



University of Hawai'i at Hilo

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**Minutes
Regular Meeting**

Mauna Kea Management Board
Tuesday June 23, 2009

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

Attending

MKMB: Chair Barry Taniguchi, 1st Vice Chair Patricia Bergin, John Cross, Lisa Hadway, Herring Kalua, and Christian Veillet

BOR Ex officio

Officers: Dennis Hirota and Eric Martinson

Kahu Kū Mauna: Ed Stevens and Arthur Hoke

OMKM: Stephanie Nagata and Dawn Pamarang

Others: William Burgett, Gerald De Mello, Mike Maberry, Bob McLaren and Harry Yada

I. CALL TO ORDER

Chair Taniguchi called the meeting of the Mauna Kea Management Board (MKMB) to order at 10:05 a.m. Regent Eric Martinson was introduced.

II. APPROVAL OF MINUTES

Upon motion by John Cross and seconded by Patricia Bergin the minutes of the May 8, 2009 meeting of the MKMB were unanimously approved.

III. INTERIM DIRECTOR'S REPORT

A. Rule Making Authority

Governor Lingle signed HB 1174 into law, it is officially Act 132. OMKM will not initiate rule making until the Public Access Plan has been approved by the Board of Land and Natural Resources (BLNR). The issue of rule making will be part of that Plan.

B. Caltech Submillimeter Observatory (CSO) Incident

On May 17, CSO reported a failure in their shutter wire cable system causing one of their hydraulic lines to break resulting in an oil spill. It spilled onto the concrete pad and some spilled into a drainage hole. It is not known how much oil actually drained into the hole. CSO followed all the proper procedures. They filed a report with the National Response Center, notified the Coast Guard and contacted the Department of Health and the Department of Land and Natural Resources (DLNR). They hired a consultant to assess the extent of the spill and implemented remediation.

C. Comprehensive Management Plan (CMP) and Environmental Assessment (EA)

The 30-day period for filing of a lawsuit has passed. There are no reported filings. There is still no word whether the Land Board will entertain a contested case hearing.

D. Thirty-Meter Telescope (TMT) Draft Environmental Impact Statement (EIS)

The TMT Draft EIS was filed with the Office of Environmental Quality Control and published in the May 23rd edition of the *Environmental Notice*. This started the 45-day comment period that ends on July 7. Public meetings have commenced island-wide with the last meeting to be held on Oahu on Thursday, June 25. TMT is encouraging people to submit comments particularly those relating to impacts and suggested mitigation measures.

E. Cultural Resources Management Plan (CRMP) and Natural Resources Management Plan (NRMP)

We are moving ahead with the sub plans and hope to have open houses in August or September. Regent Hirota believed the plans would go through full BOR for approval prior to submittal to BLNR.

F. Letters of Appreciation

Letters from Chair Taniguchi on behalf of the MKMB were sent to Allan Landon, BOR Chairperson and Laura Thielen, BLNR Chairperson thanking them for supporting the Mauna Kea Comprehensive Management Plan. A letter was also sent to Gerald De Mello for his tremendous efforts in getting HB 1174 passed by the legislature. Chair Taniguchi read the letter to Mr. De Mello who was present at the meeting.

IV. KAHU KŪ MAUNA COUNCIL (KKMC)

Ed Stevens reported the Council is embarking on a series of field trips to Mauna Kea for orientation for the four newest members on the Council. Their first field trip was on June 4th and it was a good effort to begin to review with Council members on all aspects of Mauna Kea. His mission is to share his knowledge of the mountain with the Council.

On June 11, Ron Terry, Klaus Hoddapp and he were interviewed by ARD, German Public Radio for broadcast later in Germany. He was interviewed for his perspectives on Hawaiian Culture. They were very receptive and wanting to know everything about Mauna Kea.

On June 22, at the request of Ka'iu Kimura of Imiloa, he escorted a group of 12 Maori scholars from New Zealand. Their goal was to look at our mountain and issues relating to science and culture and how they work.

V. OLD BUSINESS

Pan-STARRS Schematic Design Phase

Interim Director Nagata gave an overview and summary of the Pan-STARRS project review process.

Background. This project was first introduced to MKMB in 2002. In December 2002 the MKMB recommended classifying this a Major Project with a condition that they could only go as far as Phase I of the Project Review Process. The reason being that it was not yet determined whether Haleakala or Mauna Kea will be the selected site for the project. President Dobelle concurred and the project was officially declared a Major Project.

