



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  
Wednesday, September 1, 2010

University of Hawai'i at Hilo  
Ho'oulu Terrace (UCB 127)  
200 W. Kawili Street  
Hilo, Hawai'i 96720

**Attending**

**MKMB:** Chair Barry Taniguchi, 1<sup>st</sup> Vice Chair Patricia Bergin, 2<sup>nd</sup> Vice Chair/Secretary Ron Terry, John Cross, Lisa Hadway, Herring Kalua, and Christian Veillet

**BOR:** Dennis Hirota

**OMKM:** Stephanie Nagata and Dawn Pamarang

**Others:** Laura Aquino, Dean Au, Craig A., Roy Bagorio, Mary Begier, Leonard Bisel, David Byrne, Ronnie Cabanting, Nancy Cabral, Johnny Carrill, Robert Christensen, Roberta Chu, Gregory Chun, Sandra Dawson, John Dill, Reggie Domingo, Jesse Eiben, Jeno Encencio, Yen Wen Fang, Linda Fisher, Scott Fleming, Suzanne Frayser, Paul Gillett, John Hamilton, Cory Harden, Janice Harvey, Inge Heyer, Nelson Ho, Stewart Hunter, Leslie Isemoto, Brian Lowdes, Bob McLaren, Jeff Melrose, Jon Miyata, Cindy Nomura, Guilros Padilla, Helen Rogers, Royden Shim, Hideki Takami, Nimir Tamimi, Kumiko Usuda, James Valdez, Deborah Ward, Bill Walter, Ross Wilson, Robert Yamada, Stephen Yee, Mason Yamaki, and Miles Yoshioka

**I. CALL TO ORDER**

Chair Taniguchi called the meeting of the Mauna Kea Management Board (MKMB) to order at 11:03 a.m.

**II. APPROVAL OF MINUTES**

Upon motion by Christian Veillet and seconded by Herring Kalua the minutes of the July 14, 2010 meeting of the MKMB were unanimously approved.

Upon motion by Lisa Hadway and seconded by Herring Kalua the minutes of the May 19, 2010 Executive Session were unanimously approved.

**III. INTERIM DIRECTOR'S REPORT**

**A. Thirty-Meter Telescope Environmental Impact Statement**

The challenge period for the Thirty-Meter Telescope (TMT) Environmental Impact Statement (EIS) has expired. No lawsuits were filed against the EIS.

**B. Thirty-Meter Telescope Conservation District Use Application**

The University prepared a Conservation District Use Application (CDUA) that will be presented today.

**C. University of Hawai'i (UH) President's Tour of Mauna Kea**

On August 9, 2010, Interim Director Nagata and Dr. Bob McLaren accompanied President Greenwood on a tour of the summit followed by a visit to the Keck Observatory hosted by its director Taff Armandroff.

**D. Rule Making**

A committee of agency representatives, chaired by Lisa Hadway, has been formed to provide guidance in the development of rules. The goal is to have a draft of the rules by next spring followed by public meetings as required by statute next summer.

**E. Mauna Kea Rangers**

Scotty Paiva has returned from special duty from the British Petroleum oil cleanup in the Gulf. The ranger corps is back to its full complement of five rangers.

**F. Kona Town Meeting**

Interim Director Nagata, Ed Stevens, Ka'iu Kimura, and Sandra Dawson will be giving short presentations at the Kona Town Meeting on September 14, 2010. The theme of the meeting is Mauna Kea. Interim Director Nagata will be doing a presentation on the Office and its activities over the past ten years.

**IV. KAHU KŪ MAUNA COUNCIL (KKMC)**

No report.

**V. NEW BUSINESS**

**A. Conservation District Use Application for the Thirty-Meter Telescope Project**

Interim Director Nagata presented the TMT's Conservation District Use Application (CDUA) to the Board. She made it very clear that the Mauna Kea Management Board (MKMB) is making a recommendation to file the CDUA not granting a permit to construct the TMT. Only the Board of Land and Natural Resources (BLNR) has the authority to approve and issue a permit.

Background

May 19, 2010 – Final EIS accepted by the Governor

May 19, 2010 – MKMB recommended approval of the TMT project.

June 28, 2010 – University of Hawai'i Board of Regents approved the TMT project.

