



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Written Testimony Submitted to the
Senate Committee on Ways and Means
Tuesday, April 5, 2022 at 10:30 a.m.

By

Greg Chun, Executive Director
Center for Maunakea Stewardship
University of Hawai'i at Hilo

and

David Lassner, President
University of Hawai'i

HB 2024 HD1 SD1 – RELATING TO MAUNA KEA

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee:

Mahalo for the opportunity to comment on HB 2024 HD1 SD1 (“SD1”) relating to Mauna Kea, although we cannot support passage in its current form.

First, the University of Hawai'i (“UH”) reiterates our support for the cultural foundations articulated in the Maunakea Working Group’s (“MKWG”) report to the Legislature which formed the basis of HB 2024 HD1 (“HD1”). The Kumu Kānāwai represent timeless principles of nature’s cycles and are consistent with the 2009 *Mauna Kea Comprehensive Management Plan* (“CMP”) that was adopted by the Board of Land and Natural Resources (“BLNR”) which is implemented by UH. UH looks forward to integrating these principles into our stewardship of Maunakea through the update to our Comprehensive Management Plan that is nearly complete.

UH also acknowledges the attempt SD1 makes to strike a more balanced proposal than HD1 for the future governance of these special lands. For example, representation on the proposed governing board strikes a fair mix of cultural, community, and agency voices all of whom have important perspectives on the use and stewardship of the mauna. And, we appreciate SD1’s support of the State of Hawaii’s academic excellence in astronomy through UH by requiring that agreements with non-UH observatories include dedicated UH observing time.

However, UH respectfully opposes SD1 for a number of operational, programmatic, and policy issues and on the basis that it is a misdirected attempt to resolve the deeply held differences within our community regarding astronomy on Maunakea by changing the governance structure, without any balancing of the cost of doing so at this point in time. Previous UH testimony submitted in response to hearings before the House Joint WAL/JHA/FIN Committee on February 19, 2022, and before the Senate HRE Committee on March 22, 2022, detail our concerns with earlier drafts. That testimony is

attached herein as Attachment A.1. SD1 highlights some of our previous concerns, and raises some new ones, which are summarized below.

The timeline for implementation effectively ensures an end to astronomy on Maunakea.

The process that UH is currently undertaking to secure a new land authorization and negotiate terms of new subleases with the reduced number of observatories that will continue is nominally expected to be completed by 2026. Regardless of specific details in SD1 (e.g., Board composition, funding, etc.), the timeline for establishing the Mauna Kea Stewardship Oversight Authority (“MKSOA”) will cause, under optimistic assumptions, **at least a three-year delay** in securing those same agreements which are critical to sustain astronomy beyond the duration of the current general lease (2033).

Figure 1 provides a comparative depiction of relevant timelines. Of note, decommissioning experiences with the Caltech Submillimeter Observatory and the Hoku Kea telescope to date indicate that the entire process requires about six years to complete which is generally consistent with the timeline in the 2010 Decommissioning Plan. Since UH’s current general lease terminates in 2033, the other observatories would need to commence decommissioning no later than 2027. This is several years before implementation of SD1 will yield the necessary new general lease and associated subleases. Importantly, not only must all observatories be removed by the end of 2033 under existing agreements, but key infrastructure (e.g., underground utilities) and site restoration work must be done by then as well – an enormous undertaking in a time constrained situation. The timeline in Figure 1 incorporates several assumptions including the time needed to complete contested cases and subsequent litigation (assumed to be 3 years total – comparable to the TMT experience), reaching closure on a multitude of sublease negotiations with international funders of Maunakea astronomy, and numerous complex steps in the 3 year MKSOA transition period being successful. ***In general, schedule uncertainties and poor or missing assumptions will tend to push the implementation timeline to longer durations than what is shown in Figure 1, while the 2033 end of the current 65-year general lease is fixed.***

Given the length of time required to obtain necessary approvals for a new land authorization, the governments and universities that support astronomy on Maunakea will be hard pressed to continue doing so without assurances of the State’s support of astronomy on Maunakea and a clear path to the timely granting of use and control of property upon which existing astronomy facilities are located. Aside from the costs associated with starting a new governmental entity, and prematurely terminating existing contractual and property interests held by the observatories and UH, the ultimate toll that this Bill will impose, if passed, will be to threaten one of our State’s most successful global achievements, the future of 21st century astronomy, and the

priceless opportunity for generations here in Hawai'i to be part of the legacy of Hawai'i astronomy.

The costs of implementation and operations have not been adequately assessed.

SD1 appropriates \$12M in FY 2022-23 for start-up costs to establish MKSOA, as well as an unspecified amount to hire an executive assistant to support the new authority. It is not clear what start-up costs will be covered or how ongoing operational costs, which are separate from start-up costs, are to be paid for. Consider, for example, that UH is the permittee of all conservation district use permits for astronomy facilities on Maunakea, under which BLNR requires that UH implement the CMP. The CMP requires UH to coordinate the implementation of 103 management actions related to resource management, education, outreach, and culturally appropriate stewardship on lands managed by UH on Maunakea.

The \$12M appropriation approximates UH's current annual costs to support community education and outreach, stewardship, and operations on Maunakea. It does not include the cost associated with operating a world-class astronomy program. Our operational costs are covered by a combination of state, tuition, extramural, Maunakea observatory, lease, and commercial fee funds. Actual start-up costs for MKSOA would need to include more than just the hiring of administrative, enforcement and fiscal support staff for MKSOA. Other readily apparent costs include the costs of developing new planning documents and completing the environmental reviews required to secure a new land authorization and necessary permits for MKSOA, the costs associated with negotiating a new land authorization and subleases as well as the transfer or assignment of current interests from UH (e.g., general lease, subleases permits, and assets), the cost of developing administrative rules, and the cost to defend likely legal challenges associated with developing new leases, permits, rules, or other necessary agreements.

The requirement that the MKSOA be self-sustaining after the first year following the transition period implies substantial lease rent income through renegotiated subleases with the observatories. As described above, this would likely not occur before 2029 which means ongoing operational costs need to be funded.

Further, limiting MKSOA expenditures to five percent of the annual budget, as called for by SD1, is unrealistic. The Center for Maunakea Stewardship's ("CMS") budget is devoted primarily to support administrative functions, including the implementation of the master plan, CMP, compliance monitoring, and the administrative rules. The public, UH, environmental and cultural stewards, observatory funding entities, and others who may be expected to sustain operations deserve to understand how public and private funds are to be used to cover these costs.

UH stewardship of Maunakea.

SD1 and HD1 are founded on the narrative that UH is mismanaging Maunakea. Respectfully, this narrative is no longer accurate. Criticisms expressed in the 1998 State audit concerning UH's management have long been addressed by subsequent State audits and the recent *Independent Evaluation* procured by the Department of Land and Natural Resources ("DLNR"). Yet this reality continues to be ignored. There have been 22 solid years of innumerable continuous improvements in management, research, and outreach as well as millions of dollars of investment by UH that have corrected those criticisms. The 2020 DLNR Independent Evaluation of UH's management of Maunakea stated that the UH-managed lands on Maunakea are ***among the best managed state lands in Hawai'i, and that negative perceptions of UH's management are associated with negative views on telescope development.*** The real issue is the deeply held differences regarding state policy that has supported astronomy on Maunakea for more than five decades, not UH's land management. It is certainly the prerogative of state government to revoke the state's support for astronomy, but leaving it to a new governing authority to effectively form state policy on astronomy is a poor substitute for a clear declaration from the state government, one way or another.

Moving forward: Collaborative governance alternatives.

The concept of governance alternatives is not new to UH. In 2017 the Governor, OHA, DLNR, and UH spent considerable effort in developing a collaborative governance model and agreement only to have that effort stalled due to ongoing litigation. When then-Senator Kai Kahele introduced legislation in 2018 regarding a new Maunakea management authority, UH engaged in discussions with the legislature and other key stakeholders about that proposed framework. Most recently, OHA in their testimony before the Senate HRE Committee on March 22, 2022 suggested that more time be allowed for exploring the development of a "collaborative stewardship model" that seems to have similarities with UH recommendations as identified below. And currently, UH and DLNR are already in the process of withdrawing 10,000 acres from UH's current general lease to be returned to DLNR.

A discussion of alternative governance for Maunakea should begin with a review of the shared vision and objectives for a new structure. In our experience working with multiple stakeholders for the last 22 years, the evaluation of governance options for Maunakea should begin with the following principles:

- Native Hawaiians who inhabited these islands prior to 1778 brought with them, and developed over time, a rich and valuable understanding of the natural world. That knowledge is timeless and can inform today's resource management programs and practices.

- Native Hawaiian and community perspectives need to be represented in planning and decision making concerning Maunakea. The land on Maunakea managed by UH are both public trust and ceded lands that are to be managed for the benefit of the community, including native Hawaiians.
- Hawai'i needs to diversify its economy and Maunakea astronomy catalyzes education, research, and innovation at scale, in turn forming a vibrant University astronomy research, education, and technology development program and associated endeavors, such as world class astronomy facilities.
- These principles need to be balanced.