Interim Director Nagata briefly summarized Phase I and Phase II meetings for the project:

Phase 1. Pre-design Meeting

In July 2007 a project review group was convened. This phase is an orientation on the natural and cultural significance of the summit of Mauna Kea. It was to make project members aware of the design and environmental goals and the development standards that are included in the Master Plan, and to introduce them to the design guidelines. This phase takes place before the project starts to design their facilities.

Phase 2. Schematic Design

Following the announcement in the Scoping Notice for the Pan-STARRS Environmental Impact Statement (EIS) that stated Mauna Kea was the preferred site for the project, the first Schematic Design meeting was held in November 2007 followed by a second meeting in April 2009.

The Pan-STARRS design objectives are in keeping with the Master Plan objectives:

- Stay within the existing footprint
- Limit construction impacts
- Reduce visibility and improve visual relationship to natural environment
- Leverage existing infrastructure
- Minimize environmental impact

Master Plan Design Elements

- a. Color and Materials:
 - Base section will be brown and earth tones
 - Upper part of observatory and dome will have reflective paint/materials. Upper part of the facility will track the sun during the day which will help to blend in with the sky minimizing visibility
 - Except where reflective materials are used to intentionally to reduce glare, all surfaces and textures will be non-reflective

- b. Scale:
 - Use of orthogonal or geometric shapes to help reduce the visibility of the building
 - Design will reduce the total 3D footprint by 30 – 35% when compared with the existing 2.2-meter facility

- c. Heights and Widths:
 - Maximum height will be approximately 60 – 65 feet above ground level, which is well below the height limitations of the Master Plan of 130 feet
 - Support facilities will be shorter than the existing one

- d. Footprint and Orientation:
 - Pan-STARRS is keeping within the 2D footprint of the UH 2.2-meter telescope
 - The preferred orientation of the building is in alignment with the existing underground utility tunnel
 - The preferred orientation would limit personnel and service access to one side of the building, optimize use of existing infrastructure, use the existing tunnel for heat ventilation with air economizer, and minimize grading during site recycling
 - Pan-STARRS will commission a comprehensive geotechnical report prior to Phase 3 to assess the feasibility of preferred option

- e. Retaining Walls:
 - Used to minimize grading required to bring the new floor plan to a single elevation level
 - Grading will not disturb any previously undisturbed ground

Environmental Considerations

Energy and other resource conservation methods:

1. Electric power management configured to optimize usage
2. Oil-free air compressor for service air
3. Water side economizer to cool computer room and helium chillers – less power consumption, reduce cost
4. Air side economizer on the computer room
5. Heated exhaust air removed from the building through the utility tunnel
6. Eliminate septic tank system

Provisions for recycling and use of recycled materials:

1. Use “green” materials in concrete
2. Use “green” interior surface treatments for walls
3. May be able to use other recycled interior finish-out materials

Summary

Pan-STARRS have complied with the Master Plan design guidelines. Their proposed design will:

1. Reduce current 3D footprint by 30 – 35 per cent
2. Stay within the current 2D footprint
3. Substantially reduce the long-range visibility compared with the current site
4. Substantially improve the facility’s relationship with the surrounding environment
5. “Recycle” an existing site and not putting up a new facility in an undisturbed area.
6. Be more environmentally-friendly

Discussion

William Burgett, Pan-STARRS Project Manager, and Mike Maberry and Bob McLaren of IfA were available to answer questions.

Mr. Burgett explained the differences in the retaining walls and grading of the two options are based on the relationship between the support building and the enclosure itself. They need to be the same level so you can move from one building to the other. In the Preferred Option there is less grading to get to where the floors are level compared with the Alternate Option.

Dennis Hirota asked if the grading had something to do with parking and whether you could not drive over the tunnel. Mr. Burgett replied it was not about the parking and Mike Maberry stated you can drive over the tunnel.

Regent Hirota inquired if there was any information on what the site looked like prior to the development of the facility and to see if there would be a benefit to restoring that site back to what it was. Mr. Burgett replied they have some pre-construction photos, and about 15 feet of material in height was removed during the construction of the facility. Regent Hirota also asked if there was a way to re-naturalize the area with heavier materials so that it will not get blown away or eroded. Christian Veillet explained that for work at their facility they got material from the summit to compensate for the erosion. There is existing material that you can use on the mountain. If you are in a space that does not have much driving, and if you compact it first, it will stay for quite some time.