Objective of the CDUA

The Mauna Kea Science Reserve is zoned conservation district and is also classified a resource subzone. The purpose of the CDUA is to provide information to the BLNR for their consideration in granting a Conservation District Use Permit (CDUP):

1. Whether the project is consistent with the purpose of the Conservation District and objectives of the designated subzone.
2. What are the impacts to the resources.
3. How it protects public health, safety and welfare.
4. What are the effects on cultural practices.
5. What are the effects on public access.

Requirements of the CDUA

**1. *Whether or not the project is consistent with the purpose of the Conservation District and objectives of the Resource Subzone.***

UH is committed to the management measures contained in the BLNR approved Comprehensive Management Plan (CMP) and sub plans. UH is also committed to implementing both the CMP and its sub plans.

A TMT Management Plan was developed which adopts the goals, objectives, findings, recommendations, and management strategies and actions of the CMP and sub plans. The TMT Management Plan also fulfills the requirement of the Conservation District Rules Exhibit 3.

**2. *Assess how the project will not cause substantial adverse impact to existing resources.***

Analyses of the impacts are detailed in the TMT Final EIS. The impacts are evaluated within the project's framework of compliance with all applicable rules, regulations and requirements. An assessment of the project is that it will not have an adverse impact based on the assumed implementation of the proposed mitigation measures and relevant CMP and sub plan management actions; it utilizes existing roadways and

utility corridors; and the location of the TMT project as well as the design and color helps minimize visual impact.

3. ***Preservation and improvement of existing physical and environmental aspects of the land and visual impacts.***

The TMT project will be located in Area E in the northern plateau where it will not have an impact on the existing summit cinder cones. It will not be visible from Lake Waiau or the summit, but will be visible from the northern ridge of Kūkahau'ula where other telescope facilities are located and are visible. Its location at a lower elevation below the summit and design features help to minimize its visibility. From outside the Mauna Kea area, TMT will be visible to approximately 15 percent of the population of the Island of Hawai'i.

4. ***Protection of public health, safety and welfare.***

Wastewater

TMT is designed to have a zero-discharge sanitary waste system. No wastewater will be discharged into the ground, but instead will be collected, held in tanks and disposed at treatment and disposal facilities off the mountain.

Solid Waste

The contractor will be required to remove waste frequently to prevent build-up of waste materials. Recycled materials will be separated and sent to a recycling facility. The contractor will also follow construction waste minimization guidelines developed by the Department of Business, Economic Development and Tourism.

During operations the project will provide recycling containers throughout the facility. Other solid wastes will be stored in closed containers to prevent providing potential food for invasive fauna and will be disposed at approved landfills.

TMT will also develop a waste management plan which goal is to minimize the level of solid waste generated by operations at a level below that of comparable sized facilities. The plan will establish policies and procedures for efficient handling, storage, use and disposal of waste.

Hazardous Waste

Handling of hazardous materials will follow all applicable regulations. All hazardous wastes will be stored in containers with a secondary containment system. Storage containers will be inspected daily to ensure the containers are intact and functional. TMT will not be using mercury and will be using non-toxic ethylene glycol. TMT will use an EPA-permitted contractor to transport hazardous materials off the mountain.

TMT will develop a Materials Storage/Waste Management Plan and Spill Prevention Response Plan. These plans will establish protocol for proper handling, storage, use and disposal of hazardous waste materials.

Although mirror washing wastewater is not considered a hazardous material, it will be treated as such. Mirror washing wastewater will drain into a double-walled holding tank which will be equipped with a leak detection system. Similar to the handling of other wastewater, it will be removed and transported off site for treatment and disposal.

5. ***Effect on traditional and customary Native Hawaiian rights and on historic properties.***

The CDUA evaluated the impact on cultural resources used for traditional and customary Native Hawaiian rights, including pilgrimage, prayer, shrine construction and offerings, collection of water from Lake Waiau, Piko deposition, scattering of cremation ashes and burial blessing. It also described the impact on historic properties. The majority of the areas within the Mauna Kea Science Reserve and Natural Areas Reserve where rituals and observances are believed to occur would not be affected by the project. The vast majority of the Science Reserve and Lake Waiau will also not be affected by the project, thus leaving substantial undisturbed areas where traditional and customary practices can continue.

An archaeological survey of the Science Reserve indicated there are no documented burials within the northern plateau. The closest burial is over a mile from the TMT site. The project would not have an impact on burial blessings.

The project's construction activities, in particular the access road, would occur in an area that has been substantially altered from previous observatory construction, and therefore would not result in any significant degradation of resources and of Kūkahau'ula.