If the Legislature wishes to affirm a positive, thriving, integrated future for astronomy in Hawai'i consistent with UH's "commitment to the collaborative stewardship of Maunakea's cultural, natural, educational and scientific resources, and ... to move forward to collaboratively build a global model of harmonious and inspirational stewardship that is befitting of Maunakea" (Board of Regents Resolution, August 24, 2017) then SD1 should be amended to incorporate the recommendations in our March 22, 2022 testimony before the Senate HRE Committee. These included the following:

- Commit in statute to expand, broaden, and diversify the range of community voices in planning and decision making as seems to be the intent of HB 2024 HD1 and direct the creation of an interagency management authority comprised of UH, OHA, DLNR, and DHHL to develop a collaborative governance model that includes community voices on its oversight board. The entity could be administratively attached to DLNR, and its role would be to establish an integrated management program with shared goals and resources for the collaborative stewardship of public lands on Maunakea with each entity playing a major role consistent with its respective mission. These common objectives would incorporate many of the MKWG's recommendations along with DHHL's 'Āina Mauna plan for Maunakea, UH's Master Plan for astronomy, DLNR's approved CMP and other relevant DLNR management plans, and the principles of the Kumu Kānāwai to promote the kind of holistic and integrated management approach for the mauna presented in the MKWG report. Such an approach would ensure that Maunakea lands would continue to be protected under the various administrative rules and management programs in place without having to recreate a new management regime and government entity while giving time for trust, communication, and collaboration to build.
- Commit in statute to the cultural underpinnings of the MKWG report and HB 2024 HD1 and direct the interagency management authority to integrate these principles into a joint stewardship program. These are established principles of nature's cycles that should inform and shape stewardship practice, and UH looks forward to integrating their application in our management plans and actions.

- Continue the State’s commitment to the future of astronomy on Maunakea by codifying that commitment in statute, with UH holding an appropriate land authorization only for the astronomy precinct within which the existing astronomy sites are located, Hale Pōhaku, and the road connecting these areas so we can continue to improve our stewardship, as we have committed to do. Approximately 10,000 acres currently under UH’s general lease would return to DLNR management.
- Direct the interagency management authority to develop a community-based stewardship program for the lands withdrawn from UH’s current general lease that provides educational, stewardship, and economic opportunities for native Hawaiians and the community.

Again, these ideas are not new, and UH has been discussing, analyzing, and pursuing alternative governance with stakeholders for years.

While UH opposes SD1 in its current form, UH would be glad to assist in crafting a bill that would help achieve a vision of a thriving, respectful, and balanced future where astronomy works hand in hand with cultural, historic and environmental stewardship for the benefit of the mauna, community, and humanity. This approach could also address some of the legal issues inherent in the current draft such as avoiding impacts to existing contractual obligations that do not terminate until 2033 under the current subleases and other issues UH identified in our testimony on HB 2024 and HD1.

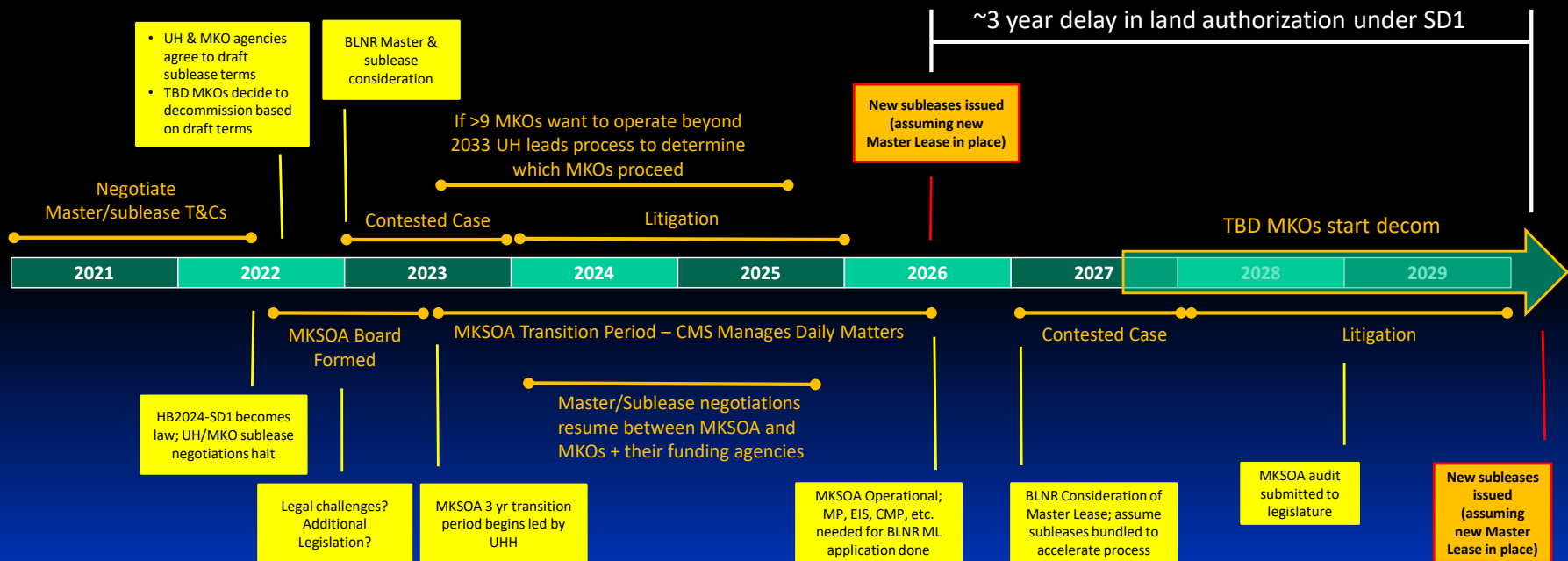
Experience suggests that when three of the primary agencies who would be involved in a collaborative stewardship model have expressed openness to the concept, then the prudent course of action would be to explore that option further.

Polynesian explorers employed keen observation and generations of accumulated knowledge, including astronomical, to traverse the Pacific far-and-wide bringing humans to these islands centuries ago. They brought a profound understanding of humanity’s place in the universe and the natural world. At some point in that history, there was the “first canoe” whose crew members were inspired by vision, intuition, and trust in the discovery of a land far away that they had no knowledge of but which could sustain life in spectacular ways. In the 1960’s, Governor Burns launched us on a similar journey of discovery that asked UH to lead the State in building a knowledge-based sector to our economy that would establish Hawai’i as an international leader in science and technology based on our special and unique natural, cultural, and scientific resources. This voyage would not have been possible but for the imagination and foresight of the Hawai’i Island community responding to the devastation to Hilo caused by the 1960 tsunami and the recognition by a Hawaiian master optician and observer, Alika Herring, that Maunakea represents the best site for night-time observing in the world. Central to all of these voyages was a clear vision of what lies beyond that which we could imagine, and the courage to sail. Such courage is what’s needed now.



Master/Sublease Schedule Comparison

UH as Applicant



Mauna Kea Stewardship and Oversight Authority as Applicant

Figure 1. Comparison of Implementation Timelines



UNIVERSITY OF HAWAII SYSTEM
Legislative Testimony

ATTACHMENT A.1



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Higher Education
Tuesday, March 22, 2022 at 3:00 p.m.

By

Greg Chun, Executive Director
Center for Maunakea Stewardship
University of Hawai'i at Hilo

and

David Lassner, President
University of Hawai'i

HB 2024 HD1 – RELATING TO MAUNA KEA

Chair Kim, Vice Chair Kidani, and members of the committee:

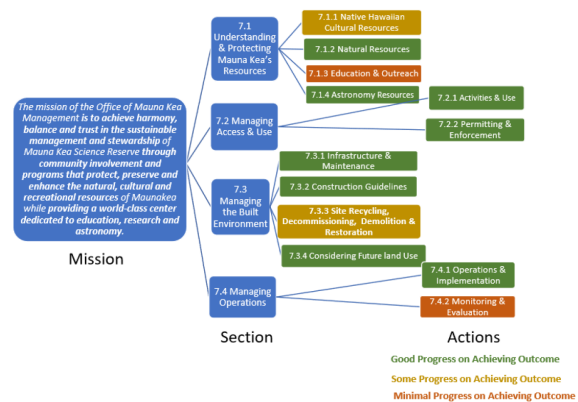
Mahalo for the opportunity to comment on HB 2024 HD1, relating to Mauna Kea. The University of Hawai'i ("UH") respectfully opposes HB 2024 HD1 as drafted on the basis that it is a misdirected attempt to resolve the deep-seated differences within our community regarding astronomy on Maunakea by changing the governance structure, without any balancing of the cost of doing so at this point in time. UH's current lease (and therefore subleases) lasts until 2033, and given the length of time required to obtain necessary approvals for a new land authorization, the governments and universities that support astronomy on Maunakea will be hard pressed to continue doing so without assurances about the State's support of astronomy on Maunakea. Even aside from the costs associated with starting a new governmental entity, and prematurely terminating existing contractual and property interests held by the observatories and UH, the ultimate toll that this Bill takes, if passed, is threatening one of our State's most successful global achievements based, respectfully, on an outdated narrative.

This Bill is founded on the narrative that UH is mismanaging Maunakea. More than twenty years following the long out-of-date 1998 audit, this is a false narrative, and UH has since made innumerable improvements and millions of dollars of investment. In 2000, in order to ensure more engagement and accountability to the Hawai'i Island community, the UH Board of Regents ("BOR") adopted the 2000 Master Plan that created the Office of Maunakea Management. UH Hilo then assumed many of the responsibilities previously held by the Institute for Astronomy ("IfA") on O'ahu, to more appropriately shift the focus to and on Hawai'i Island stakeholders. Improvements continued with the adoption of a Comprehensive Management Plan, Subplans (2009-10) ("CMP") and Hawai'i Administrative Rules ("HAR") chapter 20-26 (adopted by BOR in 2019 and approved by the Governor in 2020), which together, address the protection of Maunakea's cultural, natural, and scientific resources, ensuring safe public access,

managing commercial activities, and the decommissioning process for astronomy facilities.

