

Mauna Kea - The Temple

Protecting the Sacred Resource

Submitted by

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Mauna Kea - The Temple *Protecting the Sacred Resource*

summary

The issue concerning astronomy development on Mauna Kea has been a long and emotionally charged controversy. For the past 30 years, the state and federal governments, who are charged with conserving our public resource, have failed to adequately protect the environment and cultural landscape of the summit. There has been little public support for continued development on the mountain and a greater demand for accountability. The Mauna Kea Master Plan adopted in June of 2000 fails to resolve these issues. There exists a great imbalance in the benefits derived from the use of the mountain for astronomy. There is more than enough funding for science, but little for preservation of our resources.

In this report, we outline the steps we believe are necessary to restore balance. We submit that public input into the decisions made concerning the use of Mauna Kea needs to be assured. We propose the creation of a separate authority to restore public involvement in the protection of our sacred resources. We submit that sustainable funding for this protection already exists but needs to be committed. Finally, we recommend the mitigation measures that must be taken before any further development takes place on the mountain.

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- Appendix W** "*Basic Protocol at Hawaiian Sacred Places*" by Phyllis Coochie Cayan (December 1999).

Why is Mauna Kea so sacred to the Native Hawaiian people?

The summit of Mauna Kea represents many things to the indigenous people of Hawai'i (most of which is outside the range of this report). The upper regions of Mauna Kea reside in Wao Akua, the realm of the Akua-Creator. It is also considered the Temple of the Supreme Being and is acknowledged as such in many oral and written histories throughout Polynesia, which pre-date modern science by millennia.

It is home of Na Akua (the Divine Deities), Na 'Aumakua (the Divine Ancestors), and the meeting place of Papa (Earth Mother) and Wakea (Sky Father) who are considered the progenitors of the Hawaiian People. Mauna Kea, it is said, is where the Sky and Earth separated to form the Great-Expanse-of-Space and the Heavenly Realms. Mauna Kea in every respect represents the zenith of the Native Hawaiian people's ancestral ties to Creation itself.

The Mauna Kea issue has been a long and emotionally charged controversy. This is so because, throughout the deliberations, some very basic fundamental rights have been ignored and abridged, the right to freedom of religion, the right to have a spiritual relationship with the land of our birth.

"Some just look up and see a mountain...but for the Hawaiians, it's like building a McDonald's at Stonehenge."

*Ira S. Rohter, Associate Professor of Political Science
University of Hawai'i at Manoa*

Mauna Kea the Temple

From the Native Hawaiian perspective, the issue surrounding Mauna Kea is neither political nor economic. The issue is of a **religious and spiritual nature**. It is so because the upper regions of Mauna Kea reside in Wao Akua, the realm of the Akua-Creator. **Mauna Kea is a Temple** or House of Worship. The Temple of Mauna Kea differs from other temples because it was not created by man. Akua built it for man, to bring the heavens to man. Therefore, the laws of man **do not** dictate its sanctity, the laws of Heaven do.

Although Mauna Kea is not a typical house of worship by dominant cultural standards, it is, in our cultural understanding and cosmology, a temple of the highest order. The reverence of a place is determined by the essence of the place and on Mauna Kea, when we walk upon the sacred 'aina, we do not walk in the province of our will but rather in the province of Heaven's will. For it is here that the very life breath can be seized in a moment never to return. It is only here that the life-giving waters originate. Only here do the heavens open so that man can be received, blessed, freed and transformed in the ways of Heaven.

As kahu (religious guardians) of this place, our kuleana (responsibility) to this temple is ancient. It is our duty to proclaim its sanctity and work to protect it, so that its greatness and purpose can be shared with all of mankind. We must be allowed to continue our work there.

Unfortunately, the history of Hawai'i Nei has shown all too clearly that our land was seized, our culture bastardized, and our essence consumed and transformed beyond recognition. At this time in our existence, we acknowledge that, though physical things may be taken from us, our duty to Heaven cannot be abridged.

As each culture has its gifts to give mankind, so too has the native Hawaiian culture. We have asked Akua to allow us to continue on our path so we can contribute the wisdom of our ancestors to the collective knowledge of mankind. We also ask those listening to accept the responsibility to maintain reverence and respect for the laws of Wao Akua and its place in the context of Creation, for it is said that all who enter the temple of Heaven are bound by the laws of Heaven. And so it is. Aloha no.

It is in this light, Mr. Chairman, that we offer the following report.

N.B. For supplemental reading see *Appendices V and W*. *Appendix V* is a report evaluating the Mauna Kea Master Plan and its effects on the Hawaiian people of today, titled *Mauna Kea: Buried Epistemologies* by Emily Godinet (May 2001). *Appendix W* is a report on protocol for sacred places titled *Basic Protocol at Hawaiian Sacred Places* by Phyllis Coochie Cayan (December 1999)

Gil Coloma-Agaran
Chair, Department of Land and Natural Resources
Kalanimoku Bldg. Rm. 130
1151 Punchbowl St.
Honolulu, Hawai'i 96813

Aloha Mr. Chairman,

Attached for your review are the positions set forth by the Royal Order of Kamehameha I (ROOK I) and Mauna Kea Anaina Hou (MKAH) regarding the state of affairs and status of the sacred temple Mauna Kea. We hope to outline and reiterate our commitment to preserving, protecting and restoring Na mea o ka Lani a me ka Honua (the things of Heaven and Earth) surrounding the sacred Mauna Kea.

As is our obligation directed by Ke Akua (the Creator), Na Akua (the Divine Deities) and Na 'Aumakua (the Divine Ancestors) a me ka Po'e (the People), we present for your review our recommendations and mitigation measures to restore balance, harmony and the kuleana (duties and responsibilities) to all interested parties. We pray that you and others will hear our call to raise the standard of Aloha in all things and to brave the challenges that this issue has put before us all. We seek only fair, just and practical solutions for all parties concerned, including the astronomy community, which also holds a special place within the boundaries of the temple Mauna Kea.

Prior to this report, two other reports were submitted for consideration by Mr. Timothy Johns, the former DLNR Chair. The first report, titled *Why Mauna Kea Should be Protected and Preserved* by Kealoha Pisciotta (*Appendix A*), was intended to begin the review process, stimulate discussion and outline some of the basic problems threatening the sacred nature of Mauna Kea.

The second report, titled *Mauna Kea - Protecting the Sacred Resource*, submitted by Mauna Kea Anaina Hou (*Appendix B*), was meant to provide some concrete suggestions on how the sacred nature of Mauna Kea could be protected and preserved. It was also meant to present our suggestions on how the kuleana could be returned to all interested parties.

Some of the basic topics from the second report are:

- To outline a preliminary Cultural Preservation Plan for Mauna Kea.
- To request that the State reassess the terms and conditions of the General Lease agreement with the University of Hawai'i.
- To present proposals for funding the protection of this vast resource called Mauna Kea.

We did not receive a response to either the first or second report.

This third report is submitted on behalf of the **Royal Order of Kamehameha I, Moku O Mamalahoa, Heiau Helu 'Elua** (ROOKI) and **Mauna Kea Anaina Hou** (MKAH). Both organizations are currently consulting parties for the proposed NASA Outrigger Telescopes Project pursuant to the National Historic Preservation Act (NHPA Section 106) and the National Environmental Policy Act (NEPA).