Mr. Stevens commented the batch plant is very uneven. He suggested quarrying the area to make it more usable as a staging area and stock pile it for future backfill. He felt it would make good sense to flatten out the batch plant area.

Regent Hirota expressed concern about long range visibility using a reflective roof/surface. If the sun is behind you that may work, however, if the sun is in front of you would this have a more detrimental affect on people on the west side of the island looking up in the afternoon? Mr. Burgett did not think so stating that their intent is to rotate the dome to track the sun as it rises from east to west. It will be at a special angle so that it is reflecting the glint back up to the sky.

Lisa Hadway understands Phase 3 is the next step and asked if the EIS had been released yet. Mr. Burgett replied parts of it had been on hold pending the completion of the CMP, but with the approval from the Land Board, they have begun moving forward on the draft. They hope to publish the draft in the early fall.

Ms. Hadway inquired about the renegotiation of the sublease. Interim Director Nagata stated there is no sublease because this is a UH facility and Pan-STARRS is a UH project.

Chair Taniguchi asked what the expected life of this project was. Mr. Burgett stated the initial mission is 10-years and they hope to begin that mission in 2013-2014. They are looking into extending that mission, but at the moment there is nothing foreseen that would take it to the end of the lease. They are working on a decommissioning plan.

Dr. Veillet felt we should look at the mountain globally. Pan-STARRS is proposed as a recycling of an existing site. If the TMT comes to Mauna Kea, it would be located in an area to be developed. He suggested that by locating Pan-STARRS in the same area as the TMT, its construction could be part of the disturbance generated by the TMT.

Mr. Stevens believed that was proposed at a Kahu Kū Mauna meeting about using Area F. That option did not quite suit the purpose. Mr. Burgett emphasized there is no relationship between Pan-STARRS and TMT. By tying those together Pan-STARRS would be dependent upon a permit being granted for that land use. If for some reason a permit was not granted for TMT, Pan-STARRS would have to request a permit on completely undeveloped ground, which would require a huge amount of infrastructure to be put in. He simply does not see that as being a viable option.

Dr. Veillet appreciated their position and added if there is no other option, this is a nice design. His point was that by putting Pan-STARRS in the same area as TMT it would be a step toward cleaning up the mountain and still have a good site. He suggested that the EIS process consider this. Mike Maberry agreed this could be considered under the other alternatives in the EIS. He noted that the TMT area is lower in elevation where the seeing is not the same quality as the preferred site. Also it would have to be taller in order to get the quality seeing necessary to do the science.

Regent Hirota stated a while ago his firm did an obscuration analysis for the summit. He and Regent Martinson talked about the positioning of some of the telescopes. He believes that putting facilities in different places would be problematic in terms of viewing because of the obscuration of the other facilities.

John Cross asked how often the 88-inch telescope is being used. Mr. Burgett replied it is used every clear night of the year; it is not an obsolete instrument. It is one of the world's most heavily sought after telescope for the particular studies it is designed for. Despite the heavy use of the 88-inch, Pan-STARRS is a better scientific benefit that would support a lot more users simultaneously.

Ms. Hadway asked who is funding the building of Pan-STARRS. Mr. Maberry explained the construction portion of the project is being funded through a cooperative agreement with the Air Force Research Laboratories. Upon completion it will be completely owned and operated by the University of Hawai'i Institute for Astronomy without any involvement of any other entity. The EIS will be a joint federal and state document.

Interim Director Nagata stated the Master Plan does not say the MKMB is required to approve Phase II, instead it states MKMB is required to review it. MKMB is eventually going to make a recommendation to approve or not approve the project. She also stated the Board needs to decide whether to take action to recommend moving on to the next phase or refer it back for more work.

Dr. Veillet felt they could move on to Phase 3. Mr. Cross felt that Pan-STARRS did a good job on their schematic design and should be allowed to move on.

Action

No action taken. Instead the MKMB acknowledged their review and acceptance of Phase 2 for Pan-STARRS.

VI. NEW BUSINESS

A. Review and Comments Relating to the TMT EIS

Preliminary thoughts on the Office's comments to the TMT EIS were forwarded to all Board members by Interim Director Nagata. The Office is looking for input from the Board to submit as part of the Office's comments. Board members may submit comments individually, or include them with the Office's.