UH has continued to shift stewardship and coordination to Hawai'i Island with the creation of the Center for Maunakea Stewardship ("CMS") under UH Hilo (2020) which brings together more closely than ever the environmental, cultural, educational, and operational elements of a comprehensive stewardship program. And most recently, the BOR adopted a new master plan (2021) that emphasizes the integration of culture and education with environmental stewardship and astronomy. The new master plan, for the first time, commits to a significant reduction in the number of astronomy facilities from the current 13 to a maximum of 9.

Multiple independent reviews in recent years have affirmed this work and counter the inaccurate premise of mismanagement that underlies this Bill. As we have reported in our testimony to the Joint House Committee re: HB 2024 (Attachment A), in its November 2019 Report on the Implementation of State Auditor's Recommendations 2014 – 2017, the State Auditor noted that of the several audit recommendations from 1998, only four (4) were outstanding. One item, directly under the control of UH, was completed with the BOR's adoption of HAR chapter 20-26. UH is actively working on the remaining three (3) items in coordination with the Department of Land and Natural Resources ("DLNR"), which has final approval on these particular tasks. These remaining items are dependent on (1) whether a new general lease is granted by the Board of Land and Natural Resources to UH and, more significantly, (2) whether there is a future for astronomy on Maunakea, both of which are decisions outside UH's sole authority.



From the Ku'iwalu Report – "The Links Between the OMKM¹ Mission and MCP Management Actions" demonstrates good management performance.

As a result of the hard work and investment of many, our stewardship programs have been recognized with multiple awards, notably in 2016 by the Kona Kohala Chamber of Commerce ("KKCC") and in 2017 by KKCC again and the Historic Hawai'i Foundation. Our stewardship also resulted in the removal of the wekiu bug from the endangered species candidate list in 2011 by the UH Fish and Wildlife Service who cited in their press release:

¹ "OMKM" is the former "Office of Mauna Kea Management" which has since been replaced with the creation of CMS in 2020 by the BOR.

“The removal of the wekiu bug is based on the successful management of the summit of Mauna Kea on the island of Hawai‘i. Survey work resulted in more than doubling the number of sites where this species is found. The protection and monitoring of the wekiu bug provided through the management plans for Mauna Kea has precluded the need to list this species.”

Most recently, the Ku‘iwalu Report² on which the Mauna Kea Working Group (“MKWG”) report³ and this Bill purports to be based, at least in part, noted that the UH managed lands on Maunakea are among the best managed lands in Hawai‘i.

The Ku‘iwalu Report also insightfully notes,

“Those who support existing and future telescope development on Mauna Kea believe that OMKM has adequately implemented the CMP MAs⁴ to preserve and protect the cultural and natural resources on Mauna Kea. For those who do not support continued telescope development on Mauna Kea beyond 2033, the expiration of the existing state lease, they believe that UH continues to mismanage Mauna Kea as concluded in the 1998 State Auditor’s Report.”

Astronomy on Maunakea was established over 50 years ago through the leadership of Governor Burns at the request of many in the Hawai‘i Island community. As a result, Maunakea is now the best site for astronomy in the world and the IfA is one of the top astronomy institutions in the world, a legacy about which our children and their children can be proud. Recognizing their responsibilities to do more for and with the community, UH and the Maunakea Observatories have implemented groundbreaking new programs. A Hua He Inoa has brought traditional Hawaiian naming practices to the naming of astronomical objects discovered in Hawai‘i resulting in international acceptance of Hawaiian names for major discoveries including the first “visitor” to our solar system from outside, ‘Oumuamua, and the first picture of a black hole, Pōwehi. The Maunakea Scholars Program provides Hawai‘i high school students on every island with access to the finest telescopes in the world to conduct their own research while mentored by UH IfA graduate students; the only such program in the world. These programs all result from the engagement and capacity within our UH campuses as part of our stewardship mission.

² The *Independent Evaluation of the Implementation of the Mauna Kea Comprehensive Management Plan*, dated December 2020, was prepared for DLNR at its request by Ku‘iwalu, tradename for Ho‘Akea LLC, a company owned and operated by Dawn N.S. Chang (“Ku‘iwalu Report”).

³ The MKWG was created by House Resolution No. 33, H.D. 1 to “develop recommendations, building on the findings of the [MKWG].” The MKWG issued its final report to Speaker Scott K. Saiki on January 25, 2021.

⁴ “MAs” refer to the 103 management actions enumerated in the CMP, and which are currently being updated as part of the CMP’s adaptive management review and update process.

The MKWG Report ignores the positive changes discussed herein, and the Bill is inconsistent with the State's support of astronomy on Maunakea. The changes made in HD1 provide token support to preserve astronomy. Instead, the Bill makes stewardship of the mauna the responsibility of a group that does not fully represent the community, most notably the astronomy community. The new authority created under the Bill would be statutorily charged with planning the end of astronomy. Removing UH from its stewardship role and the holder of the general lease under which it grants subleases to astronomy facilities would cause the demise of IfA as a global leader. UH would no longer have a say or control over guaranteeing the best use of complex and costly scientific equipment for Hawai'i students, researchers, and faculty, or guaranteeing that the benefits from unique science outcomes are spread across the community so that future generations can become leaders in astronomy, physics, and math.

If the Legislature wishes to affirm a positive, thriving integrated future for astronomy in Hawai'i consistent with UH's "commitment to the collaborative stewardship of Maunakea's cultural, natural, educational and scientific resources, and ... to move forward to collaboratively build a global model of harmonious and inspirational stewardship that is befitting of Maunakea" (BOR Resolution, August 24, 2017) then this Bill should be amended as follows.

- Commit in statute to expand, broaden, and diversify the range of community voices in planning and decision making as seems to be the intent of HB 2024 HD1 and direct the creation of an interagency management authority comprised of UH, OHA, DLNR, and DHHL to develop a collaborative governance model that includes community voices on its oversight board. The entity could be administratively attached to DLNR, and its role would be to establish an integrated management program with shared goals and resources for the collaborative stewardship of public lands on Maunakea with each entity playing a major role consistent with its respective mission. These common objectives would incorporate many of the MKWG's recommendations along with DHHL's 'Āina Mauna plan for Maunakea, UH's Master Plan for astronomy, relevant DLNR management plans, and the principles of the Kumu Kānāwai to promote the kind of holistic and integrated management approach for the mauna presented in the MKWG report. Such an approach would ensure that Maunakea lands would continue to be protected under the various administrative rules and management programs in place without having to recreate a new management regime and government entity while giving time for trust, communication, and collaboration to build.
- Commit in statute to the cultural underpinnings of the MKWG report and HB 2024 HD1 and direct the interagency management authority to integrate these principles into a joint stewardship program. These are established principles of nature's cycles that should inform and shape stewardship practice, and UH looks forward to exploring their application in our management plans and actions.

- Commit in statute to the future of astronomy on Maunakea as a matter of state policy with UH holding an appropriate land authorization only for the astronomy precinct within which the existing astronomy sites are located, Hale Pōhaku, and the road connecting these areas so we can continue to improve our stewardship, as we have committed to do. Approximately 10,000 acres currently under UH's general lease would return to DLNR control and management.
- Direct the interagency management authority to develop a community-based stewardship program for the lands withdrawn from UH's current general lease that provides educational, stewardship, and economic opportunities for native Hawaiians and the community.
- While UH opposes the Bill in its current form, if the committee is willing, we would be glad to assist in crafting a bill that would help achieve a vision of a thriving, respectful, and balanced future where astronomy works hand in hand with cultural, historic and environmental stewardship for the benefit of the mauna, community, and humanity. This approach could also address some of the legal issues inherent in the current draft such as avoiding impacts to existing contractual obligations that extend to 2033 under the exiting subleases and other issues UH identified in our testimony to the House committees.

Polynesian explorers employed keen observation and generations of accumulated knowledge, including astronomical, to traverse the Pacific far-and-wide bringing humans to these islands centuries ago. They brought a profound understanding of humanity's place in the universe and the natural world. At some point in that history, there was the "first canoe" whose crew members were inspired by vision, intuition, and trust in the discovery of a land far away that they had no knowledge of but which could sustain life in spectacular ways. In the 1960's, Governor Burns launched us on a similar journey of discovery that asked UH to lead the State in building a knowledge-based sector to our economy that would establish Hawai'i as an international leader in science and technology based on our special and unique natural, cultural, and scientific resources. This voyage would not have been possible but for the imagination and foresight of the Hawai'i Island community responding to the devastation to Hilo caused by the 1960 tsunami and the recognition by a Hawaiian master optician and observer, Alika Herring, that Maunakea represents the best site for night-time observing in the world. Central to all of these voyages was a clear vision of what lies beyond that which we could imagine, and the courage to sail. Such courage is what's needed now.

Attachment A



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Water & Land,
House Committee on Judiciary & Hawaiian Affairs, and
House Committee on Finance

Saturday, February 19, 2022 at 9:00 a.m.

