

# Mauna Kea

## Protecting The Sacred Resource

By K. Kealoha Pisciotta

This copy is for the exclusive use of Mr. Timothy Johns, Chairman  
Department of Land & Natural Resources  
State of Hawai'i

Prepared for the Mauna Kea Anaina Hou  
230 Lyman Avenue, Hilo Hawai'i 96720  
(808) 934-7668  
May 2000

### Introduction:

Prior to this report, we forwarded another report for your review titled "Why Mauna Kea Should Be Protected and Preserved" by Kealoha Pisciotta. This report basically meant to begin the review process, stimulate discussion and to Outline some of the basic problems threatening the sacred nature of Mauna Kea. The attached report however; is meant to provide some concrete suggestions not only on how the sacred nature of Mauna Kea can be protected and preserved but also to present our consensus view of how the kuleana can be returned to all interested parties. The Mauna Kea Anaina Hou has three principle positions that on the surface may appear stringent. It is our hope however, that we will have provided enough justification and evidence to show that in fact these positions are not only fair and reasonable but evident.

### Position Statements:

1. The Mauna Kea Anaina Hou exists to preserve, protect and perpetuate the religious and spiritual relationship between Akua, the Community, and the 'Aina.
2. The Mauna Kea Anaina Hou does not support further expansion of current levels of development on Mauna Kea or the destruction of the 'Aina.
3. The Mauna Kea Anaina Hou believes that in light of the poor record of oversight and control of Mauna Kea by the UH/IFA; that the State of

Hawai'i has justification and an obligation to the community to reassess the terms and conditions of the lease agreement between the State of Hawai'i and the UH/IFA.

### **The Dangers of Special Interest MIS-Management:**

1 The Mauna Kea Master Plan (s) \*:

(\* The University is currently working on =fifth draft of the Master Plan and has spent in excess of \$800,000.00.)

The Mauna Kea Draft Master Plan(s) prepared by Group 70 International and the Mauna Kea Advisory Committee to University President Kenneth Mortimer, at first glance appear to address the criticism's raised by the State Audit as well as those raised by the public. Closer examination however, will reveal the contrary.

The new Master Plan(s), after all of the nimble language, still retain at least three of the major problems that existed in the original 1983 Master Plan and later revisions. These problems are as follows:

1. **No Change in jurisdiction and Authority:** The University and the

Institute for Astronomy have been in control for 31 years and under the "new plan" they will remain in control for the next 34 years.

2. **No Change in Liability:** The State of Hawai'i remains liable for violations

of State and Federal laws incurred by the UH/IFA, and for Public Health and Safety:

3. **No Change in Funding:** The UH/IFA has presented no viable solution

for the funding and implementation of this new management plan.

### **The Jurisdiction and Authority of the UH/IFA:**

The original lease (S-4191) issued in 1968, allowed for one observatory and support structures to be built. Within the first four years of receiving their lease, the IFA built a total of five observatories instead of what was authorized within the lease agreement. The use of semantics to justify development and circumvent the letter or spirit of agreements reached, has a long history with astronomy in Hawai'i. In 1983, the Draft Master Plan and EIS allowed for thirteen observatories inclusive of the six that were previously built. In 1999, a total of sixty observatories, telescopes, antennas, foundations and support structures exist in direct violation of the original lease and the 1983 Master Plan and EIS.

Under the jurisdiction of the UH/IFA, three times the number of observatories and structures have been built, most without the proper permits and without having to adhere to either State or Federal statutes regarding historic, cultural and environmental protections.

The 1983 Master Plan and EIS required that the Archaeological Surveys be completed and a Historic Preservation Plan be implemented before further development would be allowed. To date, however, the archeological surveys have not been completed (i.e., only *reconnaissance level surveys are complete*), the State Historic Preservation Division is currently working on the completion of the Preservation Plan. There has been no consultation with Native Hawaiian organizations and families pursuant to Section 106 of the National Historic Preservation Act and no compliance with Chapter 6E of the State Historic Preservation Act pertaining to the protection of burials. No consultation with the Hawai'i Island Burial Council has taken place. This is needed in order to develop a long range burial protection plan for the burial complexes on Mauna Kea. And last but not least, the IFA ordered the removal of places of worship from Mauna Kea. The later involving the removal of a family shrine of several members of the Mauna Kea Anaina Hou on two separate occasions.