We have forwarded this report to the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Division (SHPD) for their review. It is our hope that they will support our plan for further protection of the natural, historic, environmental and cultural resources of Mauna Kea.

We have also forwarded this report to the University of Hawai'i's new President, Dr. Evan Dobbelle. It is our hope that he too will hear our call and lend support for our plan to return balance to this issue.

We thank you very much for your time. The Sacred Mountain Mauna Kea is of paramount importance to us, the Native Hawaiian peoples. We look forward to your response.

Aloha no a me Malama pono,

On behalf of the Royal Order of Kamehameha I
Moku O Mamalahoa

Kuauhau Ali'i Sir Darnell Mahi

Kaka'olelo Ali'i Sir Robert McKeen Jr.

Ali'i Aimoku Ali'i Sir Paul K. Neves
K.G.C.K

On behalf of Mauna Kea Anaina Hou,

Kealoha Pisciotta, President

Keomailani Von Gogh, Vice President

Purpose of this report

- 1. The Public Trust Doctrine is being violated.** The Public Trust Doctrine is infringed because the equal protections afforded the general public's and Native Hawaiians' collective rights to natural resources are not being fairly considered against the interests of astronomy development atop Mauna Kea.
- 2.** We believe the **solution is to introduce public input** to the process of protecting the natural, environmental, historic and cultural resources of Mauna Kea.
- 3.** We submit **there is existing funding** that could be committed **to insure protection of Mauna Kea** and restore balance between the interests of astronomy and those of the general public and Native Hawaiians.
- 4. New developments** planned for Mauna Kea, such as the NASA Outrigger Telescopes Project, **must assess the cumulative impacts that astronomy development has had on the mountain and must be in compliance with state and federal laws.**

Statement of Problem: Violation of Public Trust

State law

The State of Hawai'i Constitution, Article XII, Section 4, states:

The lands granted to the State of Hawaii by Section 5(b) of the Admission Act...shall be held by the State as a public trust for native Hawaiians and the general public.

Article XI, Section 1 states:

Section 1. For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy

sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.

Prior to the public meetings in 1999, a legislative moratorium on all construction was called and a legislative audit was conducted. The *Audit of the Management of Mauna Kea and the Mauna Kea Science Reserve* of 1998 was not complimentary to either the State or the University regarding their roles as land managers. It states:

"Over the past thirty years, the University of Hawai'i and the Department of Land and Natural Resources have managed the Mauna Kea summit and the Mauna Kea Science Reserve primarily for the development of astronomy facilities."

"We found that the University of Hawai'i's management of the Mauna Kea Science Reserve is inadequate to ensure the protection of natural resources."

"We found that the Department of Land and Natural Resources needs to improve its protection of Mauna Kea's natural resources."

(Overview - Audit of the Management of Mauna Kea and the Mauna Kea Science Reserve, Appendix C)

The Department of Land and Natural Resources (DLNR) is legislatively mandated to protect the public's resources and also to honor and uphold the U.S. Constitution and federal statutes regarding religious freedom and other protections (*i.e.*, The American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act (NAGPRA), National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), etc.).

The DLNR is also obligated to uphold state provisions that specifically protect Native Hawaiian religious, cultural, and traditional rights and traditional cultural properties (*i.e.*, Act 50, Chapter 343, PASH, 60 HRS, Title 13-300).

DLNR, in its role as manager and overseer of our mountain in the public interest, has a higher duty to support Mauna Kea because of its sacred nature. The lands and the sacred nature of Mauna Kea have been recognized by the State Historic Preservation Office through the identification and designation of the summit region as a Historic District, the summit cluster of cones as a traditional, cultural, and historic property and the Mauna Kea Natural Area Reserve as a Historic Landmark. The lands of Mauna Kea have been afforded these titles and protections because of the unique natural and cultural resources found there. The State of Hawai'i is legislatively mandated to protect all of these lands and all cultural sites on Mauna Kea. They are mandated to do so as the trustee of these lands, as they are held in trust for the beneficiaries — Native Hawaiians and the general public.

DLNR has clearly failed in its duty to protect the public lands in the public interest by handing management of Mauna Kea over to UH. The Mauna Kea Master Plan adopted in June of 2000 was formulated as a response to the auditor's report. However this response fails because it does not fully comply with state law, most notably in the following aspects.

No Burial Treatment Plan

Of the many issues that the new master plan did not address, one is of paramount importance to us and requires immediate response from the State of Hawai'i.

There is no Burial Treatment Plan for Mauna Kea pursuant to Chapter 6E HRS.

The State is mandated to insure that all state Chapter 6E HRS criteria are met. Title 13-300-3(b) states, "...where a burial site is Native Hawaiian and previously identified, authority to determine treatment belongs to the appropriate council." The Hawai'i Island Burial Council is the appropriate council in this case. The entire Master Plan for Mauna Kea was created and adopted by the University without any protection put in place for the "known" and "possible" burial sites contained within the Science Precinct and atop Mauna Kea in general. No burial treatment plan was created and approved to address our burial sites on Mauna Kea. Mauna Kea is the burial ground of our highest born and most sacred ancestors.

No historic preservation rules and regulations adopted

The State of Hawai'i has not adopted administrative rules to oversee historic and cultural preservation as mandated in 1976. The cultural landscape of the summit of Mauna Kea is unique throughout all of Polynesia, containing shrines, heiau, one of the largest adze quarries in the Pacific and many other cultural sites. It remains unprotected and vulnerable to damage and desecration.

"We recommend that DLNR...adopt rules for the Historic Preservation Program."

(Overview - Audit of the Management of Mauna Kea and the Mauna Kea Science Reserve, Appendix C)

Little public support for the new Mauna Kea Master Plan

The public meetings held for the "new" master plan for Mauna Kea produced adamant public outcry. It should be noted that the public meetings were conducted by an appointed advisory group and were not considered to be public hearings conducted by a government agency in compliance with administrative rules.

There were at least four major positions articulated by the greater Hawaiian community in the public meetings on the new master plan.

1. **No support for further development.** The vast majority of the community and especially the Native Hawaiian community were not in support of the Master Plan because it allowed for the construction of more telescopes on Mauna Kea. The existence of 20 telescopes on the summit already exceeded the 13-telescope limit set in place by the 1983-85 Master Plan. Instead of addressing past infractions, the new plan overwrote previous limits on the number of telescopes permitted, allowing for further development.

2. **No support for continued control of Mauna Kea by the University of Hawai'i.** The community was not in support of allowing the University to maintain continued control of the vast public resource that is Mauna Kea because the University had a dismal record of violations of both state and federal statutes regarding environmental and cultural protections.
3. **No support for the appointment process of community representatives.** The people did not support the process by which community representatives were appointed to the Office of Mauna Kea Management, the Mauna Kea Management Board, and Kahu Ku Mauna advisory group. The University of Hawai'i administration and Board of Regents gave themselves the authority to say who could represent the interests of the people, further extinguishing public input. It should also be noted that the current OMKM, MKMB and Kahu Ku Mauna do not conduct meetings in compliance with the state Sunshine Laws. There is still no public input on any level.
4. **No support because no funding for the new Master Plan was provided.** In addition to not supporting the new master plan as it was written, the community raised further objections to the fact that no funding was guaranteed to fully implement the plan. This oversight led to further distrust in the process. It raised questions as to the seriousness of the plan. A plan cannot be implemented without funding. Although the University of Hawai'i-Hilo Chancellor offered a one-time payment of \$400,000.00 from her discretionary funds to begin the process, this funding, although generous, clearly could not fund the entire costs of implementing such a plan.