6. *Effects on public access and on public trails.*

There are no known trails in the vicinity of the TMT project. The closest customary trail is the Umikoa trail located approximately a mile to the south/southeast. The distance from the trails, and the fact that existing topography block views from the trails toward the proposed project site, indicate there is no potential for project-related work activity to adversely affect public access.

Construction activity in the summit batch plant and visibility to hikers could impact the experience of those hiking along the modern trail that intersects the summit access road near the batch plant and winds around the western side of Pu'u Hau Kea and heads to Lake Waiau.

The long-term indirect benefit is that it is anticipated that some of the lease rent to be paid by TMT will be used for educational and cultural awareness programs which will help reduce potential impact to the cultural resources by visitor and employees.

TMT Management Plan

This document is intended to manage TMT land use in the Conservation District for the purpose of:

- 1) Conserving, protecting and preserving the natural and cultural resources and to promote long-term sustainability; and
- 2) Protect public health, safety and welfare.

The TMT Management Plan incorporated management actions contained in the CMP and sub plans. These documents are the primary management documents governing activities and uses in the UH Management Areas on Mauna Kea and will guide TMT project development and operations. The TMT Management Plan is intended to guide activities and uses within the TMT project area and together with the CMP and sub plans, they are intended to fulfill the purpose of the Conservation District with regards to the TMT project.

The TMT Management Plan includes and addresses the following:

- a. Construction and operations mitigation measures described in the TMT EIS.
- b. Decommissioning of the project at the end of its useful life by following the requirements and processes described in the Decommissioning sub plan, including preconstruction documentation of the conditions of the site prior to the start of construction.
- c. A Historic Preservation Mitigation Plan that includes archaeological monitoring during ground disturbance, and treatment of artifacts and human remains. It also calls for a cultural monitor to be on site whenever an archaeological monitor is present.
- d. Construction Plan including a construction schedule and description of construction activities.
- e. Historical and Archaeological Site Plan containing a summary of archaeological sites and historical properties within the Mauna Kea Science Reserve.
- f. Maintenance Plan for operational activities.
- g. Arthropod Access Way Monitoring Plan relating to monitoring wekiu bug and other arthropods along the TMT access way prior to, during and post construction.

Recommendations

The Office of Mauna Kea Management (OMKM) requests that the MKMB recommends to the UH Hilo Chancellor to approve the CDUA and to submit it to the Department of Land and Natural Resources (DLNR). OMKM's recommendation is based on the following. The CDUA:

1. Incorporates information and mitigation measures of the TMT FEIS.
2. Meets the requirements of the CDUA.
3. Complies with Conservation District Rules.
4. Meets the purpose and objectives of the Conservation District and Resource Subzone.

OMKM also proposes that the MKMB also recommends to the UH Hilo Chancellor to request of the UH President that she designate UH Hilo to submit the CDUA to the Department of Land and Natural Resources. This is consistent with prior action taken by UH Hilo when it served as the proposing agency for the TMT EIS. UH Hilo has also been the principal agency responsible for implementing the Master Plan's project review process which included community input.

Next Steps

Should the MKMB recommend approval of the CDUA and the UH Hilo Chancellor concurs with the MKMB's recommendation, submittal of the CDUA to DLNR completes the University's review process.

The next step is the review and acceptance of the application by DLNR followed by public hearings as prescribed by law. Following these steps, adjustments to the CDUA may be required. The BLNR makes the final determination whether to grant a CDUP for the construction and operation of the TMT project.

Statement by Gary Sanders, TMT Project

Mr. Gary Sanders provided a short technical overview of the TMT project. The thirty meter diameter telescope is designed to collect light and provide very high resolution, become a leader as an astronomical resource for optical and infrared astronomy and to preserve Mauna Kea as the capitol of astronomy. TMT has worked very hard and respectfully in this process to develop a management and construction plan that meets all of the laws, regulations and requirements of the community. TMT is very grateful for MKMB's consideration today and for the opportunity to comment.

Public Testimonies

There were a total of 10 public testimonies. Six testified in support of the TMT project, three testified against, and one spoke about remembering the Hawaiians. (See attached.)

**B. Executive Session**

Chair Taniguchi asked for a motion to enter into executive session to discuss issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities pursuant to HRS §92-5(a)(4). It was moved by Ron Terry and seconded by Herring Kalua to enter into executive session. Upon unanimous approval, the executive session commenced at 12:05 p.m.