The EIS needs more discussion on mitigation relating to cumulative impacts. Interim Director Nagata spoke to TMT about this and they explained that they were hoping for public input because they were not sure what was needed. They are looking for guidance from the community. Mitigation measures need to have some connection to the impact

Referencing OMKM's suggestion regarding the use of the Stone Cabins, that is, converting it into a ranger office, Mr. Stevens stated Hale Pohaku is the namesake for the stone cabins. It should be handled with dignity and not use it as a "catch all" for somebody's office. Maybe the Board needs to consider turning it into a cultural center.

Ms. Hadway asked about the likelihood of TMT and Pan-STARRS construction overlapping. There are use issues at Hale Pohaku that need to be considered. What is not covered in the EIS was the potential impact of increased visitors especially on the Visitor Information Station (VIS). UH is going to be left holding the bag dealing with all those people who are now potentially going to see the largest telescope on earth. The VIS is inadequate to handle the current amount of visitors. She does not know if TMT can be tasked with this, but perhaps some combination between Pan-STARRS and TMT. There needs to be a picture of how to accommodate all of these uses. It could include the restoration and development of a culture center.

Chair Taniguchi stated TMT should look at the incremental impact and things that are within their control. He does not know if TMT can be tasked to mitigate the cumulative impact that already exists. The existing telescopes have or are contributing to the impact and they will have to contribute toward mitigating the cumulative impact. Financially, UH and OMKM cannot do it alone. He suggested assessing a common area maintenance fee (CAM).

Mr. Stevens thought we really need to take serious action about help for Interim Director Nagata. She is a one-man army right now and it is not fair that she has to carry the burden for all of this. We need that position filled. Chair Taniguchi agreed and is sure Gerald De Mello has heard that too. Gerald De Mello mentioned that the CMP also needs some resources in order for the Office to move forward. As it is right now, it is totally unacceptable and we cannot move forward.

Chair Taniguchi stated it was good that the Board of Regents has a presence on our board because they can start to see some of the problems we face. While we would like the UH to provide financial resources, there are

limitations. This is why it is important that we look at a CAM assessment in addition to what observatories pay into Mauna Kea Support Services (MKSS). This is a UH/OMKM/MKMB matter, not a TMT one.

Mr. Cross stated the VIS is supported by MKSS. It would be a matter of putting monies into a reserve fund for a larger facility. Chair Taniguchi replied it could be capital as well as operating costs. Currently MKSS manages certain functions such as road maintenance and is funded by an assessment of all observatories. We are in a new paradigm and TMT can help us execute this paradigm by being willing to accept some responsibility for these matters.

Dr. Veillet stated most of the other telescopes are paying by giving viewing time. It is a new paradigm for TMT in that their contribution would be part viewing time and part money. But the existing observatories are giving a lot of viewing time and they do not have much available money. If you ask for more money at some point, we have to deal with less observing time. Chair Taniguchi agreed and that is something we might have to do. It is something probably the Institute for Astronomy (IfA) does not want to hear, but it is a reality.

Patricia Bergin asked for clarification on President McClain's statement on the compensation. There seems to be several things tied together and she is confused by it. Interim Director Nagata stated TMT has committed to contributing \$1 million annually to a community benefit package which TMT will begin funding when they receive all their permits. That fund would be administered outside of the university. They are also looking in terms of an education benefits package plus viewing time. Right now the existing observatories pay UH in viewing time plus \$1. The \$1 per year is no longer an option. They are looking at a combination of viewing time and cash contributions for rent. The \$1 million community package is separate and outside of the rent.

Ms. Hadway stated as she reviewed the EIS there were multiple points where she felt TMT needs to contribute more. For example, a condition that the BLNR set when they approved the CMP was making sure that there was staff in place to oversee the biological and cultural resources. There needs to be a concept above and beyond education and viewing time. Some of the cash should go into managing the mountain.

Chair Taniguchi agreed but thought it was not fair for TMT to carry the entire burden. If TMT decides on July 21st that they are going to Chile, a lot of things we are hoping to happen are going to disappear. The opportunity to have a change agent will be gone. On the other hand, if they decide to come to Hawaii there are a lot of things we still need to do. One is the extension of the lease. That would open a lot of opportunities to do things with the existing telescopes.