It is safe to say at this juncture that the UH/IFA have not fulfilled their duties or obligations and have not acted in good faith, disregarding the host cultures' input, concerns and more importantly, its spiritual connection to Mauna Kea. It is further obvious that the UH/IFA intends on continuing to develop and expand their astronomical agenda, what is

2

not obvious however, is how they intend on taking responsibility for their past and ongoing infractions that have led to such adamant public outcry.

The management and protection of the sacred nature of Mauna Kea and its natural, cultural, historic and scientific resources **CLEARLY CANNOT BE BASED ON GOOD FAITH AT THIS LATE DATE.** The poor track record of the UH/IFA speaks for itself and the recent State Auditor's report validates this. **OUR DECISIONS SHOULD BE BASED ON THEIR TRACK RECORD AND NOT SIMPLY ON THEIR PROMISES.**

### The Liability of the State of Hawai'i:

In 1995, as a result of public outcry and in an effort to skirt any liability, the UH/IFA created a "Revised Mauna Kea Management Plan", which basically accomplished only two things:

1. It transferred all prior responsibility for the management and enforcement aspects of the lease from the UH/IFA back into the hands of the State of Hawai'i, Department of Land and Natural Resources (DLNR). Prior to this change, the sub-leasees had agreed to fund and provide some protections. This change was approved by the State Board of Land and Natural Resources under its former chairman, Michael Wilson.

2. It empowered the UH/IFA to regulate all public access.

It is obvious that the second regulation is ineffective with regard to Native Hawaiian rights to access and religious worship as well as the public's right to use a State roadway. The real problem lies with the first regulation which exempted the UH/IFA from funding the management and enforcement responsibilities it had agreed to from the beginning. The State of Hawai'i has clearly been remiss in its fiduciary duty and responsibility to enforce the pertinent laws and protect the rights of the Public and Native Hawaiians.

### The State of Hawai'i has a fiduciary responsibility to protect the rights of the Public and the Native Hawaiian.

The State of Hawai'i is now liable and the various observatories, their respective governments along with the UH/IFA, pay only \$1.00 per year for their leases. The UH/IFA argues that the observatories pay for the use of Mauna Kea by paying the UH/IFA in time and usage on the various observatories. This, in actuality is the UH/IFA paying itself.

### Time Equals Money; Funding and How it Works:

The observatories are all required to give observing time to the UH/IFA. This is used by UH/IFA staff and students to conduct various research projects. All observatories give ten percent of their annual observing time to the UH/IFA with one exception. The

3

Smithsonian Institute is required to give fifteen percent of their annual observing time to the UH/IFA.

The operating costs associated with astronomical observation can range from \$10,000 - \$60,000 per night, with the newer observatories requiring the higher costs. The UH/IFA receives approximately 36 nights from each observatory on an annual basis. Calculating the rates received by the W.M. Keck Observatory at \$5,000 per hour, \$60,000 per night, or \$21.7 million annually.

It is clear that just a few nights per year cashed in could provide funding for the management and protection of Mauna Kea and should not even be an issue.

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/IEFA allegedly does not re-sell their time allotments and only uses it for its own observing proposals. If this is indeed the case, it is still time that is 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 of Hawai'i is in control of a tremendous resource and also the destroyer of another - Mauna Kea. The question remains; **If the UH/IFA truly are concerned with the protection of Mauna Kea, the world's very best observation point, why haven't they offered to sell this time to fund more adequate management of this precious resource?**

#### The UH/IFA is not a Qualified Resource Manager:

The State Auditor and the community have outlined the deficiencies in the oversight of Mauna Kea by the UH/IEFA. The community is deserving of professional management and protection of the sacred nature as well as the cultural, historic and natural resources of Mauna Kea. The State of Hawai'i, Department of Land and Natural Resources is actually the only legislatively mandated entity with the professional expertise capable of such resource management. It is however, grossly understaffed and underfunded to be able to do the job professionally, especially on the \$1.00 per year lease payment the State now receives. Why would anyone **believe that a professional carpenter could perform brain surgery** and succeed? Astronomically, the UH/IFA is defiantly among the best in the world but it is not the best **resource manager for the job of protecting Mauna Kea.**

#### Is Astronomy a Clean Science?

Mauna Kea is one of the principal aquifers for Hawai'i Island. Although by industrial standards astronomy is considered a clean industry, it is not without toxicity. In the author's ten years tenure of service on Mauna Kea, there have been instances of toxic spills on this sacred resource. Others have shared their experiences with the author regarding many toxic spills which include but are not limited to mercury spills, ethylene glycol, hydraulic fluid, diesel fuel and sewage spills. Most recently, while the W.M. Keck Observatory was digging and laying forms for their outrigger project, the author witnessed

4

leaking puddles of hydraulic fluid beneath the huge earth movers which were used for this project.