The Board reconvened in public session at 1:34 p.m.

**C. Approval of the Conservation District Use Application for the Thirty-Meter Telescope Project**

Action

It was moved by Ron Terry and seconded by Herring Kalua to approve the Conservation District Use Application for the Thirty-Meter Telescope Project and to recommend to UH Hilo Chancellor Straney that the University of Hawai'i at Hilo accept the CDUA, and request of President Greenwood to designate UHH as the appropriate agency within the University to submit the application to the Department of Land and Natural Resources.

Dr. Terry commented on a statement made earlier by a testifier who stated the University was fronting the TMT by putting this application forward. Dr. Terry felt there is some confusion as to why this board is involved. The Board was asked back in 2000 to start taking some responsibility and making Mauna Kea its kuleana. Everything starts and stops with this Board. Personally he has no problem with making TMT do everything and making them responsible and not getting the Board involved, because it is a burden for us having to review everything carefully. This is what we were asked to do so we essentially own this CDUA. Many of us have spent hours reviewing it and worked hard on the EIS, and we are confident about administering the vote. We are taking that responsibility.

Board members unanimously voted in favor with no one opposing.

**VI. ANNOUNCEMENTS**

There were no announcements from the public.

**VII. NEXT MEETING**

Board members will be polled for future meeting dates.

**VIII. ADJOURNMENT**

There being no further business, Chair Taniguchi adjourned the meeting at 1:39 p.m.

Respectfully submitted:

Signed by Dr. Ron Terry  
Dr. Ron Terry, Secretary, MKMB

11/3/10  
Date

## Public Testimonies

**Nimr Tamimi** asked for support in allowing the submittal of the CDUA to the DLNR to continue the permitting process for the TMT project. He strongly believes this project will not only provide a vital economic resource for our community, but it will also provide a wealth of education and hope for our children. The development of the EIS and the fact that it has been unchallenged shows the depth and strength of the project and the people involved with developing its plans. Based on their past record he has no feelings of regret for supporting this project and has the utmost confidence that subsequent documents will be just as strong as the EIS.

**Deborah Ward** stated recently there was a newspaper article that mentioned that a member of the public was ten years behind in his/her criticisms of the University's management of the summit resources. Chair Taniguchi and Herring Kalua cited the work of the Environment Committee, among others, as an example of the change in practice. She noted as a member of the Environment Committee that the committee met only once in 2009 and not once in 2010. The Environment Committee was not convened to provide input on this proposal, nor on the CDUA. The Natural Resources Management Plan (NRMP) promulgated by the Environment Committee calls for a number of studies to be carried out before any further development. When the CMP came before the BLNR without the NRMP BLNR later required its inclusion. She requests that the MKMB defer its decision until the Environment Committee has a chance to provide its input.

Ron Terry stated there is some truth to what Ms. Ward said. He tried to convene the Environment Committee for a number of times over the last six months with no success. It has been difficult finding a common time for everybody to meet, which is frustrating for him. Regarding the NRMP and CMP he always felt the NRMP should be part of the CMP. The BLNR asked for it and we also wanted it and now it is part of the CMP.

Dr. Terry stated individual members of the Environment Committee responded and discussed the TMT EIS with each other. He also spoke with Deborah Ward, Nelson Ho and a number of other people. He indicated that he, Deborah Ward, and Lisa Hadway submitted comments. Even though it was not the Environment Committee per se that submitted comments, the committee had significant input in the TMT EIS and had an impact on the way the document was changed and the way the Plans were changed. He has never thought of the Environment Committee as operating like the MKMB which gives recommendations. The Environment Committee is where we share input, although he would like to broaden the scope a little. While the Committee is composed of a dedicated group of people if we had 20 members we might get critical mass more often. He has asked Interim Director Nagata to send out invitations to people. Of course, he does not want a group with people who only come every third or fourth time. As the chair of the Environment Committee, he apologized for not meeting Ms. Ward's expectations. He has been trying really hard just to have a committee do a good job. The work on the NRMP was excellent.