Dr. Veillet felt if TMT did not come we could be the change agent. We do not necessarily need the TMT to have things changing on Mauna Kea, although it would be a nice opportunity. Chair Taniguchi reminded him we have an existing lease to work with. The Board cannot do anything unless Canada-France wants to be the change agent. Dr. Veillet believes the Board can start talking about how to effect change. Chair Taniguchi stated it would require an amendment to the lease.

Ms. Bergin did not feel the TMT adequately addressed the cultural issues. It seems to her that we need to set protocols and other things about protecting and respecting the Hawaiian community. She noted only 13 members of the Hawaiian community were consulted which was insufficient. There should be a comment on this.

Mr. Hoke stated we will have a new president shortly and the old president made a commitment that, given the politics of the University, will be flushed down the tubes. Kahu Kū Mauna is all volunteers and they have been tasked with a huge amount of work under the CMP. The UH has to step up to the plate and support OMKM so they can do the job they are supposed to do.

Chair Taniguchi commented that was a good observation. Looking back, the Board of Regents had to make a commitment at their April 16th meeting. BLNR Chair Laura Thielen felt the same way. She wanted a commitment from a higher level, therefore; one of the conditions was involving the BOR. So even when there is a change in administration the BOR commitment stands. However, there is only so much financial resources available and the challenge is how do we get those financial resources to make this work. Mr. Hoke stated that is the point he is trying to make. Some of those financial resources need to come out of the current budget, but he knows the State is going through a budget crunch.

Mr. Hoke stated the conditions on the CMP have to be fulfilled at the time a Conservation District Use Application (CDUA) is filed. Chair Taniguchi thought the conditions need to be met within a year from the granting of the CMP or when an application is submitted, whichever is earlier. He does not believe the conditions have to be completed. We need to give them reports annually and if we are working on it and not yet finished we probably will be okay.

Mr. Hoke thought it said the Natural Resources, Cultural Resources, and Decommissioning plans need to be completed. Chair Taniguchi replied those three plans are in different stages of development. The CRMP needs to be modified for BLNR purposes. The Decommissioning Plan is also a process-oriented plan. To a large degree those three were already in process or at least substantially completed. They understand and they expect those three to be out. The hardest one is going to be the Public Access Plan.

Interim Director Nagata read DLNR's conditions: *"That within one year of the BLNR approval of the CMP or the submission of a Conservation District Use Application, whichever occurs sooner, the University shall submit for review and approval the following sub plans..."* Ms. Hadway thought those plans would have to be approved. Mr. Stevens added it also said if you did not meet those conditions they will impose other conditions.

Mr. Hoke asked if the Plans need to go through the public review process. Interim Director Nagata stated we are planning to do "open houses" for the sub plans for comments.

The Office will be expanding its comments to the TMT's DEIS. The Office welcomes Board members to submit comments. Both Ms. Hadway and Dr. Veillet replied they have comments which they will submit on their own. Any other comments can be sent to the Office before June 30. Individual comments should be postmarked no later than July 7. Mr. Stevens stated Kahu Kū Mauna Council will give its comments to add to the Office's comments.

Ms. Hadway mentioned regarding the TMT Workforce Pipeline, it would be worthwhile adding benchmarks and reporting.

Mr. Hoke asked if the Stone Cabins have ever been registered. Interim Director Nagata replied the Stone Cabins have not been officially inventoried. If that becomes a mitigation measure for TMT, we would like to have the Stone Cabins officially go through the State Historic Preservation process.

Action

No action taken by the Board.

B. Amended Mauna Kea Management Board Bylaws

UH Legal Counsel reviewed the amended Bylaws and made some recommended changes to include the two BOR ex officio members. The changes include clarification about voting and non-voting members. The BOR ex officio members are non-voting members.

Action

It was moved by Herring Kalua and seconded by Patricia Bergin to adopt the amended Bylaws of the Mauna Kea Management Board. The motion was carried unanimously.

VII. NEXT MEETING

The next meeting of the Mauna Kea Management Board is scheduled for Tuesday, July 21, 2009.

VIII. ADJOURNMENT

There being no further business, Chair Taniguchi adjourned the meeting at 12:05 p.m.

Respectfully submitted:

Signed by Barry K. Taniguchi
Barry K. Taniguchi, Chair, MKMB

7/21/09
Date