By

Greg Chun, Executive Director
Center for Maunakea Stewardship
University of Hawai'i at Hilo

HB 2024 – RELATING TO MAUNA KEA

Chairs Tarnas, Nakashima, and Luke, Vice Chairs Branco, Matayoshi, and Yamashita, and members of the committees:

Mahalo for the opportunity to comment on HB 2024, Relating to Mauna Kea. The University of Hawai'i is committed to the comprehensive and holistic principles for Maunakea stewardship advocated in the Mauna Kea Working Group (“MKWG”) Report (“Report”) and as called for in HB 2024. These principles are widely accepted as underlying accepted best practice in land and ecosystem management which are reflected in the collective commitments we have made through our Master Plan, Comprehensive Management Plan, component- and sub-plans, and our Administrative Rules. However, the University respectfully opposes HB 2024 for multiple reasons which are outlined in the attached response submitted during the public comment period on the MKWG draft report. We would like to take this opportunity to highlight a few of the more salient issues outlined in those comments.

1. Astronomy on Maunakea is a long-standing state policy. HB 2024 creates a new management entity with the authority to, among others things, “establish a plan to return the mauna above nine thousand two hundred feet elevation to its natural state.” Support for astronomy on Maunakea goes back for more than fifty years. At that time, the State decided that it did not want to just be a passive landlord for the best observatories in the world but that Hawai'i should be the home of a world-class program of astronomy research and education. This has enabled Hawai'i to participate in and lead the discoveries that underlie human understanding of the origins of the universe and the celestial bodies around us.

Maunakea is truly deserving of the highest levels of stewardship. Decisions on access to Maunakea for culture, science, education, recreation, and commercial activities require broader policy discussions involving stakeholders across multiple communities and policy-makers on Hawai'i Island and the State. No single state

entity, the creation of which is proposed in HB 2024, should have the sole authority to make that policy decision on behalf of the state. Further, upon close examination the recommendation to eliminate astronomy is not substantiated in wider stakeholder input submitted during the comment period for the Report.

2. The complexities and costs of managing access to public lands have been underestimated in the Report upon which HB 2024 is based. Under the proposed powers and duties of this new entity, public access appears to be more restrictive and does not reflect the wide variety of values the broader community holds towards Maunakea, including recreational, subsistence, educational, and economic uses. Access to Maunakea by Hawai'i Island residents, including native Hawaiian practitioners, is one of the most contentious and consistently raised concerns in matters related to Maunakea. The Report underestimates the complexity of addressing public interests and coordinating across the various jurisdictions on Maunakea. Further, the proposal to include adjacent State and private lands into the jurisdiction of the new Governing Entity greatly exacerbates the complexities of the enterprise and significantly increases its resource requirements, which itself has not been adequately evaluated in the Report.
3. Legal, administrative, and funding issues present risks for implementation of the MKWG's Proposal. There are a number of legal, administrative, and funding concerns raised by the MKWG's proposal that will require further analysis and discussion. These include but are not limited to:
 - a. The potential constitutional concerns related to race-based membership of a government entity with control over state lands and resources.
 - b. The Report does not account for the complexity of the various jurisdictions on Maunakea, and the variety of funding sources that will need to be shored up, or replaced with general funds.
 - c. The lack of key Stakeholder representation on the board of the new Governing Entity (i.e., astronomy, UH, federal partners) will in and of itself create governance and funding problems.
 - d. The complexities and risks of successfully working through the aforementioned tasks of realigning, much less simply coordinating, management of public lands that are currently under leases and/or the jurisdiction of different agencies with different administrative rules.

All of these are complex issues and any one of these could significantly impede implementation of the proposed governance structure given the contentious nature of Maunakea stewardship and the significant resources required. Respectfully, attaching the success of a newly established entity to highly speculative outcomes is irresponsible without considerably more cost-benefit analyses than is provided in the Report and to substantiate HB 2024.

The basis of HR 33 HD1 (2021) that established the MKWG, the MKWG Report, and HB 2024 are claims that the University has mismanaged Maunakea. The University has

acknowledged and apologized for its stewardship of Maunakea prior to 2000. Subsequent state audits of the University's management of Maunakea have documented our commitment and improvement over time. Further, DLNR's 2020 Independent Evaluation of the University's implementation of the comprehensive management plan (CMP) showed that people's perceptions of UH's effectiveness as manager were associated with whether people supported telescope development on Maunakea. No change in management practice will satisfy many of those who oppose TMT or even astronomy on Maunakea. This is not a management issue; this is a policy issue that requires broader discussion.

As you know, the University's current lease for the Maunakea Science Reserve (MKSR) expires in 2033. Discussions have begun for a new land authorization; the current preferred alternative is to seek a new land authorization for a reduced area including the astronomy precinct, access road, and Halepōhaku **only**, effectively withdrawing 10,000 acres from the science reserve and returning them to DLNR management. The University continues to seek opportunities to work collaboratively to enhance stewardship of the mauna.

In closing, the University should be judged by our complete record which shows substantial improvement over time across multiple dimensions. Our commitment has been reliably demonstrated in time, effort, and resources committed by us over the years in the exercise of our stewardship responsibilities for the privilege of access we have. And as a result, as reported by many in the Independent Evaluation **"...the cultural and natural resources on the state conservation lands on Mauna Kea are some of the best managed and protected lands in the entire State"** and we have a world class research enterprise Hawai'i can be proud of.

Mahalo for the opportunity to provide our testimony. Further details outlining our opposition to HB 2024 are outlined in our response to the MKWG Report which we have attached here.

University of Hawai'i Response to the Maunakea Working Group's Draft Report:
He Lā Hou Kēia Ma Mauna A Wākea: A New Day On Mauna A Wākea

Mahalo for the opportunity to provide comments on the Mauna Kea Working Group's ("MKWG") Draft Report to the Hawai'i State Legislature entitled, *He Lā Hou Kēia Ma Mauna A Wākea: A New Day On Mauna A Wākea* ("Report"). It is clear from the Report that the MKWG worked diligently in fulfilling their charge.

We have organized our response around five themes that arise from the content of the Report: 1) The University of Hawai'i (UH) embraces the value of the Kānāwai principles; 2) The MKWG's recommendations risk the future of astronomy in Hawai'i and beyond; 3) The complexities and costs of managing access to public lands have been underestimated; 4) Legal and administrative concerns; and 5) UH's responsible stewardship of Maunakea.

Our cover letter summarizes our views on these themes with further elaboration provided in the Attachment. Our intent is to provide an overview of the real challenges and implications of the Report and provide background that should be considered prior to contemplating and drafting legislation seeking to build upon the recommendations in the Report. Further discussion is welcomed.

1. The Kānāwai principles are consistent with UH plans for Maunakea

We acknowledge and appreciate the holistic and integrated approach of the Kānāwai principles described in the Report. The symbiotic connections between the elements of nature, and of nature with humans, emphasizes the importance of sustaining balance between these forms. These principles are valuable guidelines for land use planning and decision making. We understand that stewardship of Maunakea is a privilege that requires a comprehensive and cohesive management program. The University embraces these perspectives, which are reflected in the integrated and balanced nature of our own Master Plan including our proposed update, our Comprehensive Management Plans, and our Administrative Rules that collectively and specifically outline our commitments and responsibilities to Maunakea, the state, and the communities we serve.

As you know, managing public lands, especially 'āina with as many complexities and conflicting expectations is extraordinarily complex. We are committed to continuous improvement and look forward to improving the application and integration of these principles into the University's existing and next plans within the context of governing laws and regulations.

2. The MKWG Report places the future of astronomy at risk

Foundational to the Report's recommendations is the position of the MKWG that astronomy on Maunakea above the 9,200 foot elevation should be phased out as an allowed land use (Page 25).

Support for astronomy on Maunakea is a longstanding State policy going back more than fifty years. At that time, the State decided that it did not want to just be a passive landlord for the best observatories in the world but that Hawai'i should be the home of a world-class program of astronomy research and education. This has enabled Hawai'i to participate in and lead the discoveries that underlie human understanding of the origins of the universe and the celestial bodies around us. It is not an overstatement to say that what is at risk here is the future of

astronomy as a field of human inquiry, as a source of economic activity on Hawai'i Island, as an inspiration for Hawai'i's youth, as a source of pride for the people of Hawai'i, and as an area of international excellence for UH and our students. Consistent with its place in Hawaiian cultural tradition and cosmology, *Maunakea stands as a uniquely treasured scientific and community resource.*

Maunakea is truly deserving of the highest levels of stewardship. Decisions on access to Maunakea for culture, science, education, recreation, and commercial activities require broader policy discussions involving stakeholders across multiple communities and policy-makers on Hawai'i Island and the State. The recommendation to eliminate astronomy is not substantiated by wider stakeholder input in the Report.

The risk to astronomy's future is further amplified by the lack of specifics in the implementation plan for establishing the new Governing Entity proposed by the MKWG. Numerous steps would need to be achieved to establish the new Governing Entity including, but not limited to, enabling legislation, land transfers, development of land use and management plans, permitting requirements, development and coordination of administrative rules across jurisdictions, standard operations start-up, and the potential for appeals at multiple steps along the way. At the Board of Regents direction, the UH administration conducted its own analysis of alternate governance models for Maunakea in 2020. The MKWG's projected timeline of three years to establish the new Governing Entity is unrealistic and exacerbates the risk to the future of astronomy due to the impending termination of the current general lease in 2033. These are no small steps and the lack of a viable business plan on top of these challenges makes success highly speculative, especially with the Report's reliance on general fund appropriation.

