hannah Springer and seconded by Herring Kalua the minutes of the February 10, 2015, meeting of the MKMB were unanimously approved.

III. DIRECTOR'S REPORT

A. Department of Hawaiian Home Lands (DHHL)

On February 17, 2015, the Department of Hawaiian Home Lands Commission heard their staff's report about the Office of Maunakea Management's (OMKM) proposal to use the Humu'ula sheep station as a rest stop and dinner area for commercial tour operators. The commissioners questioned whether the fee of \$4 per passenger was a reasonable fee and deferred action on the matter. It was later discussed that OMKM should look into first pursuing a coordinated effort with DHHL on the development of a shuttle system from the Saddle Road junction to the Visitor Information Station (VIS) and summit. If this program is determined to be financially feasible, it would reduce the number of vehicles and congestion at the VIS and summit and would provide a source of income for DHHL that would be used toward implementing their Aina Mauna Legacy plan.

B. Capital Improvement for the Visitor Information Station and Road

OMKM and VIS staff met with its consultant, Kober Hanssen Mitchell Architects, to discuss the needs and requirements for designing facilities and layout of the area around the VIS that would better accommodate the visiting public and address safety issues, in particular parking, and vehicular and pedestrian flow.

C. Comprehensive Management Plan - Review Update

It has been five years since the Comprehensive Management Plan (CMP) was approved by the Board of Land and Natural Resources. The office has begun reviewing the CMP and will be preparing a list of items for Kahu Kū Mauna and the Maunakea Management Board for discussion and input.

D. Rangers

Two part-time rangers have been hired to assist the full-time ranger staff on the busy weekends. One full-time ranger left to pursue other opportunities. A search will begin to fill the vacant position.

E. 2014 Volunteer Statistics

OMKM hosted nine volunteer invasive weed pull events in 2014 during which 283 volunteers put in about 2,000 hours and filled 392 bags of weeds. Volunteers included members of the Hawaii Island Chamber of Commerce, University of Hawaii (UH) at Hilo student groups and general community members. There were also a number of youth student organizations including Circle K (Kiwanis Youth), Interact (Rotary Youth), Hawaii National Guard Youth Challenge Academy, Ke Ana La'ahana Public Charter School and Hawaii Academy of Arts and Sciences. So far in 2015, OMKM hosted two events with more to be scheduled.

The combined total spanning 2012 through April 2015 totals 700 volunteers who put in about 5,000 hours of weed pulling and filling about 1,100 bags of weeds.

F. Cultural and Natural Resources Orientation

Since the program began, about 1,220 employees have gone through the cultural and natural resources orientation training. This represents about 93 percent of all employees or individuals who have some working relationship on the mountain. Kahu Kū Mauna asked that we solicit feedback from those attending the orientation. Feedback ranged from being informative, interesting, to not useful at all. Suggestions included putting in more photos and discussion of the resources to not enough graphics showing the geology.

G. Kealakehe Elementary School Science Showcase

On April 23, 2015, OMKM staff and Tom Chun together with members from 'Imiloa, the Institute of Astronomy, Canada-France-Hawaii Telescope, Hawaii Ant Lab, West Hawaii Astronomy Club, One Earth Message, and UH Hilo Spatial Data Analysis and Visualization Lab helped Kealakehe Elementary School organize their first annual Science Showcase. In addition to the school's science fair where students displayed their science projects, OMKM and its partners offered a variety of fun science activities ranging from coloring and stamping activities, flora and fauna ecosystem games, bug identification, archaeology, earth's magnetic fields, unmanned vehicle flight simulator, earth and the surrounding solar system, to a planetarium show. One Earth Message had an information booth and activities related to caring for our earth. The Hawaii Ant Lab had an information booth on fire ants and take home surveying kits. The Science Showcase was well attended by both parents and their children.

Jasmine Cabanilla expressed her concerns that the construction and more proposals for infrastructure and but the management plan is not being looked at. It was her understanding that the plan had not been looked at or reviewed for the last five years. Cultural Resources Management Plan (CRMP) has not been looked at for about a year. Why are we perpetuating the mismanagement of the resources. Why keep proposing infrastructure when there are already existing infrastructure to take care of.