**Nelson Ho** addressed his comments to concerned Big Islanders who love and respect Mauna Kea, people such as: Mae Mull, who in the 1970s spoke against the urbanization of the summit, Mayor Herbert Matayoshi, whose was concerned in the early 1980s about what was taking place the mountain top; those who expressed their concern during the 1983 Master Planning process that astronomy was taking over the summit of Mauna Kea and tried to get the UH and international astronomy community to live within limits establish a genuine balance on the mountain top; and those who testified at the UH 2000 Master Plan hearings. Big Islanders today are still upset with the industrialization and impacts on Mauna Kea just as they are about those same impacts on Haleakala. Sierra Club and others will keep advocating to restore the balance on the mountain against those forces pushing to industrialize it. They will keep advocating for management that protects the public's interest rather than the interest of the various stakeholders who stand to gain by continuing astronomy development. The TMT proposal represents a major push for more industrialization. It will not go unchallenged. This is the University of California and Caltech telescope, not a UH telescope as alleged on the CDUA proposal. The University is in collusion with the ambitions of the Californians and other outsiders who do not have the Islanders interest in mind. UH, by fronting for TMT, undermines its own reputation in our community. Some say many changes in management have occurred in the last ten years. But the attempts to repair the broken promises of the 1970s and 1980s are too little and too late. TMT should not be allowed on the mountain before all those issues are resolved, and in ways that serve the public's interests. Islanders outside the power structure do not want another telescope. They appreciate the education dollars that are promised now and the jobs that may go to the island residents, but they are not in favor of damaging Mauna Kea to get them. Even though this is not a UH telescope, Hawai'i tax payers are footing the bill to defend outsider ambitions against legal challenges.

**Jon Miyata**, president-elect of the Hawai'i Island Chamber of Commerce, which membership includes over 300 businesses representing over 700 members. TMT is one of the most important and significant project for this island and our state. It will fuel economic growth by providing hundreds of construction jobs for the better part of a decade, and will help to further diversify and grow our economy by providing our children the opportunity to utilize their scientific technical talents without having to leave Hawai'i. The long term economic benefits of the TMT will be widespread as we envision this project both during and after construction having the effect of bolstering substantially all sectors of our economy including the construction

housing market, retail, agriculture, education and government. While there are a few project opponents who repeatedly reflect on past events and shortcomings of other operators, we ask them to stop insinuating TMT has or will operate in the same manner. The open and transparent process TMT has demonstrated thru its extensive EIS is the same process we expect them to use throughout the conservation district use application process. TMT was diligent with meeting diverse groups of community members, listening to comments and concerns, and taking actions to address them in the EIS. The EIS is an outstanding document with solid scientific, cultural, social, and environmental findings and we trust TMT to deliver the same high level of thoroughness and integrity with its conservation district use application. We ask the Board file the conservation district use application with the Chancellor for submission to DLNR.

**Mary Begier**, full time licensed realtor, had the opportunity to participate in focus groups, review and read a number of environmental assessments and environmental impact statements. Here in Hawai'i we are fortunate that most of the people involved in the type of work it takes to draft an EA or EIS do so with a great deal of care for our community and environment. However, there are distinct differences from time to time. This is one of those times. All the meetings, gatherings, and outreach events she attended involving the TMT has always been a step above. The patience and style that the leaders of this project have operated with has raised the bar for future evaluation of EAs and EISs. From the leaders of Cal Tech to the public affairs employees here in Hawai'i to conduct themselves with such respect for the variety of personalities that care about our mountain demonstrates the level of commitment they have for the citizens of Hawai'i. Please grant this conservation district permit approval. She believes the work TMT will do within the conservation area will comply with the CMP and its sub plans. TMT not only wants to have this stellar telescope that will make wonderful and unique discoveries accessible to the scientists, but TMT wants to lead the astronomy industry in how to be a good neighbor and community member. Many people from all the other telescopes on Mauna Kea are appreciative of the heightened awareness all the telescopes are now experiencing. Thank you TMT for your professionalism in conducting business in my community. Thank you for your desire to maintain a spirit of aloha as you do your work. Thank you to the Management Board. You are volunteers and doing this without pay. She appreciates their volunteer time and careful consideration of this important step forward.

**Gregory Chun** on behalf of the Hawai'i Island Economic Development Board supports the recommendation of the Board to Chancellor Straney that the CDUP be filed. It is not what you do; it is how you do it. It is how you conduct yourself. TMT has conducted themselves in a way very different than others in the past. That is demonstrated by the fact that the EIS was accepted without any objections. They have been transparent in that process. They have been responsive to the community and have conducted themselves with aloha. That counts for something. Often times we evaluate these proposals looking at the specific benefits to be achieved by different groups. We often talk about mitigating one impact by offering a benefit on the other side. The approach being taken is really simple but quite novel and important. It is about integrating interest. It is not about who wins and who loses, but how we advance the benefit of everyone. That is reflected in their commitment to education, to work force development, and working with the UH so that they and their astronomy program have significant access to this technology. It is about raising the tide so that everyone benefits. We often evaluate these proposals on the vision that is being proposed. This is not about the vision of TMT or Cal Tech. This is about the vision of this community for the future of this island. The decision before us is as much what we want as it is what TMT wants. It has been said that we are the product of our past. That is true, but we do not have to be the victim of it. We can continue forward by making different choices.