The percolation rate of the soil of Mauna Kea is approximately twenty inches per hour. There are numerous water caves and underground streams which are relatively close to the

surface of the summit region. These sacred and pristine sites are always in danger of contamination generated by the spillage of toxic substances from the observatories.

There

does not appear to be any disclosure of the use of toxic chemicals in either the 1983 Mauna

Kea EIS/Master Plan or the new Master Plan regarding the use of these toxic substances.

if there is no disclosure then how will the observatories be regulated to insure compliance

with the National Environmental Policy Act and State Environmental Protection statutes.

The Mauna Kea Anaina Hou is deeply concerned for the health and welfare of the

people

of Hawai'i, the sacred ocean as well as the healing waters of Mauna Kea.

### **The Mo'olelo of Kanekawaiola and Poliahu:**

The God Kanekawaiola whom is revered in the traditions as the creator and protector of all fresh water, holds a significant place in the oral history of Mauna Kea and for the "Waters of Life" generated there.

The Goddess Poliahu, although best known for her snowy essence and bodily forms is also of the sacred waters of Mauna Kea. Oral traditions indicate that many people have gone and continue to go to Mauna Kea to harvest the healing waters, snow and ice of this sacred place. Oral histories discuss the many underground, inland, shoreline and deep ocean waters that originate atop Mauna Kea.

### **The Protection and Preservation of Mauna Kea:**

The Mauna Kea Anaina Hou firmly believes that the protection and perservation of this sacred resource can be realized if the following criterion are implemented.

1. No further development or expansion on Mauna Kea should be allowed.
2. The control of Mauna Kea inclusive of the management, protection and enforcement responsibilities must be taken out of the hands of the UH/IFA and redirected to the Department of Land and Natural Resources of the State of Hawai'i.
3. A fair percentage of the observing time allotted to the UH/IFA by each observatory should be resold by the observatories and earmarked for a special fund and the cash value redistributed for the following purposes.
  - A. To fund various programs within the Department of Land and Natural Resources:
    1. State Historic Preservation Division:  
5  
A. The History and Culture Branch i.e., for die Burial Sites  
Program and a Special Mauna Kea Management and Education Program.
    - B. The Archaeology Branch
    - C. Chairman's Discretionary Fund

The Mauna Kea Anaina Hou believes that we have developed a plan that would receive broad based support and would fulfill the following criteria

#### **Criteria:**

1. Provide sustainable funding for the protection and preservation of Mauna Kea - TheSacred Resource.
2. Create educational opportunities for Hawai'i's 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 Scientific-Astronomical community with the additional time to focus on what they are best at - astronomy.
6. The satisfaction of the various user observatories at no extra 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 Hawaii's children.

## **Implementation**

**1. Providing Sustainable Funding:** Through the re-allocation and re-apportionment of some of the observing time currently allotted to the UH/IFA. This would provide a conservative\* revenue stream of \$5,000,000 annually. This would be accomplished by reallocating the 10-15 percent observing time given annually to the UH/IFA and re-directing 80 percent of this time towards the implementation of this plan. The implementation of this plan would be accomplished through the creation of a Mauna Kea Management entity located within the State Department of Land & Natural Resources' Historic Preservation Divisions' History and Culture Branch. *\*(The Keck Observatory cites operating costs at \$60, 000 and the Gemini Observatory cites operating costs at \$30, 000 per night respectively. This totals \$21,900,000 for the Keck and \$10,950,000 for the Gemini).*

**2. Creation of Educational Opportunities:** Through the assessment of the educational needs of Hawaii's diverse community and the effective networking with various educational organizations such as the State Department of Education, the

University of Hawaii and other private universities, this would be inclusive of the immersion schools as well. sectors of the tourism industry could also be included in this educational effort with regard to this most sacred resource.