Chair Mooers thanked Ms. Cabanilla for her comments adding we are in the process of reviewing the Management Plan and until such time the existing Management Plan is in effect and we will continue to manage the mountain based on current existing plans.

IV. KAHU KŪ MAUNA COUNCIL (KKMC)

Shane Palacat-Nelsen reported the Council has been reviewing the CRMP and have a few things they wish to bring to the Board. They are also looking at some of the action items within the Plan as it gives the Council some tasks that could be outside their jurisdiction as an advisory committee. They also want to work with Director Nagata in developing some cultural resources within the University.

**V. Committee Reports
Environment Committee**

Roger Imoto deferred the report to Fritz Klasner.

There has not been a meeting since the last Board meeting. The next meeting will be scheduled for either late May or in June.

The Office will be hiring two Pacific Internship Programs for Exploring Science (PIPES) interns. One intern will work with Dr. Ryan Perroy on his erosion project. The second to assist with the VIS exhibits. OMKM is also taking on a third intern in support of the Hawaii Community College Forest Team Program. This person will be assisting with general field assistance for OMKM including arthropod biodiversity, erosion and permafrost projects.

Weekly monitoring is conducted on geocache sites on UH managed and surrounding lands. In late March a site that was near the road in Forest Reserve/Hawaiian Home Lands is getting a lot of visitation. There are two virtual geocaches on University managed lands which are educational modules administered by the Geological Society of America. It talks about the resources and staying on trails and is a positive message. The other geocaches have been removed.

Dr. Eiben and his crew sampled for wēkiu bugs in late February and captured over 119 wēkiu bugs including all life stages. This is a good number of bugs for the snowy weather and he is interested in how the summer capture rates are going to turn out. Annual fieldwork for monitoring of alien arthropods and wēkiu bugs is being planned June.

More Standard Operating Procedures (SOP) will be presented to the Environment Committee at their next meeting - identifying species, threat priority, procedures for updating the plan, are some of the SOPs in progress.

Halepōhaku facilities were monitored in March and April and no new threats were identified on UH managed lands. Monitoring frequency of the Halepōhaku parcel has been increased to weekly (from quarterly) due to increased activity and visitation.

On April 16 the ant *Ochetellus glaber* was found in the Mauna Kea Forest Reserve, across from the VIS in a pile of left over roof thatching (a non-native fan palm) reportedly brought from Waimea for the hale. That was reported to the Department of Forestry and Wildlife (DoFAW). The following week bait stations were put out to try and eliminate that population. 'Ohi'a posts used for the foundation of the hale are also of a concern because the wood is from Kalapana and could be infected with the rapid 'ohi'a death fungal pathogen *Ceratocystis*.

Megan Nakamoto participated in the Junior Division of the Hawai'i State Science Fair. Her project with Dr. Eiben was on "Arthropod diversity and abundance difference on curled unhealthy Māmane leaves and healthy Māmane leaves at ~8,500 ft. on the south slope of Maunakea."

A special thanks to Debbie Ward and Jessie Eiben for reaching out to individuals at Halepōhaku to discuss ant threats. We have been passing out 'A'ole Ant handouts and anticipate having some form of an open house to discuss resources and threats at Halepōhaku.

Some groups are expressing interest in our volunteer weed pulls so we will be setting up the next events for later in May or in June.

Hannah Kihalani Springer asked if the vehicle monitoring would increase according to the threats - fireweed that is proliferating across Pōhakuloa Training Area. With that increase would vehicle monitoring for seeds be increased? Also, is the vector for the rapid 'Ohi'a death identified? Mr. Klasner stated most of the companies that do regular deliveries actually have company policies that they wash their vehicles every day. He did not have the answer regarding the vector for the rapid 'Ohi'a death and referred it to Dr. Eiben. Dr. Eiben stated a vector has not yet been identified. Ms. Springer stated her concern is even though a vehicle is cleaned at a lower elevation, when it comes up and drives through an area full of fireweed is there any way of establishing a cleaning station at the mid-level elevation site? Mr. Klasner stated one of the CMP action items is to look into the feasibility of a vehicle wash station. That is something we started working on. How efficient will it be scientifically? What will the economics of it be? How would it operate? Where would the water pump from? How much would it cost to operate? There is a suite of issues to consider.