3. The complexities and costs of managing access to public lands have been underestimated

Under the proposed powers and duties in the Report, public access appears to be more restrictive and does not reflect the wide variety of values the broader community holds towards Maunakea, including recreational, subsistence, educational, and economic (including commercial tour operator) uses. Does the MKWG propose to prohibit snow play? Hunting? Hiking? Who would determine the legitimacy of claims made by individual native Hawaiian cultural practitioners?

Access to Maunakea by Hawai'i Island residents, including native Hawaiian practitioners, is one of the most contentious and consistently raised concerns in matters related to Maunakea. The Report underestimates the complexity of addressing public interests and coordinating across the various jurisdictions on Maunakea. The proposal to include adjacent State and private lands into the jurisdiction of the new Governing Entity exacerbates the operational complexities of the enterprise and significantly increases its resource requirements. It is also unclear on how new rules and procedures the new Governing Entity adopts would integrate with existing rules governing activities on DLNR, DHHL, County, and private landowner property that is included in the new land area defined in the Report. Importantly, who does the MKWG propose to allow to have access, who will it prohibit, and who will make decisions about how individuals are placed into categories that are allowed or disallowed access?

Finally, the Report does not meaningfully address the resource requirements of the new Governing Entity. Annual operating costs for stewardship alone are \$12M, the majority of which is covered by extramural and non-general funds generated by the University. In addition, the University provides world-class global network connectivity for all Maunakea Observatories so

that the data collected on the mountain can be shared with researchers and students at institutions around the world. Under the new management regime being recommended, absent other sources of revenue because of the uncertainty created about future access and use, a substantial investment by the State will be required to support a new stewardship program that would have jurisdiction for significantly more land than the current program.

4. Legal, administrative, and funding issues present risks for implementation of the MKWG's proposal

There are a number of legal, administrative, and funding concerns raised by the MKWG's proposal that will require further analysis and discussion. These include but are not limited to:

- A. The potential constitutional concerns related to race-based membership of a government entity with control over state lands and resources.
- B. The Report does not account for the complexity of the various jurisdictions on Maunakea, and the variety of funding sources that will need to be shored up, or replaced with general funds.
- C. As discussed before, stakeholder representation on the board of the new Governing Entity will in and of itself create governance and funding problems.
- D. The complexities and risks of successfully working through the aforementioned tasks of realigning, much less simply coordinating, management of public lands that are currently under leases and/or the jurisdiction of different agencies with different administrative rules.

All of these are complex issues and any one of these is a potential show stopper given the contentious nature and resources required of them. Attaching the success of a newly established entity to highly speculative outcomes requires considerably more cost-benefit analyses than is provided in the Report.

5. The University's commitment and ability to successfully steward Maunakea has been demonstrated

The University has acknowledged and apologized for its stewardship of Maunakea in the last century. Subsequent state audits of the University's management of Maunakea have documented our commitment and improvement over time. In its *Report on the Implementation of State Auditor's Recommendations 2014 – 2017*, the State Auditor noted that of the several audit recommendations from 1998, only four (4) were outstanding as of its November 2019 report. One item, directly under the control of the University, was completed with the University Board of Regents' ("BOR") adoption of Hawai'i Administrative Rules ("HAR") chapter 20-26 on November 6, 2019 (approved by the governor on January 13, 2020). The University is actively working on the remaining three (3) items in coordination with DLNR, which has final approval on these particular tasks. These remaining items are dependent on whether a new general lease is to be granted to UH and, more significantly, whether there is a future for astronomy on Maunakea, both of which are decisions outside UH's sole authority.

The University is charged with implementing 103 management actions in the *Mauna Kea Comprehensive Management Plan*, adopted by BLNR in 2009 ("CMP"). The University's implementation of the CMP was the subject of an independent review conducted by Kuiwalu in December 2020 at the direction of DLNR ("Independent Evaluation"). DLNR's Independent Evaluation of the University's implementation of the comprehensive management plan showed that UH had achieved good or some progress on 8 of the 10 desired outcomes identified in the

CMP. The two outcomes where we received a minimal progress rating are actively being worked on. This evaluation also found that **people's perceptions of UH's effectiveness as manager were associated to whether people supported telescope development on Maunakea, i.e., no change in management practice will satisfy many of those who oppose TMT or even astronomy on Maunakea.** This is not a management issue; this is a challenging and contentious statewide policy issue that is, again, not a decision that UH alone makes.


Our efforts to improve stewardship have been recognized by the community. In 2017 UH received the Pualu Award from the Kona-Kohala Chamber of Commerce for our education and outreach. In 2017 UH received a Preservation Commendation Award from the Historic Hawai'i Foundation for our interpretative efforts. And in 2016 we received the Pualu Award for Environmental Awareness from the Kona-Kohala Chamber of Commerce. Finally, and perhaps most notable, in 2011 the Wekiu Bug was removed from endangered species candidate list because of our ecosystem restoration efforts.

The University should be judged by our complete record which shows substantial improvement over time across multiple dimensions. Our commitment has been reliably demonstrated in time, effort, and resources committed by us over the years in the exercise of our stewardship responsibilities for the privilege of access we have. **The University believes that the criticism of "mismanagement" often levied against UH, and seemingly the basis for the Report, is now inaccurate and derives from the accusations of those who oppose the state policies in support of astronomy on Maunakea rather than the actual practices of the University.**

For these, and the reasons further detailed in the Attachment, we humbly suggest that instead of creating a new entity, the focus turns to what the Hawai'i Island community, native Hawaiian practitioners, Maunakea observatories, and DLNR have learned over time to continuously improve the University's stewardship of what has become one of the most, if not the most complex land management challenge in Hawai'i.

We are available for any questions you or others may have regarding our comments and our stewardship program.

Na māua iho nō me ka 'oia'i'o,



David Lassner
President, UH System



Gregory Chun
Executive Director, Center for Maunakea Stewardship

ATTACHMENT

University of Hawai'i (UH) Response to the Maunakea Working Group's Draft Report: He Lā Hou Kēia Ma Mauna A Wākea: A New Day On Mauna A Wākea

1. The Kānāwai Principles are Consistent with UH Plans for Maunakea

UH acknowledges and appreciates the holistic and integrated approach of the Kānāwai principles described in detail in the Foreword, Introduction, and Chapters 2 and 3 of the Report. The symbiotic connections between the elements of nature, and of nature with humans, emphasizes the importance of sustaining balance between these forms. As stated in the report:

“Normalizing the use of these traditional kānāwai in our modern society protects the life of kanaka, flora and fauna, as well as the health of the environment and the balance of its natural cycles. Developing this worldview can start with an inquiry into native ecology, observing nature, developing a relationship and appreciation of natural phenomena, and exhibiting a sense of responsibility in protecting that which nurtures and feeds us, the ‘āina.” (Page 5).

The connected nature of our surroundings and, therefore, the importance of sustaining balance between the various branches of the natural world are well established in many indigenous cultures. It is a lesson lost upon a large fraction of the world's population and as an institution grounded in science, UH finds the concepts laid out in the four kānāwai to be sound and relatable. They are the product of centuries of observation and learning in an island setting, developing practices that fundamentally sustain populations of living organisms, including humans, over long periods of time. Embracing them in the future makes sense, given the demonstrated success of their application in the past.

Chapter 3 of the Report is an attempt to bridge the elegant concepts laid out in the previous chapters into a management structure predicated on the kānāwai. Guiding principles are articulated, including:

“We are driven by creativity and innovation, constantly challenging the status quo. Our stewardship of Maunakea is informed based on existing knowledge and traditions (kānāwai) as well as on new and expanding knowledge. We are mindful and observant of needs, trends, and opportunities and seek new knowledge and opportunities in ways that enhance our ability to serve as stewards without jeopardizing our foundation of ‘āina aloha.” (Page 20).

This is an important statement because it explicitly acknowledges the importance of continuity in knowledge systems to support ‘āina aloha, past, present, and future through “...new knowledge and opportunities...”. It is a hopeful and upbeat statement, but the report fails to identify how the approach proposed would actually lead to “new knowledge and opportunities” for our community. It sets up a dichotomy of interests and begs the question, what is the ultimate goal of the proposed management model?

The management of public lands is complicated, as you know, and as any agency will tell you. But, unlike any other land management framework in the state, the University has several layers built into its management framework that includes the Hawai'i Island community, academics, observatory operators, and the native Hawaiian community who are represented at various levels of decision making. This framework for managing lands on Maunakea was developed

over decades. The University has built constituencies, infrastructure, and funding to support its efforts. The University's new draft Master Plan and our updates to the Comprehensive Management Plan consider and incorporate what has been learned. Through its experience, the University has successfully moved toward a more balanced goal of astronomy, stewardship, and respect for Maunakea.