**Dean Au**, representing the Hawai'i Carpenters Union Local 745, strongly supports the Thirty Meter Telescope conservation district use application. TMT is very appropriate for the use of this land and other telescopes located there. As much as an EIS, CDUA and CMP explain impacts that the telescope will have on Mauna Kea, imagine the impact that Mauna Kea, the Big Island and the State of Hawai'i will have on the Thirty Meter Telescope. Hawai'i will help define the largest and needed telescope in the world with our unique culture and aloha spirit. The Hawai'i Carpenters Union shares the same vision as TMT.

**Roberta Chu** spoke as chair of the Hawai'i Island Economic Development Board. Years ago when the TMT project came about, the HIEDB was very clear that they would be in support of the project, but not at all costs. It was very clear that cultural and environmental issues needed to be addressed properly and the months and years that have passed has demonstrated that TMT, OMKM, and the UH Hilo have worked well together to develop what has become a model for what we can look forward to as a project that will have tremendous impact on this island and state, but done right, it can have tremendous positive impacts. The HIEDB strongly urges the Mauna Kea Management Board to submit the conservation district use application to Dr. Straney at UH Hilo, and for him to recommend that UH Manoa present the application to the Board of Land and Natural Resources. This will then begin the final process with the hope that the permit can be granted and we can look forward to what can make our state a very different place in very positive ways.

**Jeno Enocencio**, with Kalalau Ranch and the Office of Hawaiian Affairs Native Hawaiian Historic Preservation Council, stated a lot of the Council members were hesitant in supporting the TMT project. Our advice to the OHA Board of Trustees

was to hold off and wait until more information was obtained and the proper EAs and EISs were filed and more community concerns were being presented to them. But, they went ahead and did it on their own without our advice and without our motions not being considered and supported the TMT. After careful consideration on his part, he wrote an article in the OHA magazine regarding the scientific community as well as the spirituality world of the Native Hawaiians. There was a huge gap. He loves how science works and the theories behind it. However, he cannot help but think about the kanaka who are homeless, the kanakas that do not have the opportunities to go to school, and the kanakas who want to come to school and learn astronomy but do not have the math, the physics, or the scientific background to meet the challenges of being an astronomer. Everybody says Ellison Onizuka is the first Hawaiian to go into space. He is the first Hawaiian born and raised in Hawai'i, but he is not kanaka. He wants to see the kanaka go into space, go into the depths of the sea and discover. He would like to see the spiritual aspect of the Native Hawaiian community as well as the tangible scientific community come together. Only then will we have years meshed so that the telescope can work properly with the spiritual aspect behind it.

Herring Kalua remarked what Mr. Enocencio stated is 100 percent correct. He knows there are some Native Hawaiian astronomers here on the mountain. Chair Taniguchi informed Mr. Enocencio that one of the new paradigms for the observatories is that they are putting a lot of emphasis on trying to support educational opportunities, particularly for the Native Hawaiian community. Chair Taniguchi also mentioned Paul Coleman, a Native Hawaiian astronomer at the IfA at UH Manoa. There is also a student from Pahoia studying at the IfA.

**Cory Harden** stated Nelson Ho told her how recently he went up to the mountain with his family and they were sitting there after sunset watching the stars come out and ranger came along and told them they needed to get off the mountain. After the ranger found out who Nelson Ho was, he was told he could stay up as long as he wanted. Astronomers get to stay up, but this is what is happening on the ground. People are chased away. She is hearing from a lot of folks who are seeing benefits to the economy, which she cannot deny. She is not seeing the dollar signs, she is seeing the destruction. It is not about the science, it is about the concrete that is required. She cited the famous quote from the Vietnam War "We had to destroy the village in order to save it." We need to think about how much of the village we are destroying in order to save it. She sees much more respect for the environment and the culture then she had in the past, but with TMT, where does it end? It is always one more telescope and one more.