A member of the public stated he had an issue with the reported weekly monitoring of Halepōhaku and vicinity. He has been up there every other day for the past 40 days and has not seen anyone monitoring until the hale was built. The whole time he was there no one saw an ant until the monitors came around and dug up a little area around the palms. That is when they told us there were ants. All of a sudden there are monitors after 20-something days and then there are ants after 50+ people handled the palms not experiencing any ants. He questioned the expertise and the volume of monitoring. Mr. Klasner stated we are following the methods that are outlined in the Invasive Species Plan, which is also on our website. If there are any questions, we would be happy to talk with you about the methods. We have been talking about having an open house at Halepōhaku to share with what we do, what our monitoring entails, how often we do it, and where we monitor. The monitoring in the Forest Reserve land is done in coordination with the Forest Reserve staff.

Mr. Palacat-Nelsen commented there is an urgency for OMKM to take a look at the actions plans because some of these monitoring issues, as well as invasive species, should include a cultural resource person being involved. This task was given to Kahu Kū Mauna, a volunteer advisory council. Lehua Veincent commented we should to take a look at the timeline and how do we redo the timeline because he thinks the urgency is there. He is confused in regards to the monitoring practices. How do we get copies of what is being monitored and how it is being monitored?

Ms. Springer stated this conversation speaks also to the timeliness of having discussions that can bring members of the public as well as the respective boards and committees up to speed historically. She is the only member of the Board with the history and knowledge of the pre-Office of Mauna Kea Management days. It is helpful if there was an orientation binder that gives members a timeline that includes when reviews are to take place.

Mr. Veincent stated that out of respect to past board and committee members it would be helpful to get an historical perspective so that he can get a better understanding.

Mr. Herring Kalua got involved in Maunakea in 2000. Ms. Springer, 1998. His recollection regarding Kahu Ku Mauna was to have representatives from the five districts. Mr. Kalua emphasized that volunteering means not getting paid, and to make sure he follows up. He understands there hasn't been much communication, but believes we are on a good thing and there is an urgency. He asks of everyone that if it comes from the heart, you are humble, and you listen, we'll get things done. He used to go up the mountain for gathering rights and he was also a hunter, so he respects what is there. He has a big responsibility to make things correct. His family is for culture and education. Everyone must understand that this island has all the resources. If we do things right, it will be known throughout the world. Go out there, do your research and you will know. Taking the lead will be the new generation. He has a letter from Kalakaua dated in 1874 that he would like to share. Every ali'i, every organization we have - Kamehameha Schools, Lili'uokalani Trust, if you look at them they are 100+ years. But we are here. He is saying this because he is proud to see the young generation. It is not about him, it is about the next generation. The past is past. The present is present. And the present needs to be corrected so that people in the future do not have to do what we are all doing here today. He asked the meeting attendees how many served in the military. The whole nation is thanking the veterans for their service. When he was 21 he served in the Vietnam war. His grandfather was in World War I and his dad was in World War II. Almost every generation of his family has served in the military. He tells his family you serve with honor and do not make shame of our family. He wants this to be a win-win. He is giving back now. He asked those from Keaukaha, Panaewa, or Waimea or other homestead lands to stand up. He is going to give the young folks challenge and a commitment to the next generation; he is holding them accountable, to be the leaders when he is not here. Put your name on the list, he does not care about the outsiders but those who came to this meeting. This meeting is the first meeting to move forward. He hears the problem and we should correct it.

Ms. Cabanilla inquired about monitoring associated with the Thirty-Meter Telescope (TMT). Mr. Klasner replied the TMT construction permit requires increased monitoring which has already begun. Monitoring is required as part of the TMT permit. Another person from the audience asked to explain what actually happens at these monitoring. Mr. Klasner replied it depends on the nature of the monitoring, whether it is inside or outside the buildings. We have bait and sticky traps inside the building to see what is there around garbage cans and break rooms. Outside of the buildings we will pull weeds, turn over rocks and crawl around on the ground looking for insects.