The plan had no support from the community at large (see "Science, Culture Clash Over Sacred Mountain," *Los Angeles Times*, Appendix D). The public's concerns were principally ignored and band-aid solutions were implemented instead of honest and real solutions. The growing sentiment in the community is that the astronomy community has not made good faith efforts in addressing their concerns and therefore there is little support for telescopes, observatories or the international astronomy community in general.

University of Hawai'i

"The University focused primarily on development of Mauna Kea and tied the benefits gained to its research program."

(Audit of the Management of Mauna Kea and the Mauna Kea Science Reserve, Appendix C)

The University of Hawai'i has been managing Mauna Kea for its own benefit, more specifically for the benefit of the Institute for Astronomy. The University of Hawai'i's Board of Regents (UH-BoR) approved the Mauna Kea Master Plan in June 2000 against the wishes of not only many hundreds of Hawaiians that presented oral and written testimony against the Master Plan over a three year period, but also against the final positions of the first and second Mauna Kea advisory committees, the Office of Hawaiian Affairs, the Department of Hawaiian Home Lands, and other major groups representing the grass-roots Hawaiian communities

Basically the people feel that the **University of Hawai'i controls** and **benefits** from everything, but **funds** and **enforces nothing**, while **the people of Hawai'i benefit nothing** and must **fund everything**. To illustrate:

1. **No fair lease rent charged for use of public resources.** The DLNR and the UH are legislatively mandated to protect the public's resources atop Mauna Kea. Yet they only charge the observatories \$1.00 a year in lease rent, an amount that can hardly help fund this protection (See sub-lease agreements, *Appendix E*). Meanwhile, the University went before the state legislature to request \$31 million to fund the new Master Plan. (See "U.H. seeks millions to pay bills," *Honolulu Advertiser* article, *Appendix F*). The state legislature approved \$1 million to the University of Hawai'i for the Mauna Kea Management Plan. **Why should the taxpayers of Hawai'i foot the bill for astronomy being conducted by 13 of the richest nations in the world? And how could a Master Plan be approved without funding already in place to implement it?**
2. **University of Hawai'i still controls the mountain.** The Master Plan authorized the creation of the Office of Mauna Kea Management (OMKM), the Mauna Kea Management Board (MKMB) and the Kahu Ku Mauna group (Native Hawaiian advisory group). All of the people selected to serve on these bodies are appointed by the UHH Chancellor and the Board of Regents, except for the DLNR representative. These bodies serve the University, not necessarily the people of Hawai'i. **This process cannot be impartial.** (See "Ho'opono Mauna Kea "- *Newsletter cover-Issue No.1 ,Fall 2000,Appendix G*).
3. **No public input.** The OMKM, the MKMB and Kahu Ku Mauna do not conduct public hearings. Therefore there is no venue for the public to have input unless invited by these University bodies. The OMKM, MKMB and Kahu Ku Mauna claim they are exempt from the sunshine law because they are only advisory to the UH President. However, the State of Hawai'i is not exempt from the sunshine law. Regardless, the alleged exemption from the sunshine law makes it very difficult for these bodies to claim to represent the people.
4. **There is no enforcement mechanism in place that is not in a conflict of interest.** There still is no state authorized enforcement mechanism in place to protect our sites and the environment. The University has recently implemented a monitoring program, hiring people that have no enforcement powers and no experience in historic, cultural or environmental protection and preservation statutes. (See "Towering Mauna Kea gets its own caretakers," *Hawai'i Tribune Herald, Appendix H*).
5. **Tourism with unencumbered access to all of our sacred sites.** The University of Hawai'i's OMKM and MKMB are planning to triple the area of the Hale Pohaku Visitor Center, increasing the number of visitors that will have unencumbered access to our sacred sites. With no proper enforcement mechanism in place, violations will inevitably result. In 1995, the BLNR approved commercial use permits that allowed for over 104,000 tourists per year, an amount already considered excessive.

New University Leadership is Encouraging

In 1999, the University of Hawai'i was cited by the Western Association of Schools and Colleges (WASC) for poor management practices of the administration. Consequently, the

University received academic accreditation for only three (3) years instead of the normal ten (10) years. This situation was brought about in part by minority reports filed regarding racism within the University system. Recently a new president of the University was named, Dr. Evan Dobelle. Because of the new leadership the WASC has extended the accreditation to 2003. We are hopeful that Dr. Dobelle will be more open to plans that support balance, good land management and the principles of the "life of the land."

Federal law

Section 106 Consultations

Under the National Historic Preservation Act (NHPA) and Chapter 6E HRS, when a major federal undertaking occurs that will affect historic properties eligible for listing on the National Register of Historic Places, Section 106 consultations are triggered. There are two concurrent federal provisions that have been triggered here on Mauna Kea: Section 106 (NHPA) and the National Environmental Policy Act (NEPA) relating to the NASA Outrigger Telescopes Project. The Section 106 Process is also triggered through NEPA in this case.

The Office of Hawaiian Affairs (OHA), Department of Hawaiian Homelands (DHHL), Hawai'i Island Burial Council (HIBC), Hui Malama I Na Kupuna O Hawai'i Nei, the Royal Order of Kamehameha I (ROOK I), Mauna Kea Anaina Hou (MKAH), Ka Lahui Hawai'i and other Native Hawaiian organizations have been recognized by NASA as consulting parties under NHPA Section 106, and have also submitted comments on the Draft Environmental Assessment for the NASA Outrigger Telescopes Project (See comments from ROOKI/MKAH, OHA and Hui Malama I Na Kupuna O Hawai'i Nei, *Appendix I-K*).

None of the Section 106 consulting parties supported either the "on" or "off" site mitigation measures submitted by NASA and, further, all parties requested that a federal Environmental Impact Statement (EIS) be conducted in order to assess the full impact of the NASA project on Mauna Kea.

No official response from NASA has been offered since March 2001.

The principle concerns raised during the Section 106 Consultations and the Draft Environmental Assessment are as follows:

- **The Section 106 process was not inclusive enough.** All consulting parties recommended the inclusion of more Native Hawaiian organizations to expedite the process. The inclusion of other Native Hawaiian organizations was also important since this Section 106 consultation would be the first ever conducted for any federal project or undertaking on Mauna Kea.

N.B. NASA and the National Science Foundation (NSF) have contributed substantial federal funds constituting federal undertakings for many projects on Mauna Kea in the past, none of which ever resulted in Section 106 consultations. For instance, the Infrared Telescope Facility (IRTF) belongs to NASA and the Smithsonian Submillimeter Array (SMA) is principally funded by the National Science Foundation.

NASA and NSF funds have been used to make improvements and alterations to the Mauna Kea Access Road and for power and communications infrastructure improvements. Foreign governmental spending as well as substantial federal

funds for development on Mauna Kea are routed through the Research Corporation of the University of Hawai'i (RCUH), thus making the University or the RCUH the administrative agent for federal funds. Yet the University of Hawai'i has not conducted either federal EIS or Section 106 consultations pursuant to the National Environmental Policy Act and the National Historic Preservation Act.