The University understands that stewardship of Maunakea is a privilege that requires a comprehensive and cohesive management program. The University embraces the intent of the k^ān^āwai, which is reflected in the integrated and balanced nature of our master plan and our proposed update, management plans, and administrative rules that collectively outline our commitments and responsibilities to Maunakea, the state, and the community in specific terms. These principles are valuable guidelines for land use planning and decision making and we are committed to continuous improvement and look forward to learning how to improve the application and integration of these principles into the University's existing plans and policies and within the context of governing law and regulation. Maunakea lands currently managed by the University are ceded lands with great cultural significance to native Hawaiians. Ceded lands are held in trust for the five (5) purposes enumerated under section 5(f) of the Admission Act of 1959 and the k^ān^āwai principles can help further balance those objectives.¹

2. The MKWG Report places the future of astronomy is at risk

Foundational to the Report's recommendations is the position of the MKWG that astronomy on Maunakea above the 9,200 foot elevation will no longer be an allowed land use:

"The Governing Entity shall develop a framework to limit astronomy development on the mauna, through development limitations that may include limitations on the number of astronomy facilities or an astronomy facility footprint limitation; provided that in establishing a framework to control astronomy development on the mauna, the Governing Entity shall establish a plan to return the mauna above 9,200 feet elevation to its natural state" (Page 25).

The Report also states that the MKWG had robust discussions over whether future legislation should limit the current astronomy footprint:

"The full Working Group had a robust conversation as to whether the Governing Entity should be prohibited from allowing either an increase to the current number of astronomy facilities or an increase to the current astronomy development footprint. Ultimately, the Working Group was not able to reach an agreement, with some members preferring not to set a specific astronomy footprint or astronomy facility number limit in legislation and others wanting a smaller footprint or less telescopes than what currently exists. Some members wanted a lower number of telescopes, such as the Governor's and the University of Hawaii's proposed nine telescopes. Nine telescopes, while a lower number than the thirteen telescopes that currently exist on the mauna, still represents an increase in the current astronomy footprint, which was unacceptable to some members" (Page 25 Footnote 5).

¹ Section 5(f) of the Admission Act, provides that ceded lands trust purposes are "[1] the support of the public schools and [2] other public educational institutions, [3] the betterment of the conditions of native Hawaiians, as defined in the Hawaiian Homes Commission Act, 1920, as amended, [4] the development of farm and home ownership on as widespread a basis as possible for the making of public improvements, and [5] the provision of lands for public use."

The Report is also not clear on the question of funding and the details of implementation are lacking:

“To support the Governing Entity, a special fund shall be created as an on-going revenue base of funding. The Governing Entity shall consider various supplemental revenue sources to be deposited into the special fund, including but not limited to renegotiated lease terms and fees; observatory use fees; common area maintenance; toll fees; general funds; ecosystem service fees; user fees; other surcharges or fee structures; and state, county and federal funding” (Page 27).

“To assure that the Governing Entity has adequate time to establish itself, the Governing Entity shall have a transition period of three years to assume management of Mauna a Wākea lands”; and,

“To help establish the Governing Entity, general funds should be allocated by the Legislature for at least the first five years. Special funds shall also be used to provide financial support for the Governing Entity.” (Pages 24 and 27)

Further, the Report states decision making regarding the new managed lands will be under the “sole authority” of the proposed new Governing Entity:

“The Governing Entity shall be the sole authority for the management of designated state-owned lands on Mauna a Wākea (See JURISDICTION)” (Page 24).

Collectively, the result of these proposed changes, *i.e.*, uncertainty regarding: the future for astronomy, implementation requirements, and decision-making authority, is to increase substantially the risk to the ongoing viability of astronomy. Importantly, the process for implementing the recommendations must occur at an unprecedented pace to enable a future for Maunakea (Hawai'i) astronomy. Numerous steps would need to be achieved including but not limited to enabling legislation, land transfers, development of land use and management plans, development and coordination of administrative rules across jurisdictions, and operations start-up. The projected timeline of three years to establish the new entity is unrealistic and exacerbates the risk to the future of astronomy due to the impending termination of the current general lease in 2033 (see section 5 herein for UH's governance analysis). The lack of a viable business plan on top of these make success highly speculative, especially with the Report's reliance on general fund appropriation.

It must also be noted that these changes require not just State of Hawai'i approval but they must be embraced by US and international federal funding agencies that are wary of large-scale change without assurances of long-term stability. The prospect of protracted litigation, on top of all the other challenges to forging, funding, and implementing a new Governing Entity in the three years prescribed, will surely push the timescale for this proposal well beyond the horizon of viability for the existing Maunakea Observatories.

Support for astronomy on Maunakea is a longstanding State policy going back more than fifty years. At that time, the State decided that it did not want to just be a passive landlord for the best observatories in the world but that Hawai'i should be the home of a world-class program of astronomy research and education. This has enabled Hawai'i to participate in and lead the discoveries that underlie human understanding of the origins of the universe and the celestial

bodies around us. It is not an overstatement to say that what is at risk here is the future of astronomy as a field of human inquiry, as a source of economic activity on Hawai'i Island, as an inspiration for Hawai'i's youth, as a source of pride for the people of Hawai'i, and as an area of international excellence for UH and our students. Consistent with its place in Hawaiian cultural tradition and cosmology, *Maunakea stands as a uniquely treasured scientific and community resource.*

3. The complexities and costs of managing access to public lands have been underestimated

Under the proposed powers and duties in the Report, public access appears to be more restrictive and does not reflect the wide variety of values the broader community holds towards Maunakea, including recreational, subsistence, educational, and economic (including commercial tour operator) uses. Does the MKWG propose to prohibit snow play? Hunting? Hiking? Who would determine the legitimacy of claims made by individual native Hawaiian cultural practitioners?

Access to Maunakea by Hawai'i Island residents, including native Hawaiian practitioners, is one of the most consistently raised concerns in matters related to Maunakea. The Report's proposal appears to be more restrictive and may not reflect the wide variety of values the broader community holds towards Maunakea, including recreational, subsistence, educational, and commercial uses. For example, the Report states on pages 24 and 26:

*"The Working Group recognized that the scope of managing an area of such important cultural significance and geographic size presents many challenges. **Additionally, because Mauna a Wākea is the kuahiwi, or backbone, of Hawai'i Island in a structural, physical, and spiritual sense, the Governing Entity should work toward decreasing the human footprint of all users and visitors of Mauna a Wākea.**" (Emphasis added); and,*

"The Governing Entity shall establish a management framework guided by the Kumu Kānāwai to manage access, stewardship, education, research, permitted uses for frequent and seasonal users, and overall operations. The Governing Entity shall also prohibit commercial use and activities (not including astronomy) above Hale Pohaku and develop rules to designate areas for permissible use, including defining "commercial use."; and,

"The Governing Entity shall consider restrictions via applications and registration processes to ensure user compliance. Additionally, the Governing Entity shall require an application for all recreational uses, including fees, and create guidelines on limits by monitoring the impacts of recreational use over time."

In 2020 Governor Ige approved Hawai'i Administrative Rules ("HAR") Chapter 20-26 which was developed by the University with significant public input received over multiple years, to be able to enforce our stewardship responsibilities. HAR Chapter 20-26 regulates commercial and public activities on Maunakea lands managed by UH. The rules allow activities subject to the impacts of those activities being addressed. Commercial activities, such as commercial tours, are regulated by permit and operators are required to pay for the impact they have on the resources and for use of public facilities. Commercial tour operators provide a needed service by reducing independent vehicles driving up Maunakea, and this activity provides economic opportunities for the local community. Under HAR 20-26 the University is authorized to levy fees and fines with the opportunity for appeal. The University regulates impacts to resources

caused by public and commercial activities, not native Hawaiian cultural practices. And despite vague criticisms to the contrary, the University has never denied access to native Hawaiian cultural practitioners.

Finally, the Report does not meaningfully address the resource requirements of the new Governing Entity. Annual operating costs for stewardship alone are \$12M, the majority of which is covered by extramural and non-general funds generated by the University. In addition, the University provides world-class global network connectivity for all Maunakea Observatories so that the data collected on the mountain can be shared with researchers and students at institutions around the world. Under the new management regime being recommended, absent other sources of revenue because of the uncertainty created about future access and use, a substantial investment by the State will be required to support a new stewardship program that would have jurisdiction for significantly more land than the current program.

4. Legal, administrative, and funding issues present risks for implementation of the MKWG's proposal

There are a number of legal, administrative, and funding concerns raised by the MKWG's proposal that will require further analysis and debate. These include but are not limited to:

- A. The potential constitutional concerns related to race-based membership of a government entity with control over state lands and resources.

While we understand the intent, the designation of members of a state entity by race raises state and federal constitutional questions. Note that the Kaho'olawe Island Reserve Commission (HRS § 6K-5) and the burial council (HRS § 6E-43.5), both referenced in the Report, do not limit seats on its boards to "native Hawaiians." Instead, for example, burial councils are comprised as follows:

"Regional representatives shall be selected from the Hawaiian community on the basis of the representatives' understanding of the culture, history, burial beliefs, customs, and practices of native Hawaiians in the region they each represent."

We acknowledge that other agencies have board compositions where seats are explicitly designated for native Hawaiians. For example, the Hawaiian Homes Commission Act § 202(a) provides that "at least four of the members shall be descendants of not less than one-fourth part of the blood of the races inhabiting the Hawaiian Islands previous to 1778." And, the Papahānaumokuākea Council Charter provides that members shall include "three Native Hawaiian representatives." However, the purposes of those bodies are distinctly different from the new Governing Entity. DHHL was established specifically for the benefit of native Hawaiians and Papahānaumokuākea is an interagency management collaborative where individual partners do not cede their jurisdiction to the collaborative. Board composition tied to race should be further evaluated, particularly when the authority of the new Governing Entity is to manage public lands and state resources.