Dr. Eiben, an arthropod researcher stated they were engaged in monitoring activities just prior to the big protest activity which is why his crew and the protestors missed each other. He offered to demonstrate after the meeting the kinds of activity they engage in looking for insects. As a researcher and educator who works with insects, he brings his class up to Maunakea and has never found the species of ant found across the VIS in the past 10 years. If he were to find something the appropriate authorities are notified, including OMKM and DOFAW. He asked to please look again because there is going to be more people, more activities, and more chances to move things around. Unless you look at everything at extreme detail, you will miss ants, especially the kind that was found up there which is why he has strict protocols for his research where they cannot bring any plants up. He has a box with pesticides in it that all his gear sits in until he moves it up to the mountain. He has a high elevation and a middle elevation box of gear which is what we have to do. He wants to show everyone how it works and how he has trained Fritz and Jessica. It is upsetting that people would think that she planted the ants. She would never do that.

Mr. Robinson asked if there was an opportunity to create a volunteer crew to help with the formal monitoring. He hears people are concerned about protecting the mountain. Mr. Klasner replied that would be a great idea.

Mr. Veincent stated in addition to just the monitoring, some things we are hearing is about the transparency of information. How does that information get people? The more we are transparent with everybody who is concerned

with Maunakea, the better off we are. The best transparency will get the best results. That is pono. That is done with aloha. That is something we should all consider.

A member of the audience thanked everyone for being attentive to our environmental issues of conservation and preservation on Maunakea, but felt we are missing cultural conservation and preservation. There is no team for that. She feels there should be attention and energy put into preserving the cultural resources and significance of this place. Director Nagata thanked this person for her comment and added an archaeological inventory of the entire University lands was completed and OMKM does annual monitoring of the sites. We do not post the sites because we want to protect them. The member from the audience added we need to learn more about the significance. She felt it is being looked at scientifically instead of from a cultural perspective. Chair Mooers appreciated her comment but added that every proposal that comes to this Board is reviewed by Kahu Kū Mauna for the cultural consultation.

Ms. Cabanilla commented the sites are being protected by not telling the public, but does not understand how you can be protecting the site when you are not looking at the Cultural Monitoring Plan. Director Nagata stated the CRMP and the Natural Resources Management Plan (NRMP) were the basis for developing the CMP. The major actions of the CRMP are in the CMP which the Council has reviewed and taken action on some of the issues we are talking about.

VI. NEW BUSINESS

A. Keck Observatory - Request to Install Additional Weather Instruments

Purpose and Objective

The W. M. Keck Observatory is requesting approval to install the following instrumentation upon the exterior of its observatory building and domes. The purpose of the requested additions is to provide remote telescope operators improved information on the facilities surrounding environment and to allow better decisions in protecting the facility in the case of inclement weather. This is part of a general effort to upgrade the environmental monitoring capability of the observatory.

- A second CloudCam weather monitoring camera, expected to provide more accurate assessments of current summit conditions, especially in darkness.
- Equipment additions to the existing weather mast
 - Precipitation sensor
 - Precipitation detection lamp
 - Stabilizing guy wires
- Addition of two new masts, two-inch diameter by 16 foot length, mounted atop each Keck dome, each with the following new equipment:
 - Sonic anemometer
 - Pan-tilt-zoom camera
 - Precipitation sensor

Pending approval, this work will be conducted in the first half of 2015 by W.M. Keck personnel. Installation consists of mounting each item to the observatory structure, requiring about one day, and three days for each new mast. This project does not involve ground disturbance.

Kahu Kū Mauna Council

Kahu Kū Mauna reviewed the proposal on March 25, 2015, and wanted to ensure the data collected would be available for other users via public archives or the Maunakea Weather Center website.

Comprehensive Management Plan Compliance

This project was reviewed for compliance with the Comprehensive Management Plan.