According to administrative procedures regarding Section 106, federal agencies must complete the Section 106 process "prior to the approval of the expenditure of any federal funds on the undertaking." This rule has been disregarded many times in the past, the most recent instance being the appropriation of \$50 million for the NASA Outrigger Telescopes Project prior to the completion of the Section 106 process.

- **Section 106 Consultations did not include the public and were restrictive.** On February 1, 2001, NASA called a meeting and invited OHA, DHHL, ROOK I, HIBC and SHPO. NASA called this meeting a Section 106 consultation but did not allow the public to attend and restricted the number of representatives allowed to participate from the various groups, including HIBC and ROOK I. Statements of objection, oral and written, were made by ROOK I and a member of HIBC opposing the restrictions. In the end, rather than violating their own protocol, ROOK I could not participate at all. (See statement by HIBC, *Appendix L*)
- **ROOK I and MKAH filed inquiries with the Advisory Council on Historic Preservation (ACHP) requesting clarification regarding the identification of Native Hawaiian organizations pursuant to the NHPA.** Those inquiries were made in response to letters issued by Senior Senator Dan Inouye to NASA requesting recognition and inclusion of both the Office of Mauna Kea Management (OMKM) and the Kahu Ku Mauna group into the Section 106 consultation process. While we were not questioning the Senator's intent, it is our understanding that a Native Hawaiian organization as defined by the NHPA is not usually selected by a senator and not usually comprised of appointees of a senator or any other state or federal official or agency. And further, the senator's request would mean that the University would then be represented twice in the consultation process. (See letter to NASA from Senator Dan Inouye and letters from ROOKI/MKAH to OHA and ACHP, *Appendix M-N*).

Draft Environmental Assessment for NASA Outrigger Telescopes Project

- **The DEA did not ensure protection of Na Pu'u (the cinder cones) and landscape.** Na Pu'u represent the kinolau (body forms) of Na Akua (the Divine Deities) and also provide points of reference for our cultural and traditional practices of the study of the Heavens. Too many pu'u have already been leveled for development. Further alterations are unacceptable.
- **The DEA did not address the complex nature of the hydrology of Mauna Kea.** Mauna Kea is a principle aquifer for Hawai'i Island. While the sacred waters of Mauna Kea are a cultural and traditional resource of the Native

Hawaiians, we are also concerned for the health and wellbeing of all the people of Hawai'i. Contamination of our sacred waters is unacceptable.

- **ROOK I directed NASA to review their hazardous and solid waste handling and containment systems, including but not limited to the heavy use of elemental mercury.** We are very concerned about possible contamination of the sacred waters of Mauna Kea and what might happen to the waters if the proper agencies do not take appropriate action to protect this resource. (See letters to the Office of Environmental Quality Control (OEQC), Department of Health (DOH), *Appendix O and P*).

N.B. It should be recognized that we did not receive acknowledgment of receipt or comments back regarding our concerns from the above agencies.

- **There was no support for the Wekiu Bug Mitigation Plan.** The Native Hawaiian organizations did not support NASA's mitigation plan because it did not address the minimum standards of protections for a species whose population has been reduced in number by 99.7% and therefore requires maximum protections.
- **All Native Hawaiian organizations have requested a federal Environmental Impact Statement (EIS) be conducted.** We consider this request a minimum requirement to protect the sacred mountain, Mauna Kea.

Under NEPA, an agency must prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). The regulations promulgated by the Council on Environment Quality establish criteria for determining when a full EIS is required: These criteria include:

- "Impacts that may be both beneficial and adverse. A significant impact may exist even if the Federal agency believes that on balance the effect will be beneficial," 40 C.F.R. § 1508.27(b)(1);
- "Unique characteristics of the geographic area such as the proximity to historic or cultural resources...or ecologically critical areas," *id.* § 1508.27(b)(3);
- "The degree to which the effects on the quality of the human environment are likely to be highly controversial," *id.* § 1508.27(b)(4);
- "The degree to which the possible effects on the human environment are highly uncertain or involve unique and unknown risks," *id.* § 1508.27(b)(5);
- "The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration," *id.* § 1508.27(b)(6);
- "Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts," *id.* § 1508.27(b)(7);

- "The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources," id. § 1508.27(b)(8);
- "The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, id. § 1508.27(b)(9); and
- Whether the action threatens a violation of...requirements imposed for the protection of the environment, id. § 1508.27(b)(10).

It is clear that review of the DEA and ongoing Section 106 consultations indicates the need to address the cumulative impacts that the NASA Outrigger Telescopes Project will have on Mauna Kea in general. It is difficult to address the full impact without considering the past, present and future developments planned for Mauna Kea. Therefore, **the Mauna Kea Master Plan plays an important role in assessing cumulative impacts.**

Review of the current status of Mauna Kea under the new Master Plan

- **The State of Hawai'i has a fiduciary responsibility to protect the rights of the general public and the Native Hawaiians.**
- **The Department of Land and Natural Resources is the qualified resource manager NOT the University, NASA or the observatories.** The community is deserving of protection of its sacred mountain as well as professional management of the cultural, historic, and natural resources of Mauna Kea. The DLNR is actually the only legislatively mandated entity with the professional expertise capable of such resource management and protections. Yet it is grossly understaffed and under-funded to be able to do the job professionally, especially on the \$1.00 per year lease payment the State now receives. The observatories and IfA are staffed by some of the best scientists in the world. But they are astronomers, not land managers. They are not the best resource managers for the job of protecting Mauna Kea.
- **The University of Hawai'i still controls the mountain** with no venue for public input, receives all of the benefit, and enforces and collects nothing for the people and Native Hawaiians.
- **The Office of Hawaiian Affairs (OHA) does not receive 20% revenues derived from the use of the Ceded Lands.** Mauna Kea in its entirety is Ceded Lands.
- **The Department of Hawaiian Home Lands (DHHL) does not receive any compensation for the use of their lands.** The Mauna Kea Access Road cuts through Hawaiian Home Lands. DHHL was never consulted or compensated for that action.

- **The Native Hawaiian community does not support the Master Plan nor do they support further development atop Mauna Kea.**
- **There is no Burial Treatment Plan for Mauna Kea, pursuant to state law.**
There is no burial treatment plan for our highest born and most sacred ancestors.
- **No cultural preservation component in the historic preservation plan or cultural impact assessment for Mauna Kea pursuant to Act 50.** The State of Hawai'i has not adopted administrative rules to oversee historic and cultural preservation since 1976 when the legislation was enacted. There is no cultural preservation component in the historic preservation plan or cultural impact assessment pursuant to Act 50 for Mauna Kea. How will the historic and cultural aspects of Mauna Kea be protected?
- **There is no enforcement mechanism in place to protect our sites.** There is no enforcement entity created that does not have a conflict of interest (*i.e.*, not controlled by the University) or that has actual enforcement powers to do the job (*i.e.*, DOCARE enforcement powers).
- **There is no support within the community for the mitigation measures or Wekiu bug mitigation plan submitted by NASA.**
- **The NASA Section 106 consultation process is not complete and has had problems.** There has never been a Section 106 consultation with Native Hawaiians before the one currently underway with NASA on Mauna Kea in over 30 years. No consultation whatsoever. Were the University and the State responsible for requiring the international governments to be in compliance with state and federal laws regarding cultural and environmental protections, even if foreign governmental spending does not directly trigger the NHPA and the NEPA?
- **No plans or provisions outlined for lease termination in 2033.** The General lease for the summit requires that, at the termination of the leases, everything will be broken down and the sacred landscape returned to its original state. (See General Lease Agreement #S-4191, *Appendix Q*) There are no plans or provisions outlined or funding earmarked to insure that when the leases are up (2033), the telescopes will be removed and the land restored to its original state.
- **The community has stated that a federal Environmental Impact Statement (EIS) should be conducted.** No federal EIS has ever been conducted by NASA, the National Science Foundation (NSF), or any of the observatories on Mauna Kea. The IRTF and the Smithsonian Submillimeter Array (SMA), among others, are funded by NASA and NSF.
- **Benefit for use of the mountain goes to only a few.** The Institute for Astronomy (IfA), a department of the University of Hawai'i, has less than 40 students who receive the entire benefit of the use of the mountain. How do the other departments and the people in general benefit?