- B. The Report does not account for the complexity of the various jurisdictions on Maunakea, and the variety of funding sources that will need to be shored up, or replaced with general funds.

- i. Public lands should remain with the State for the benefit of the public.

On page 24 of the Report, the MKWG states:

“The public land trust lands held by the Governing Entity shall be held in trust as part of the public land trust; provided that the State shall transfer management and control of the lands to a sovereign Native Hawaiian entity upon its recognition by the United States and the State of Hawai‘i”

This language mirrors Hawai‘i Revised Statutes § 6K-9, related to the Kaho‘olawe Island Reserve Commission. However, Maunakea is not Kaho‘olawe. While both are culturally significant, unlike Kaho‘olawe, Maunakea is actively used by the Hawai‘i Island community, including native Hawaiians, researchers, and others from across the state. These are ceded government lands that should remain with the State of Hawai‘i for the five (5) stated purposes under section 5(f) of the Admission Act.

- ii. The Report’s proposal to expand the land area under a new Governing Entity adds uncertainty and complexity to an already complex management issue.

The Report recommends a significant expansion of currently managed lands, pulling in private lands and other state lands managed under different laws as follows:

“the jurisdiction area for the Governing Entity shall be state-owned lands above the 6,500 foot elevation line, inclusive of Pu‘u Huluhulu to the summit of Mauna a Wākea, in order to care for Mauna a Wākea through an integrated, whole systems approach. Additionally, for lands outside of its jurisdiction, the Governing Entity shall enter into cooperative management agreements with the Department of Hawaiian Home Lands, County of Hawai‘i, and private landowners whose lands are within the jurisdiction area.”

Conservative estimates of this expansion could include approximately 56,000 acres of DHHL property, and more than 50,000 acres and 3,800 acres designated as DLNR Forest Reserve (“FR”) and Natural Area Reserve (“NAR”) land, respectively, in addition to other unidentified state, county, and privately owned lands that are referenced. The Report does not provide any details on how the new entity will manage state and private lands, and it is unclear what is meant by the new Governing Entity having jurisdiction over adjacent private lands as proposed in the Report. The Report discusses the idea of cooperative agreements but there could be significant property right issues raised through this expansion.

- iii. Powers and duties of the new Governing Entity are unclear and already exist.

Existing plans and rules developed and implemented by the University and DLNR over decades of learned and practiced management provide the integrated planning and decision-making framework suggested in the Report.

Chapter 3 of the Report details the powers and duties of the new governing entity on pages 24-25. Among other matters, it states that:

“...the Governing Entity shall develop a single plan that dictates the management of land uses; human activities, uses, and access; stewardship; and disposition. The plan shall be developed during the transition period; finalized and approved, and operational by the end of the transition period; and updated every ten years with a focus on long-term, comprehensive, coordinated planning for all of the managed lands. Additionally, the plan shall consider the state’s energy and sustainability goals, as well as impacts to climate change, including adapting to climate change and developing mitigation measures to climate change, and shall incorporate indigenous management and cultural processes and values.”

Before updating of the master plan for lands managed by the University on Maunakea, the University explored the idea of combining its two governing documents: the master plan adopted by BOR and the CMP adopted by BLNR. Based on the University’s assessment, in consultation with DLNR, we determined that combining them may not be practicable.

Both plans are implemented together and are consistent; however, each serves a different purpose. The CMP is a plan required when applying for a conservation district use permit. It addresses ongoing resource management practices to avoid, mitigate, or minimize impacts caused by proposed uses and activities. The master plan is the University’s vision for the lands it manages on Maunakea for a period of years, and it provides a framework for proposed land uses and decision making early in the planning process before a proposal is advanced to permitting, environmental review, and funding consideration. The University’s master plan and CMP, along with the administrative rules, collectively are required to achieve the state’s long-term goals of stewardship and sustainability.

Chapter 3 of the Report also provides that the new governing entity must comply with various statutes applicable to state agencies, but suggests that Maunakea lands be placed in the FR. On page 25 of the Report, it states:

“To maximize transparency, the Governing Entity shall be subject to administrative procedure pursuant to chapter 91, Hawaii Revised Statutes; Sunshine Law, pursuant to chapter 92, Hawaii Revised Statutes; the State Procurement Code, pursuant to chapter 103D, Hawaii Revised Statutes; and chapters 183, 205, 205A, and 343, Hawaii Revised Statutes.”

The Report suggests that these lands should be subject to HRS chapter 183, *Forest Reserves, Water Development, Zoning*. Lands designated FR will be subject to the rules and program under DLNR’s Division of Forestry and Wildlife (“DOFAW”). FR rules are far more restrictive generally than conservation district rules (e.g., it is unlikely that astronomy facilities would be allowed in the FR).

Building capacity to operate under HRS chapter 91, the Hawai’i Administrative Procedures Act (“HAPA”), takes time, staff, and resources. HAPA covers rule making, contested cases, and declaratory orders. The Report does not provide

detail on these resource-intensive requirements. These regulatory frameworks are needed, if as the Report suggests, the new entity will have more enforcement authority than the University currently has. The Report states on pages 26-27:

“[T]he Governing Entity shall work with the Department of Land and Natural Resources’ Division of Conservation and Resources Enforcement and Hawai’i County Police enforcement structure to enforce rules and monitor public safety through cooperative agreement. Additionally, the Governing Entity shall create operational procedures that are guided by the Kumu Kānāwai and implemented by enforcement partners.”

The Report is unclear on how new rules and procedures it adopts would integrate with existing rules governing activities on DLNR, DHHL, private, and other government lands included in the new land area defined in the Report. It is also unclear what the statement “...guided by the Kumu Kānāwai and implemented by enforcement partners” means to people who would visit Maunakea, such as Hawai’i Island residents, including native Hawaiians.

The University already has administrative processes and procedures in place. It already works under the sunshine law, procurement, HRS chapter 343, and other agency regulations related to land use. These processes have been scrutinized and tested by internal audits, state audits, DLNR oversight, and Hawai’i courts. How these matters are proposed to be handled directly impacts the viability and resource needs of the new entity.

C. The adequacy of stakeholder representation on the board of the new Governing Entity.

The Report recommends the establishment of a new attached state agency governed by a board of directors: On page 22, the Report states:

“The Governing Entity shall be attached to the Office of the Chairperson of the Board of Land and Natural Resources for administrative purposes. Decision-making for the Governing Entity shall be made by a nine-member board, of which seven seats shall be appointed and two seats shall be held by ex-officio members, with the board selecting a Chair from among its non-ex-officio members; provided that the Chair shall not be the Executive Director of the Governing Entity. Additionally, of the nine members, four of the seven non-ex-officio board members shall be Native Hawaiian Hawaii Island residents, with a preference for Native Hawaiian Hawaii Island residents for all seven non-ex-officio board seats.”

While the University agrees that broad representation on the governing board of a state land management entity is needed to ensure the range of perspectives Maunakea deserves, key expertise is lacking from the proposed structure, including seats for observatory and University representatives.

The MKWG’s lack of consensus for having astronomy representation and for eliminating University representation on the governing entity board is problematic. The Report argues that this would create a potential conflict of interest. First, it is not uncommon to have tenant and stakeholder representation on governing boards of attached state agencies. For example, the Natural Energy Laboratory of Hawai’i (“NELHA”) maintains

two seats on its board of directors for tenants who hold direct leases from the agency. Second, every board, public and private, deals with conflicts of interest through reporting and recusal procedures, so this alone is not sufficient reason to omit these important perspectives especially if they are a primary source of funding stewardship activities.

By contrast, the University's management framework includes community advisory groups, such as Mauna Kea Management Board ("MKMB") and Kahu Kū Mauna ("KKM") who have early and direct input into the decision-making process. Additional committees that advise the MKMB, like the Environment Committee ("EC"), provide additional, specific expertise. All of these advisory groups include Hawai'i Island members who are directly impacted by decisions on Maunakea.

- D. Working through the aforementioned complexities of realigning, much less simply coordinating, management of public lands that are currently under the jurisdiction of different agencies, subject to different administrative rules, appear to have been underestimated, like the time for of start-up and amounts of funding.

The details of the University's concerns here were outlined in section B(iii) above. The processes for working through the challenges of multiple jurisdictions are already in place so further analysis should be performed to discern the cost of duplication or replication of these processes, as compared with any purported benefit.

Each of these issues is itself complex, and any one of them is a potential show stopper given the contentious nature and resources required of them. Attaching the success of a newly established entity to highly speculative outcomes requires considerable more analysis before even attempting to draft legislation.

5. The University's commitment and ability to successfully to steward Maunakea has been demonstrated

While not explicitly stated in the Report, the rationale for the formation of the MKWG, and the need to establish a new governing entity, appears to be based on the assumption that a new entity could manage Maunakea better than the University. This assumption seems to be based on a snapshot of reports that evaluated the University's management over the years as well a lack of recognition of the University's own efforts and response to the University's critics.

- A. State audits of the University's management of Maunakea show improvement over time

The Report on page 3 cites a series of State Audits that began in 1998 and concludes with the statement that "Subsequent reports, which still identified shortcomings, were filed by the State Legislative Auditor's office in 2005, 2014, 2017, and 2019." The University has acknowledged and apologized for its stewardship of Maunakea in the last century, but subsequent state audits of the University's management of Maunakea have documented our commitment and improvement over time.