Department of Land and Natural Resources (DLNR)

DLNR will be consulted regarding a permit or site plan approval for this project. The project will not proceed until appropriate DLNR approval has been obtained and any conditions incorporated into the project.

Recommendation

OMKM recommends this project be classified Minimal Impact based on the following:

- No excavation is involved.
- Installation activity will occur entirely upon Keck facilities.
- The impact to the immediate surroundings and summit region are minimal.
- The proposed request does not increase the footprint of facility.

If this project is classified minimal impact, OMKM recommends Keck be allowed to proceed, pending DLNR approval and compliance with any requirements.

Conditions

OMKM recommends the following conditions:

1. Notify OMKM in writing at least five days prior to beginning any on-site work.
2. Arrange with OMKM for an orientation of the cultural and natural resources for all members of the construction crew.
3. Invasive species prevention best practices will be employed, including inspections of materials by OMKM staff prior to entering UH managed lands.
4. Allow OMKM rangers to visit and monitor activities.
5. Comply with all actions and measures described in the proposal, including (community) benefits, CMP compliance list and mitigation measures.
6. Ensure that loose tools or equipment are not left unattended and are properly stored at the end of each day.
7. In preparation for high wind conditions, protocols must include measures to ensure debris and equipment are not blown from the job site.
8. Remove and properly dispose of all waste material. All perishable items including food, food wrappers and containers, etc. shall be removed from the site at the end of each day and properly disposed of.
9. The approval may not be transferred or assigned.
10. The project must be completed within 24 months of the date approved by the Maunakea Management Board. Projects not completed within this timeframe are not allowed to continue (or commence) without explicit, prior, written approval from OMKM.
11. Notify OMKM in writing when field activity associated with the project is completed.

Discussion

Mr. Veincent stated he was pleased no excavation was involved and no large trucks were required for transport. These are some of the things that would concern him. This shows an understanding of some sensitivity for some of the things they want to do. It would behoove us to take a look at the complete comprehensive proposal when proposals come in.

Action

It was moved by Doug Simons and seconded by Gregory Chun to classify this project as Minimal Impact. Chair Mooers called for a motion. The motion was carried unanimously.

It was moved by Gregory Chun and seconded by Roger Imoto to approve the project with the conditions as stated and to allow Keck to proceed. Chair Mooers called for a motion. The motion was carried unanimously.

B. Subaru Telescope - Request to Install Permanent Safety Equipment and a Precipitation Sensor, and Repair of Existing Cloud Sensor Wire

The Subaru Observatory is requesting approval for the following:

1. Install safety anchor beams to the rooftop of its telescope enclosure for use in conjunction with a lift;
2. Installation of a precipitation sensor near an existing Cloud Sensor on the western edge of the control building rooftop; and
3. Repair of the existing Cloud Sensor wire.

Subaru has not been able to access certain areas of its telescope enclosure since commissioning due to the height of the enclosure. Installation of the safety anchor beams will enable access via a lift (analogous to a window washing lift for tall buildings) and permit some general maintenance that has not previously been performed. With the anchor beams and lift, additional maintenance activities will also be conducted safely. The precipitation sensor will function to warn staff of pending rain or snowfall, thus signaling whether to close the enclosure shutters for equipment and personnel protection. Finally, the existing cloud sensor was rendered (inoperable/unreliable) due to storm damage to a connective wire.

Installation of the safety beams is projected for spring to summer 2015, when daylight hours are longer and weather may be more favorable. No outdoor storage of materials is required during anchor beam installation. Other work would be conducted at the first opportunity in spring 2015. All work will be conducted by Subaru employees. This project does not involve any ground disturbance.

Kahu Kū Mauna Council

Kahu Kū Mauna reviewed the proposal on March 25, 2015. The Council expressed its appreciation of Subaru's concern for safety in this project, and expressed concerns about possible accelerated or increased maintenance issues with all observatories due to climate change.

Comprehensive Management Plan Compliance

This project was reviewed for compliance with the Comprehensive Management Plan.

Department of Land and Natural Resources (DLNR)

DLNR will be consulted regarding a permit or site plan approval for this project. The project will not proceed until appropriate DLNR approval has been obtained and any conditions incorporated into the project.