Compromise, we are told

The observatories and the University have asked the people of Hawai'i to compromise. We think it is rather naive for them to make such requests in light of the facts and history. It should be noted that the people have compromised for over 30 years. For over 30 years the astronomy community has enjoyed unencumbered access to and use of Mauna Kea but given virtually nothing back to the people. **Mauna Kea has become a premiere and world-class astronomy site and we consider *that* our compromise.**

The Institute for Astronomy (IfA) has stated publicly that they will *not* compromise. Mr. Robert McLaren of the IfA has stated, "If we have to give up something, that would mean we're not going to be the best in the world, then we might as well give up everything." (See *Chronicle for Higher Education, Appendix R*) The absence of trust combined with a statement such as this, makes it difficult to resolve anything.

Perhaps the astronomy community forgets that when they first asked to use the mountain, it was to build only **one observatory**. Yet, in the first four years, five observatories were built with total disregard for the concerns of the community, and over 20 were built without adhering to the 13-telescope limit allowed by the 1983-85 Master Plan. All were built without completely adhering to state and federal statutes for environmental and cultural protections.

Then, in the 11th hour of the sun-setting of the 1983-85 Master Plan, the UH sought to re-write their agreements with the State so as to secure space for more telescopes to be built. They claimed to create "solutions" to the controversy that changed little and bordered on complete insult, further alienating the environmentalists and Hawaiian community. Yet the powers that be in the astronomy community and University still claim that the people of Hawai'i **should compromise?**

Let us be clear: we do not believe that the majority of the astronomy community is the problem. We believe there are many in the ranks that support fairness and justice. It is the University and the Institute for Astronomy that we take issue with. Their power and influence should have ensured balance. But it is difficult to balance the gains they have received when weighed against the benefits to the people.

Restoring the balance

In considering possible solutions to restore balance, several facts should be kept in mind.

1. Hundreds of millions of dollars per year are involved in the operation of facilities on Mauna Kea.
2. The international observatories pay only \$1.00 per year for their sub-leases.
3. The various observatories representing major international governments are required by the University IfA to contribute 10-15% of their observing time to the IfA in lieu of lease rent.

The operating costs associated with astronomical observation can range from \$10,000 - \$60,000 per night per telescope. This amounts to hundreds of millions of dollars per year for use by the IfA. No matter how one views the above facts, the \$1.00 per year lease rent simply cannot

be reconciled. The observatories are owned and operated by governments such as the United States, France, Chile, Canada, Japan, the United Kingdom and others. They give nothing to the State of Hawai'i to assist in resource management of the mountain. We consider this unacceptable.

Instead, we submit that the 10-15% of the observing time due the IfA in lieu of rent can be the solution to restoring balance. The Institute for Astronomy receives approximately 36 nights of observing time per year from each observatory. This arrangement has meant that only a single department of the University (with minimal student enrollment) receives the bulk of the benefits from the use of public land. What if this same resource also could be used to benefit the general public?

Just one of the W.M. Keck observatory twin telescopes costs \$5,000 per hour or \$60,000 per night, resulting in a total worth of \$21,900,000 per year. However, if we calculate observing time on both the Keck I and Keck II per year, it would be worth approximately \$43,800,00.

It is clear from these figures that **time is equal to money**. If the 10-15% observing time due the UH could be sold to the international astronomy community, the resulting revenues could provide funding for the management, protection and restoration of Mauna Kea at no additional expense to the observatories.

Astronomy is a very competitive scientific discipline. There are many astronomers and universities globally who compete to acquire time on the world-class observatories of Mauna Kea. The UH/IfA allegedly does not re-sell its time allotments and claims to use them only for their own observing proposals. If this indeed is the case, it is still time not well spent.

Although time given to the UH/IfA is not cash in hand, time in this case is a resource that can be sold on the market and translated into revenue. It is clear that one department of the University serving a few students is in control of a tremendous resource. **The question remains: if the UH/IfA truly is concerned with the protection of Mauna Kea, why haven't they offered to sell some of this time to help fund the State for proper management of this precious resource?**

Solution: a Protection, Preservation and Restoration Plan for Mauna Kea

We submit to the people of Hawai'i Nei, under our obligation to the Sacred Mountain, our proposed solutions and resolutions to the above mentioned problems. We do so with the utmost respect and Aloha. It is our intention to raise the standards of Aloha for all parties concerned.

The Royal Order of Kamehameha I and Mauna Kea Anaina Hou believe we have developed a plan that has broad based support. We firmly believe that the protection, preservation and restoration of the sacred resource known as Mauna Kea can be realized if the following conditions and criteria are implemented.

Conditions

- 1. No further development or expansion on Mauna Kea should be allowed.**

2. **The control of Mauna Kea must be taken out of the hands of the University of Hawai‘i.**
3. **An independent Management Authority should be established to oversee the management of Mauna Kea, comprised of both the right-holders and the stake-holders of Mauna Kea (*i.e.*, Native Hawaiian practitioners, environmentalists, community representatives, DLNR, County of Hawai‘i, etc.)**
4. **A fair percentage of the observing time allotted to the UH/IfA by each observatory should be resold with revenues directed to a special fund administered by the Mauna Kea Management Authority, to be used for, but not limited to, the management, protection, and restoration of Mauna Kea.**
5. **An agreement should be reached which clearly outlines how and when the telescopes shall be removed and which earmarks funding for the removal of observatory facilities and the restoration of the land, pursuant to the General Lease agreement (#S-4191) between the State and University.**

Criteria

1. Provide sustainable funding for the protection, preservation and restoration of Mauna Kea, the sacred resource.
2. Create educational opportunities for Hawai‘i’s children and diverse community.
3. Increase public safety through an enhanced enforcement presence.
4. Reduce overall state liability through effective, professional and qualified resource management.
5. Provide the members of the scientific-astronomy community the additional time to focus on what they are best at — astronomy.
6. Provide for the satisfaction of the various observatories at little or no additional cost.
7. Insure compliance with all federal, state and county laws.
8. Create a management entity responsible for the day-to-day protection and preservation of Mauna Kea.
9. Create a permanent venue for broad based Native Hawaiian and community involvement.
10. Insure that the religious, cultural, historic, environmental and natural resources of Mauna Kea are restored for the benefit of Hawai‘i’s children in perpetuity.

Implementation

In order to implement the Mauna Kea Protection, Preservation and Restoration Plan, we have divided the plan into three phases. We choose to develop it this way in order to identify not only the various problems but also the responsible agencies and funding sources. These phases are:

Phase I: Create a Mauna Kea Management Authority to be a proper venue or forum for public input.