In its *Report on the Implementation of State Auditor's Recommendations 2014 – 2017*, the State Auditor noted that of the several audit recommendations from 1998, only four (4) were outstanding as of its November 2019 report. One item, directly under the control of the University, was completed with the University Board of Regents' ("BOR") adoption of Hawai'i Administrative Rules ("HAR") chapter 20-26 on November 6, 2019 (approved by the governor on January 13, 2020).

The University is actively working on the remaining three (3) items in coordination with DLNR, which has final approval on these particular tasks. These three (3) items are:

- i. “The University of Hawai‘i should renegotiate with existing sublessees to amend subleases to include provisions that address stewardship issues, as modeled by the provisions in the 2014 TMT sublease, following execution of the new general leases for UH-managed lands on Mauna Kea”;
- ii. “The Department of Land and Natural Resources should continue working with UH to renew the general leases for the UH-managed lands on Mauna Kea and ensure the leases are substantially in the form DLNR’s Land Division recommended for approval by the land board”; and
- iii. “The Department of Land and Natural Resources should use additional stewardship-related conditions contained within the TMT observatory permit as a template in all new observatory permits issued for the summit of Mauna Kea.”

The timeline on the first two of these audit items is affected by challenges brought by the Office of Hawaiian Affairs (“OHA”) and other groups who oppose TMT in several ongoing administrative and judicial appeals. If the Board of Land and Natural Resources (“BLNR”) grants the University another general lease, then BLNR must approve the first two items, which the University intends to comply with. The third audit item regarding whether BLNR grants a new astronomy facility conditional use permits is not within the University’s control.

These audit findings show the significant progress the University has made over time in fulfilling its management responsibilities. Reliance on those past audits as a measure of the University’s recent or current performance is no longer valid, and the past audits do not support taking the management away from the University. Instead, those audit reports confirm that the University has learned from its decades-long management and improved based on that experience.

- B. The Independent Evaluation of University’s implementation of the CMP was positive in most all areas, and the University has made changes to improve the few areas marked for improvement

The University is charged with implementing 103 management actions in the *Mauna Kea Comprehensive Management Plan*, adopted by BLNR in 2009 (“CMP”). The University’s implementation of the CMP was the subject of an independent review conducted by Kuiuwalu in December 2020 at the direction of DLNR (“Independent Evaluation”).

The Report picked up on some aspects of the Independent Evaluation; however, it is important to consider the actual text of the Independent Evaluation. As stated in the Independent Evaluation:

“The purpose of this Independent Evaluation Report (Report) is to (1) evaluate the effectiveness of UH, specifically OMKM’s, implementation of the specific Management Component Plans (MCP) found in Section 7 of the CMP, and (2) to evaluate the efficiency of the governance structure in managing the cultural and natural resources within state conservation lands under lease to UH.”

The Independent Evaluation offers the following conclusions:

- i. “UH’s self-assessment and many of the public comments which included members of the Native Hawaiian community and government agencies, have acknowledged that OMKM has implemented most of the 103 MAs within the MCPs. Many have commented that OMKM has effectively implemented many of the MAs that have resulted in protecting and preserving the cultural and natural resources within the state conservation lands.”
- ii. “[I]n the areas of untimely adoption of the administrative rules, cultural resources, and education and community outreach, especially with the Native Hawaiian stakeholders, the efforts by OMKM have been ineffective to achieve the desired outcome.”

It is important to note regarding the above conclusions that:

- i. At the time of the Independent Evaluation, HAR chapter 20-26 was adopted by BOR and approved by the governor. The University is currently implementing the rules. Before BOR adopted the rules (which it was granted authority to adopt in 2009 under Act 132), the University was continuously implementing the 103 CMP management actions, administering commercial tour operator permits, and coordinating on enforcement related to resources and public health and safety with entities like DLNR and its various programs² and county first responders.
- ii. Outreach to the Hawai’i Island community, including native Hawaiians, has been a mainstay of University management on Maunakea, and it is built into its management framework. This includes outreach through advisory groups like KKM³ and the MKMB⁴ as well as local schools, community groups, businesses, native Hawaiian faculty, lineal descendants, and those who identify as kia’i. The recent adoption of HAR chapter 20-26 and the on-going work finalizing the new master plan include significant efforts by the University to capture community input, resulting in thousands of comments and dozens of meetings with interested groups. All substantive comments were considered, which the University has documented in its rulemaking process and the new master plan Volume II.
- iii. There has always been an education component for the public and community outreach conducted by the University and directly by the Maunakea observatories. The University’s recent reorganization furthers this work by designating the ‘Imiloa Astronomy Center for orientation programs and educational partnerships by BOR resolution and executive policy.

The Independent Evaluation ***did not conclude that UH has “mismanaged” Maunakea***, a term often used against the University. Here is how the Independent Evaluation discusses “mismanagement”, only once and quoted in full:

“The public’s assessment of how effectively UH has implemented the CMP has primarily varied depending on whether they are in favor or opposition of

² For example the State Historic Preservation Division, Division of Conservation and Resources Enforcement, Division of Forestry and Wildlife, Office of Conservation and Coastal Lands, etc.

³ Comprised of individuals knowledgeable about native Hawaiian cultural practices who advise the MKMB.

⁴ Composed of members representing the major stakeholders of Maunakea; primary role is to advise the Office of the Chancellor at the University of Hawai’i at Hilo on management of the Mauna Kea Science Reserve.

*telescope development on Mauna Kea. Those who support existing and future telescope development on Mauna Kea believe that OMKM has adequately implemented the CMP MAs to preserve and protect the cultural and natural resources on Mauna Kea. **For those who do not support continued telescope development on Mauna Kea beyond 2033, the expiration of the existing state lease, they believe that UH continues to mismanage Mauna Kea as concluded in the 1998 State Auditor's Report.** In particular, those in opposition believe that UH continues to advocate telescope development over the protection and preservation of the resources.*

With respect to the broader public comments on the effectiveness of the UH governance structure, most see UH as one entity. They either believe that the UH existing structure is doing a good job, or they believe that UH is mismanaging Mauna Kea and there is very little in between.

(Emphasis added.)

It should be noted that the University's newly issued draft Master Plan establishes a limit of nine telescopes post 2033. It also restricts future development to existing observatory sites. The University committed to these limits despite considerable differences with astronomy advocates.

C. The University and its advisory groups take constructive criticism seriously.

At the direction of the BOR, in April 2020, the University completed an analysis of alternative governance models that included models in which the University did not serve as primary manager. The analysis evaluated the benefits and challenges of establishing the various forms of new entities identified (see [BOR Presentation \[4.16.20\]](#)). In the University's analysis of governance models, the University concluded that three (3) years is not sufficient time to transfer legal rights under existing agreements, staff, resources, programs, plans, policies, and other elements of the University management program and apparatus to a new, yet-to-be-formed entity. Given the need for bicameral legislative support and based on past legislative efforts, the University determined it would take several years for the enabling legislation to be passed to form the new entity. This short timeline also does not account for the approvals required for a new master plan, management plan, permits, administrative rules, general lease, and observatory subleases, and for developing a viable business plan that ensures the new entity's sustainability.

As a result, the University has focused its attention on the governance alternative within its control and broadened community representation within its existing advisory groups. In 2021, the EC increased its membership, bringing different expertise and perspectives to its committee. KKM updated its purpose statement and is actively recruiting new members to reflect their renewed vision. The voices on the EC and KKM are diverse and include members who share some of the views of Hawai'i Island kia'i.

At their December 7, 2021 public meeting, the MKMB passed a motion recommending that the University administration restructure MKMB along the lines of what was identified as Model 4A, Collaborative Management with UH, in the University's analysis of governance models. Model 4A expands the current MKMB from seven to nine members; designates ex-officio seats on the MKMB for DLNR, DHHL, OHA, and the

County of Hawai'i; and redistributes representation of the remaining seats to include various stakeholder interests.

In many ways, the MKWG's recommended structure parallels what the University is in the process of implementing except that the University and astronomy are represented.

D. Tangible demonstration of the University's commitment to stewardship

Annual operating costs for stewardship alone are \$12M, the majority of which is covered by extramural and non-general funds generated by the University. In addition, the University provides world-class global network connectivity for all Maunakea Observatories so that the data collected on the mountain can be shared with researchers and students at institutions around the world. Under the new management regime being recommended, absent other sources of revenue because of the uncertainty created about future access and use, a substantial investment by the State will be required to support a new stewardship program that would have jurisdiction for significantly more land than the current program.

The fruits of the University's efforts to improve its stewardship have been recognized by the community. In 2017 UH received the Pualu Award from the Kona-Kohala Chamber of Commerce for its education and outreach. In 2017 UH received a Preservation Commendation Award from the Historic Hawai'i Foundation for its interpretative efforts. And in 2016 UH received the Pualu Award for Environmental Awareness from the Kona-Kohala Chamber of Commerce. Finally, and perhaps most notably, in 2011 the Wekiu Bug was removed from endangered species candidate list because of the University's ecosystem restoration efforts.

In closing, the University should be judged by our complete record which shows substantial improvement over time across multiple dimensions. Our commitment has been reliably demonstrated in time, effort, and resources committed by us over the years in the exercise of our stewardship responsibilities for the privilege of access we have. And as a result, as reported by many in the Independent Evaluation **"...the cultural and natural resources on the state conservation lands on Mauna Kea are some of the best managed and protected lands in the entire State"** and we have a world class research enterprise Hawai'i can be proud of.