Recommendation

OMKM recommends the MKMB classify this proposal a minimal impact project based on the following:

- The proposed request does not increase the size of facility.
- There are no archaeological sites in the immediate area.
- No excavation is involved and the activity will take place on the catwalk of the Subaru observatory.
- The impact to the immediate surroundings and summit region are negligible.

If this project is classified minimal impact, OMKM recommends Subaru be allowed to proceed, pending DLNR approval and compliance with any requirements.

Conditions

OMKM recommends the following conditions:

1. Notify OMKM in writing at least five days prior to beginning any on-site work.
2. Arrange with OMKM for an orientation of the cultural and natural resources for all members of the construction crew.
3. Invasive species prevention best practices will be employed, including inspections of materials by OMKM staff prior to entering UH managed lands.
4. Allow OMKM rangers to visit and monitor activities.
5. Comply with all actions and measures described in the proposal, including (community) benefits, CMP compliance list and mitigation measures.
6. Ensure that loose tools or equipment are not left unattended and are properly stored at the end of each day.
7. In preparation for high wind conditions, protocols must include measures to ensure debris and equipment are not blown from the job site.
8. Remove and properly dispose of all waste material. All perishable items including food, food wrappers and containers, etc. shall be removed from the site at the end of each day and properly disposed of.
9. The approval may not be transferred or assigned.
10. The project must be completed within 24 months of the date approved by the Maunakea Management Board. Projects not completed within this timeframe are not allowed to continue (or commence) without explicit, prior, written approval from OMKM.
11. Notify OMKM in writing when field activity associated with the project is completed.

Discussion

In regards to Mr. Veincent's earlier comment, Mr. Klasner stated there is no excavation involved and deferred to Saeko Hayashi in terms of how much material would need to be transported up to the summit.

Ms. Hayashi stated probably about a dozen beam structures, approximately 2 table's length, can be transported by their own truck to the summit. Their field crew will bring them up to the rooftop one by one. There is no excavation and no large truck transportation.

Chair Mooers commented he understands anytime materials such as this is brought up it would need to be inspected. Mr. Klasner confirmed that is correct.

Roger Imoto asked if any heavy equipment or lifting equipment will be used to put the beams in place. Mr. Klasner stated Subaru can access the roof from inside the enclosure. Ms. Hayashi added if it is necessary they will use the pulley to bring it up to the rooftop. Mr. Imoto asked, "So no ground disturbance?" Ms. Hayashi's reply was no.

Mr. Veincent asked how will the beams be transported? Is it by a small flatbed truck? Mr. Klasner stated Subaru has a small flatbed truck that they will use to transport up on their own. Ms. Hayashi stated they have a small pickup truck and a little bigger flatbed truck. Mr. Veincent asked what that meant. Ms. Hayashi explained they have two trucks. One is a F250 pickup truck and the other is a flatbed truck. Mr. Veincent asked about the length of the flatbed truck. The point he is trying to make is that we talked about the non-disturbance, but he does not understand what that means - flatbed truck. How long is the flatbed truck? Ms. Hayashi replied she didn't know how long the truck was I feed, but felt it might be about the length of the room. Mr. Veincent commented that is big.

Action

It was moved by Doug Simons and seconded by Gregory Chun to classify this project as Minimal Impact. Chair Mooers called for a motion. The motion was carried 6:1 with Lehua Veincent opposing.

It was moved by Doug Simons and seconded by Herring Kalua to approve this project with the conditions as stated and to allow Subaru to proceed.

Ms. Springer asked in regards to the large flatbed truck, is it used regularly on the ongoing activities of the telescope? Ms. Hayashi replied yes.

Chair Mooers called for a motion. The motion was carried 6:1 with Lehua Veincent opposing.

C. Gemini Observatory - Request to Install Cloud Sensing Cameras, External Cameras and Weather Sensors

The Gemini North Observatory is requesting approval to install five cloud-sensing cameras, four external monitoring cameras and two sets of additional weather sensors on the outside of its summit facilities. One of the monitoring cameras would be placed on the neighboring UH-88 inch telescope dome. This installation will allow Gemini to conduct fully-remote night-time observations. Gemini will also use existing infrastructure from Gemini and other Maunakea observatories to transition to remote operations.