Phase II: Find and implement sustainable funding for management and protection of Mauna Kea.

Phase III: Determine ways to mitigate the impact of astronomy on Mauna Kea including the proposed NASA Outrigger Telescopes Project.

Phase I: Create a Mauna Kea Management Authority

Problem

Currently there is no venue or forum for public input. The Office of Mauna Kea Management, the Mauna Kea Management Board and Kahu Ku Mauna are comprised of people appointed by the University administration and board of regents (except the position held by DLNR). The community does not select them. The community does not even submit names for selection. These appointed bodies do not conduct public hearings or allow the public to sit in (unless invited).

Kahu Ku Mauna maintains that they are only advisory and that is why they are exempt from the sunshine laws (HRS Chapters 91 and 92) that insure public review. The fact that they are only advisory means they are not an actual decision-making body and therefore do not represent the community that is the beneficiary of the very resources under discussion.

The University, by organizing the process in this way, has insured not only their control over the process but over the mountain as well. This is unacceptable and should never have been allowed.

The first and second Mauna Kea Advisory Committees as well as community members testifying at the public meetings requested that a public forum be established separate from the direct control of the University. This advice was not accepted.

Solution

We submit that, since Mauna Kea in its entirety is comprised of Ceded Lands and, since Native Hawaiians and the general public are the beneficiaries of the Ceded Land Trust (as was established during the admission of Hawai'i into the Union), and since the University is not a qualified resource manager and remains in a conflict of interest, the creation of a Mauna Kea Management Authority must be established to oversee and manage the lands of Mauna Kea.

We believe that a community based Management Authority would be a first step to return the kuleana (duties and responsibilities) to all interested parties. There are existing models of co-management of historic, cultural and natural areas. The Kaho'olawe Island Reserve Commission (KIRC) and the Northwestern Hawaiian Island Management Protection Area Authority (NWHI-

MPA) are two examples. We have reviewed these management plans and commissions and believe that we have put together a reasonable plan that integrates similar management elements.

The Mauna Kea Management Authority

- A Mauna Kea Management Authority (MKMA) shall be established to manage Mauna Kea.
- The MKMA shall be a decision-making body for the planning, implementing and managing of all activities on the summit and upper slopes of Mauna Kea (within the boundaries of the Science Reserve).
- The MKMA shall be a ten (10) member body comprised of both the right-holders and the stakeholders of Mauna Kea.
- In order to meet the Authority's purpose, those government agencies exercising jurisdiction over public lands and natural resources, along with the right-holders and stakeholders, shall exercise their authority to implement the decisions of the MKMA.
- The Authority shall establish a Kahu Committee made up of, but not limited to, the following representatives: Native Hawaiian religious, cultural and traditional practitioners, cultural and lineal descendants of those families with traditional ties to Mauna Kea, environmental representatives, DOCARE (Chief for Hawai'i Island), recreational users and hunters etc., to advise the MKMA on all decisions.

Membership

The membership of MKMA shall be comprised of the following governmental bodies and interested representatives, made up of right-holders and stakeholders of Mauna Kea.

1. The Chairman of the Board of Land and Natural Resources
2. The mayor of the County of Hawai'i
3. A representative from the Royal Order of Kamehameha I, selected by the Royal Order of Kamehameha I.
4. A representative of the environment, selected by the governor from a list submitted by environmental groups.
5. The president of the University of Hawai'i.
6. A representative of the Office of Hawaiian Affairs, to be recommended by the beneficiaries of Hawai'i Island and the Kahu Committee.
7. A representative of the Department of Hawaiian Home Lands, to be recommended by the Hawai'i Island beneficiaries.
8. A Kamehameha Schools trustee, to be selected based upon the recommendations of the beneficiaries from Hawai'i Island.

9. and 10. Two (2) representatives shall be selected by the governor from a list submitted by the Royal Order and the Kahu Committee, where one (1) shall specifically represent the environmental resources and one (1) shall specifically represent the cultural resources of Mauna Kea.

The chair and officers of the MKMA shall be elected by the ten members of the Authority. The elected chair of the MKMA shall not vote unless there is a tie.

Members Terms of Office

The MKMA members' terms shall be four (4) years. Following the first four years the MKMA members' terms shall be staggered by two (2) year intervals to preserve continuity of experience. Those excluded from this rotation are the chair of BLNR, the Hawai'i County mayor, and the University president since they rotate by election and appointment.

Meetings

- The MKMA shall conduct their meetings under guidelines established by "Roberts Rules of Order."
- There shall be no less than three (3) meetings annually, or as deemed necessary by the MKMA to accomplish its goals and directives.
- All meetings shall be open to the public, and shall be announced a minimum of seven (7) days prior to the meetings. Notices and agendas shall be published in the major statewide newspapers.
- Exceptions to public meetings shall be established in accordance with the state 6E provisions relating to burial site protection and for the purposes of staff issues when needed.
- The MKMA shall establish procedures for addressing public concerns through testimony (written and oral) and for grievances.

Decision Making

All decisions made by the MKMA shall be made through consensus. Decisions must be made with the full membership of MKMA present.

Vacancies

The MKMA shall establish rules for the replacement of members in the event that a member can no longer serve. Alternatives may be temporarily designated by the individual members but the alternate must be given full decision-making power.

Kahu Committee

The MKMA shall assist in the creation and implementation of the Kahu Committee.

Mauna Kea is a temple and contains many religious, traditional, cultural and historic properties and natural resources. Currently there is no recognition of the sacred nature of Mauna Kea and no recognition of na Kahu (those with kuleana and stewardship rights) and na Kahuna (priests/experts) who practice and worship atop Mauna Kea.

Most religious orders throughout the world designate initiates and have a complex system for designating them. It is no different for us. Although the initiates can be recognized by the state

or federal government, they are not created by them. **For example, when you go to the synagogue or the church, you would not expect to see a rabbi or priest that had been appointed by the government.** And so it is with our temples as well; we have our own practice of selection and initiation. There are people with familial and traditional ties to Mauna Kea that reach farther back in time than this issue. The current system does not recognize these people, nor does it allow them to participate or have input into the decision-making process. Kahu Ku Mauna is only advisory and is made up of appointees, some of whom are practitioners and some of whom are not.

N.B. We would support and encourage the current practitioners of Kahu Ku Mauna to be included on the MKMA's Kahu Committee.

Staff

The MKMA shall have a staff to administer its decisions and funding. Staff members to be hired by the MKMA shall include:

1. Executive Director
2. Executive Secretary
3. Office Administrator
4. Office Secretary
5. Mauna Kea Management Specialists
 - a. Kahu Committee implementation
 - b. education/interpretive programs
 - c. monitoring/enforcement
6. Two (2) Special Project Coordinators to assist with environmental and cultural special projects.
6. Historic Preservation Specialist
7. Enforcement Officers

Objectives

- The MKMA shall establish long and short-term goals for the protection, preservation, and restoration of Mauna Kea. The MKMA shall include the recommendations of the Kahu Committee in their decision-making process.
- The MKMA shall work and oversee funding for the Kahu Committee on the following projects:
 - a. special education projects,
 - b. interpretation,
 - c. historic preservation (to assist the State Historic Preservation Division in ethnography and archeological data collection, enforcement),
 - d. earthquake prediction and weather monitoring program.
- The MKMA shall review existing rules and regulations including but not limited to all state and federal provisions, the University of Hawai'i's Mauna Kea Master Plan, the Natural Area Reserves (NARS) management, and astronomy development plans, etc., in order to develop the goals and directives of the MKMA.
- Existing regulations and management strategies may be, adopted, amended or repealed to meet the objectives of the MKMA.

- The MKMA may establish new regulations and modify or repeal existing regulations. No action shall be taken by the MKMA that would diminish any existing protections and provisions for the cultural, religious, traditional, historic and environmental properties and resources, but they may increase protections.
- The MKMA will make public via statewide newspapers, *Ka Wai Ola* (OHA newspaper), and other pertinent newspapers/newsletters within the community any changes to provisions, protections, rules and regulations and will determine a reasonable time for public review and comment.
- The MKMA shall confer with the Kahu Committee on all decisions or actions to be undertaken prior to and during the decision-making process.

Funding

- Funding for the MKMA shall be annually derived from the re-allocation of the observing time normally directed to the UH/IfA, with viewing time to be re-sold to the international astronomy community and revenues earmarked for a special fund for MKMA and other stated purposes (below).
- Alternatively, the observatories may negotiate a reasonable rental agreement in lieu of the time reallocation with the State, the MKMA, and Native Hawaiian consulting parties.
- The annual funding for the MKMA shall be \$2 million dollars.

Phase II: Find and implement sustainable funding

Problem

As was outlined above, the University controls the mountain and the UH/IfA controls the resources derived from the observatories. Even were this not the case, there is still no excuse for the international astronomy community to be using the resources of the people of Hawai'i and only offer \$1.00 per year for the protection and management of Mauna Kea, the Sacred Mountain. The nations involved in the astronomy on Mauna Kea are some of the richest in the world; they include Japan, United Kingdom, France, The Netherlands and Canada.

We believe the State of Hawai'i has the right in its role as trustee of the ceded lands to request higher and more reasonable rents and/or to negotiate with the observatories themselves to utilize some of the observing **time** allocated to the UH/IfA to help fund the management and protection of Mauna Kea.

Preferably, the observatories themselves would recognize the problems that exist and offer to do just that: pay reasonable rent or simply reallocate UH/IfA observing time to be earmarked for the preservation, protection and restoration of Mauna Kea.

We have decided to advocate for **time-sharing**, so to speak, because the alternative would cost the observatories out of pocket. We do support astronomy in general but cannot justify the money spent for it with the lack of support for the community.

N.B. We further advocate this model because we understand that the Bush Administration is advocating all national astronomy monies to be redirected to NASA, thus jeopardizing those observatories that currently receive federal funding.

To get an idea of the sums of money involved, NASA's annual budget is approximately \$14 billion. Every Space Shuttle launch costs approximately \$600,000,000. This figure is derived by taking the annual budget for the Space Shuttle and dividing it by the number of launches made in one year.

The Japan National Telescope (Subaru) cost approximately \$300 million to construct and has an annual operating budget estimated in the range of hundreds of millions of dollars.

These numbers don't include the astronomy budgets of other governments or the National Science Foundation (NSF). Astronomy and space science are noble endeavors that we believe should be supported; however, we also believe a reasonable balance should be applied in weighing its consumption of taxpayer dollars with the needs of the environment and the health and well being of society.

By sharing the revenues of Mauna Kea with the community, the needs of the environment, culture, history, traditions and religious nature of Mauna Kea would be considered equally important to astronomy. We do not believe that it is the will of the astronomy community to place these needs on a lower level of importance than their search for greater understanding of the universe. We believe greater understanding of a threatened or endangered species is equal in standing. The potential loss of an entire species is unacceptable, and in our worldview, sets the process of creation out of balance and unraveling. Hear our call!

Solution

We believe that funding for the preservation, protection and restoration of Mauna Kea is needed. We further believe that monies exist but must be committed and set aside for these purposes. We submit that the State of Hawai'i, pursuant to its mandate as trustee of the Native Hawaiians and the Public, **must** act on our behalf. **We ask for DLNR's support for the immediate creation of the MKMA and assistance in the renegotiation of the observing time allotments with each observatory.** We believe the Native Hawaiian people and even the observatories would support such an effort. **And if this condition is not met, then the State, in conjunction with the public and the Native Hawaiian beneficiaries, should assess a fair annual lease rent for each observatory.**

Breakdown of possible revenues

For review, we present some examples of the costs per night of some of the observatories, *i.e.*, Keck I and II, Gemini North, etc.

N.B. The values used for this breakdown were calculated from amounts cited by the observatories themselves in various newspapers.)

The Keck I and II observatories cost about \$60,000 per night each, therefore: **\$60,000 x 2/night = \$120,000**, therefore **\$120,000/night x 36 nights = \$4,320,000 annually**.

The Gemini North Telescope cost about \$30,000 per night, therefore: **\$30,000/night x 36 nights = \$1,080,000 annually**.

The figures given as examples above represent time allocated to the UH/IfA annually if it were translated into money by reselling it to other interested universities and astronomical institutions. We don't have the other telescopes' operating costs but we believe they should be similar.

N.B. We would like to note that the smaller and older observatories do not cost as much to operate as the larger ones because their overhead is less. We believe a condition should be placed to accommodate the smaller telescopes since their budgets are not as big. The smaller telescopes should not have to carry as big of a burden as the larger and newer ones.

We believe that the amount of money provided for by the time allotted and/or the lease rents, whichever is greater, should amount to not less than \$45 million dollars annually.

Distribution of revenues

- Funding of not less than **\$12 million** per year to DLNR
 1. Funding of not less than \$2 million to help fund and expand the Historic Preservation Division-History and Cultural Branch and the Burial Sites Program
 2. To fund and expand the Division of Conservation and Resource Enforcement (DOCARE)
 3. Funding of not less than \$2 million to help fund and expand the Division of Forestry and Wildlife (DOFAW) to manage the existing and an expanded Natural Area Reserves System (NARS).
 4. To generally fund and expand all departments responsible for management and protection of the natural resources of Hawai'i through the DLNR chairman's discretionary fund
- Funding of not less than **\$2 million** per year for the Mauna Kea Management Authority (MKMA) and the programs it will oversee.
- Funding of not less than **\$7.6 million** per year for the University of Hawai'i earmarked for the general education fund with not less than **25% (\$1,900,000** per year) allocated for Native Hawaiian students 4-year scholarships and tuition waivers to be administered through the Center for Hawaiian Studies, **with preference given to students from Hawai'i Island.**
- Funding of not less than **\$13.4 million** per year should be given to the following Hawai'i Island educational organizations and programs that serve not only native Hawaiian children, but children of all ethnicities.