Camera and weather monitoring data will be archived with the Mauna Kea Weather Center and available to the public and fellow observatories.

Chair Mooers inquired if there were any heavy equipment involved in placing the cameras. Mr. Klasner replied no. This is simply for installation of some cameras and some small weather instrumentation so there would be no ground footprint. Everything would be mounted on existing infrastructure and just transported in existing crew vehicles and existing crew would do all the installation.

Pending necessary approvals and weather, the installation will take an estimated four weeks in spring-summer 2015. Related work to install network cabling for this equipment will take an additional three weeks.

Kahu Kū Mauna Council

Kahu Kū Mauna reviewed the proposal on March 25, 2015. Council members noted Gemini's proposal would mean less people, traffic and impact on the mountain. KKMC asked Gemini to ensure that data collected would be available for other potential users via archives or Mauna Kea Weather Center.

Mr. Palacat-Nelsen added another concern the Council had was how often would they go up to check their facility? Mr. Klasner's understanding is the day crew will still be up there daily. It would just be the nighttime observing, reducing the number of people.

Comprehensive Management Plan Compliance

This project was reviewed for compliance with the Comprehensive Management Plan.

Department of Land and Natural Resources (DLNR)

DLNR will be consulted regarding a permit or site plan approval for this project. The project will not proceed until appropriate DLNR approval has been obtained and any conditions incorporated into the project.

Recommendation

OMKM recommends the MKMB classify this proposal a minimal impact project based on the following:

- The proposed request does not increase the size of facility.
- There are no archaeological sites in the immediate area.
- No excavation is involved.
- Installation activities will occur on Gemini and UH facilities.

- Impacts to the immediate surroundings and summit region are negligible.

If this project is classified minimal impact, OMKM recommends Gemini be allowed to proceed, pending DLNR approval and compliance with any requirements.

Conditions

OMKM recommends the following conditions:

1. Notify OMKM in writing at least five days prior to beginning any on-site work.
2. Arrange with OMKM for an orientation of the cultural and natural resources for all members of the construction crew.
3. Invasive species prevention best practices will be employed, including inspections of materials by OMKM staff prior to entering UH managed lands.
4. Allow OMKM rangers to visit and monitor activities.
5. Comply with all actions and measures described in the proposal, including (community) benefits, CMP compliance list and mitigation measures.
6. Ensure that loose tools or equipment are not left unattended and are properly stored at the end of each day.
7. In preparation for high wind conditions, protocols must include measures to ensure debris and equipment are not blown from the job site.
8. Remove and properly dispose of all waste material. All perishable items including food, food wrappers and containers, etc. shall be removed from the site at the end of each day and properly disposed of.
9. The approval may not be transferred or assigned.
10. The project must be completed within 24 months of the date approved by the Maunakea Management Board. Projects not completed within this timeframe are not allowed to continue (or commence) without explicit, prior, written approval from OMKM.
11. Notify OMKM in writing when field activity associated with the project is completed.