1. Na Lei Na'auao - Native Hawaiian Charter School Alliance – Moku o Keawe. Funding of not less than \$5.2 million per year should go to NLN-Moku o Keawe, an island-wide alliance of culturally-driven public charter schools, which integrate astronomy into their curriculum.
 2. Na Kalai Wa'a Moku o Hawai'i (the canoe Makali'i's educational program). Funding of not less than \$3.2 million per year should go to Na Kalai Wa'a. Hawaiian navigation and astronomy play an important role in the sacred nature of Mauna Kea. The canoe Makali'i's educational program, sponsored by Na Kalai Wa'a, serves children of all ages as well as the greater community and promotes the health, well-being and appreciation of the environment.
 3. Na Pua No'eau and the Naimiloa Programs (the Gifted and Talented Educational Programs). Funding of not less than \$2 million per year should go to NPN-NIL a island wide program for gifted and talented children of Hawai'i.
 4. Kula Kaiapuni, the Department of Education's Hawaiian Language immersion sites on all islands. Funding of not less than \$2 million dollars per years should be given to the Kula Kaiapuni programs. No more than 10% allocated shall be used for administration and 90% shall be allocated directly to the children.
 5. The MKMA Scholarship Fund, a scholarship fund shall be established for the preschool children of Hawai'i. Funding of not less than \$1 million dollars per year shall go to this fund and will be administered by the MKMA.
- Funding of not less than **\$9 million** per year for OHA which would be 20% of the total paid to DLNR of either the observing time sold or lease rent, to be placed in a fund, with 10% earmarked for Mauna Kea education and 90% earmarked for elderly beneficiary health and housing. No more than 10% of the total allocation shall be used for administration.
 - Funding of not less than **\$1 million** per year for the Department of Hawaiian Home Lands for the use of DHHL land for the Mauna Kea Access Road. DHHL will need to determine this compensation in consultation with their beneficiaries.

Phase III: Determine ways to mitigate the impact of astronomy

We do not believe that any further construction on the Sacred Mountain should be allowed. We further believe that the threats made to an endangered species, the potential for contaminating our sacred and pristine waters, and the general desecration of our Sacred Mountain **cannot** be mitigated in any way, shape or form. Such things as extinction cannot be mitigated. And we have stated as much time and time again. Enough is enough.

What can NASA do?

Part of the Section 106 process is to identify those who hold certain historic properties sacred. In this process there is an effort to identify how mitigation measures remedy activities that may affect or alter historic, cultural, traditional or religious uses of these lands. In this case, the Native Hawaiians hold these lands of Mauna Kea sacred and, in that context, we are the injured party. However, since Mauna Kea is so rich in natural resources, we submit that the general public too is the injured party. As injured parties, we submit that mitigation requires the assessment of cumulative impacts.

In order to determine mitigation within the context of Section 106 consultations, we must address the cumulative impacts that astronomy has had on the mountain. And in order to do so, we must consider past, present and future astronomy development.

We believe that in order to assess the cumulative impacts on Mauna Kea, new development must be evaluated in relation to already existing development.

- NASA must assess the cumulative impacts the Outrigger Telescopes Project will have on past, present and future development
- NASA must comply with federal and state law, conduct a federal EIS and complete the Section 106 consultations on the Outrigger Telescopes Project and their other federal projects.

As we stated earlier, many federal undertakings have occurred on the mountain that should have triggered both NHPA and NEPA regulations but did not. For example, in 1997, **\$50 million** was appropriated to NASA to implement phase one of the Outrigger Telescopes Project. According to federal law, Section 106 consultations or a federal Environmental Assessment should have occurred prior to that appropriation. (See letters from NASA to the Honorable Representative Patsy Mink; letters from NASA and the National Science Foundation to Kia'aina Mililani Trask, Ka Lahui Hawai'i, *Appendix S-U*)

We hope that NASA will both recognize its responsibilities and lend assistance to gain support for this plan from the astronomy community here in Hawai'i and globally.

NASA cannot assess cumulative impacts without a proper Master Plan. The Master Plan is flawed and in violation of existing statutes and has been created without adopted rules and regulations on historic preservation. Lastly, it is controlled by the University with no public input.

We **will not** support any mitigation measures put forth by NASA that continue the control of Mauna Kea by the University and/or its appointees. We **will** only accept a co-management plan such as the one outlined in this report.

We do not support any further development of our Temple Mauna Kea, especially if we cannot be assured to our satisfaction that true protection, preservation and restoration actions have been implemented. We must be able to see and measure the outcome of these activities before any further discussion can commence.

Conclusions

- A Mauna Kea Management Authority should be created to remove the University from direct control over Mauna Kea and to restore public input in management decisions.
- Ensure funding to protect the mountain and the injured parties (which include Native Hawaiians and the general public) through the reallocation of observing time on the telescopes and/or fair lease rents.
- The Mauna Kea Master Plan must be brought into compliance with all laws pertaining to historic preservation and environmental protect.
- NASA must comply with federal and state law, conduct a federal Environmental Impact Statement (EIS) and complete Section 106 consultations on the Outrigger Telescopes Project.
- The DLNR must maintain management oversite to ensure protection of Mauna Kea in the public interest and cannot transfer that responsibility to another agency.
- Until these measures are implemented, we request that DLNR not issue any permits (*i.e.*, CDUA, Conservation District Use Application permits, grading and grubbing permits, etc.).

Final statement of the Royal Order of Kamehameha I and Mauna Kea Anaina Hou

Ali'i Nui and Grandmaster of the Royal Order of Kamehameha I, Gabriel Makuakane, has decreed that

"There shall be no further development of any kind on Mauna Kea."

We do not believe life is a zero-sum game (*i.e.*, in order for there to be a winner there must be a loser). This thinking, although prevalent, is undergoing a global re-evaluation. We do not believe that, in order to search for life in the distant universe, we need to destroy life on earth. We know life exists here on earth but we are not sure that life exists elsewhere in the universe. And although we support the **academic question** that there is the possibility of life on other worlds, we can no longer ignore the fact that we are killing off entire species and destroying the environment that gives us life. **Hawai'i is now considered the "extinction capital of the world."** There are now less than 8,000 pure blooded Hawaiian people. With this legacy looming, we are not in a position to support any activities that would increase these extinction numbers. Everyone loses when a species becomes extinct.

If there were a clear indication that things are in fact being restored, protected, and otherwise returned to balance and righteousness, then astronomical activities could carefully be re-evaluated and perhaps allowed to advance. **But currently we cannot agree to further destruction and desecration to the land and habitat of the Wekiu bug and Mauna Kea the temple. The Ali'i have placed a kapu, or prohibition, upon the taking, using, disturbing, disrupting, and/or otherwise altering the natural balance of the species and their habitats on Mauna Kea.** Kapu placed by the Ali'i are reviewed over a time and then re-evaluated.

"Ua mau ke ea o ka 'aina i ka pono"

Kamehameha III

The above decree set forth by our Ali'i Nui Kamehameha III in 1843 and later adopted by the State of Hawai'i to become the state motto, translates as

"The life of the land is perpetuated in righteousness."

The Ali'i Nui did not utter it as a "catchy phrase" but rather as a mandate and Heavenly directive, setting the attention of the people to the Heavens for their sustenance and guidance to care for themselves and the world.

The past determines the present and the present determines the future.

The past has produced a world-class astronomy center atop Mauna Kea, accomplished without any real consideration for the beliefs of the people who hold Mauna Kea sacred. The past has produced a system and process that leaves the people out and remains in control of a single stakeholder, the University, resulting in one winner and many losers. No reasonable system or one that claims to be just would allow **one stakeholder to control all of the stakes**. This is how the system is implemented now and **it is not acceptable to the right-holders**.

We believe the plan we have outlined has broad-based support and will begin a process that

- restores control to the people and all interested parties,
- addresses the critical environmental, cultural and historic preservation issues,
- funds the responsible agencies for the protection of Mauna Kea.