Discussion

Tom Chun, a member with the Kahu Kū Mauna Council, stated there is a tremendous amount of ike (knowledge) in this room. And not necessarily on one side or the other. He has been going to almost every meeting and sits and listen. One of the things we have is an excellent science monitor in Fritz. When listening to him, you have to admire what he can deliver in terms of science. We do not have a cultural monitor who can deliver the same kind of report from a cultural perspective. The only trouble with reporting the culture side is that there are many valid cultural perspectives. Na poe of Panaewa, Keaukaha, Kekaha, Nanakuli, or for himself Kalamaula, Molokai. It doesn't matter if you have koko (blood) or not because so many of us have family that do not have koko but, they are still family and 'ohana. So whether you sit on one side of the fence or the other on any particular issue we need to respectfully listen and hear with our hearts. What he sees is that things were much different seven years ago. Why didn't the Hawaiian community and activists stand up at that time? He congratulates those TMT/astronomy supporters who stood up - maybe five guys, they were brave. Imagine seven years ago when Pua Case and Ku Ching and others were trying to stand up in the face of a hostile situation - they were getting the rocks. So it is not easy when it comes down to a cultural matter of the heart. It is easy to figure out how much stuff we going put up. That we can measure. That we can fix. But when it comes down to people's feelings, it's not easy. He would like to see a push for a cultural specialist as the chancellor stated he could fund. If there is going to be a time when this Council, who is not getting paid, is willing to sit down with the rest of the community and look at things it is now. Except for Hannah, most people do not know the background or did not participate in the decision making process. As a good faith measure, hold up on the construction. Working in good faith, building trust on both sides is the way to mediate the present situation. What is reasonable is people have to talk and be patient rather than resort to confrontation. He is looking for the safety of all those involved.

Corey Harden asked if the cameras were video or still cameras and if they would be taking pictures of people around the observatories. Mr. Klasner stated the intent is for Gemini to take pictures of the conditions of their dome and the surrounding weather. There are at times people in the camera field of view, but that is not the intent. Generally they are still cameras taking a photo at a set interval that can be composited into a time lapse. Ms. Harden asked if they swivel around or are they pointed in one direction. Mr. Klasner replied some can swivel and some are fixed.

Someone asked how the additional weather sensors that are off site would be linked back to the facility? Is it wireless? Mr. Klasner replied it would not be wireless. It would be thru an existing internet connection so no ground disturbance or trenching.

Action

It was moved by Doug Simons and seconded by Gregory Chun to classify this project as Minimal Impact. Chair Mooers called for a motion. The motion was carried unanimously.

It was moved by Hannah Springer and seconded by Doug Simons to approve the project with the conditions as stated and to allow Gemini to proceed. Chair Mooers called for a motion. The motion was carried unanimously.

VII. ANNOUNCEMENTS

Dwight Vicente, speaking on the behalf of the Hawaiian Kingdom, stated there is no valid lease. There are no demise lands here. The mountain is designated Crown Lands and being Crown Lands the Kingdom cannot die. The kangaroo courts here have no jurisdiction. You have no valid lease.

Chair Mooers thanked Mr. Vicente for his comments and pointed out this Board does not have the authority nor jurisdiction to address his concerns.

Ms. Harden announced she finds it extremely disappointing that despite the historic events surrounding the TMT Telescope over the past several weeks on Maunakea, there was nothing from the staff or on the agenda about that. She is glad to hear about focusing more on the cultural and environmental aspect. She is glad that people came and shared their thoughts and perspective in a very respectful way. It says a lot about this committee that it did not come from the staff. She is glad it was discussed and listened too and thoughts were shared.

Chair Mooers thanked Ms. Harden for her comments adding we try to keep this Board as focused on implementing the CMP and the various sub plans making sure that all of the activities on the mountain are consistent with these plans. We are not an advocacy group for or against any particular proposal. We try to make sure we are advocating for the compliance with the CMP. These plans were created by the community through many public meetings. It is our duty and responsibility and we are all serving here as volunteers and to make sure these plans are complied with.

VIII. NEXT MEETING

The Board will be polled to determine the next meeting date.

Ms. Springer commented she looks forward to meetings where we will be able to discuss the mauna as a whole in the context of the charge we accepted when we applied to sit on this Board. Some of the comments made by the public today implies the Cultural Resources Management Plan is sitting somewhere and has not yet been reviewed. It is used actively in all of the decisions. She thanked Director Nagata for hearing her concerns and for Chair Mooers for making provisions for them.

Chair Mooers commented one of the things is that clearly over the last year or two the primary focus has been on astronomy. There are other uses for the mauna and it would be good to be able to get back to the educational, cultural, and public access issues and not be totally focused on astronomy.

IX. ADJOURNMENT

There being no further business Chair Mooers adjourned the meeting at 11:37 a.m.

Respectfully submitted:

Signed by Gregory R. Mooers
Gregory Mooers, Chair, MKMB

8/25/15
Date