**3. Increased Public Safety:** This would be accomplished through the granting of enforcement powers to DLNR personnel within the new management entity in addition to other duties set forth in the job descriptions for these new positions. These other duties would also require the protection of cultural, historic and religious sites as well as natural resources and environmental management. Training in dealing with medical and other emergency situations could also be provided for.

**4. Reduction in Overall State Liability:** The liability of the State of Hawaii would be reduced due to the careful and professional management by the agency principally and statutorily responsible for this task. This agency, the DLNR, is by far the most qualified resource management entity in Hawaii. The inability of the UH/IFA to adequately manage this resource over the last thirty years resulted in numerous violations of Federal and State laws, which expose the DLNR and the entire State of Hawaii to possible litigation.

**5. Providing the Astronomical Community more time to do Astronomy:** The creation of the new management entity within the DLNR would allow the scientific community to better focus its time, effort and resources toward its primary objective.

**6. Satisfying the Users:** The implementation of this plan would not require any additional cost to the respective governments, which currently make up the astronomical community on Mauna Kea. It would only reduce the time allotted to the UH/IFA

**7. Insuring Compliance:** The new management entity within the DLNR would be empowered to enforce compliance with applicable Federal, State and County laws.

8. Creating a Permanent Venue for Involvement: Through its educational programs and community consultation, the management entity of the DLNR would provide for enhanced Native Hawaiian and community involvement.

9. Insuring Restoration: The implementation of this plan and the creation of the Mauna Kea Management entity within the DLNR, coupled with a reliable funding source, would be sufficient for the care of this sacred resource from the era of sustainable management to the full restoration of Mauna Kea. The vast resources of Mauna Kea have been neglected through years of mismanagement and gross under funding. This sacred resource, given perpetual funding and professional resources management, will be restored for the benefit of Hawai'i's children and the world.

### **Proposed Budget:**

#### **1. Personnel**

A. 10 full time Mauna Kea Management Specialists 1 Command Post Position, 2 Patrol Positions on day shift. 1 Command Post Position, 1 Patrol Position on night shift. Approximately \$40,000 per year plus \$30,000 in associated benefits. Cost for management specialist: \$700,000 per annum

B. Mauna Kea Management Program Director  
1 Position @ approximately \$50,000 per year plus \$40,000 in associated benefits.  
Cost for Program Director: \$90,000 per annum.

C. Secretarial Support  
2 Positions @ approximately \$25,000 per year plus \$15,000 in associated benefits.  
Cost for Secretarial Support: \$80,000 per annum.

D. Total Cost for Personnel

|                        |                  |
|------------------------|------------------|
| Management Specialists | \$700,000        |
| Program Director       | \$ 90,000        |
| Secretarial Support    | \$ 80,000        |
| Total Cost             | <b>\$870,000</b> |

#### **2. Equipment:**

A. Automobiles  
2 Special Utility Vehicles with four wheel drive capability @ \$35,000 per.  
1 Mini Van with seven passanger capability @ \$25,000 per unit.  
Cost for Automobiles: \$95,000 over the life of the warranty of the vehicles.

B. First Aid Equipment Estimated cost for associated first aid equipment: \$7,000

C. Flashlights Estimated costs for flashlights :\$3,000

D. Safety Clothing Estimated cost for safety clothing: \$5,000

E. Total Equipment Costs: **\$110,000**

#### **3. Communications:**

A. Two-way radio communications system 5 hand held two way radios with back up batteries and chargers. Installation of command post base radio dispatch system Labor associated with installation Service contract for maintenance Cost for two-way radios: \$15,000

4. Office:

A. Office Equipment and Supplies

5 Work Stations @ \$5,000 per station

Desks, Copier, Fax, Office Furniture, Printers @ \$20,000

Phone System @ \$3,000

Office Supplies @ \$3,000

Cost for Office Equipment and Supplies: \$31,000

5. Utilities:

A. Phone and Electric

Phone @ \$1,000 per mo. or \$12,000

Electric @ \$1,000 per mo. or \$12,000

Cost for Phone and Electric: \$24,000

6. Estimated Budget Total:

|    |                             |             |
|----|-----------------------------|-------------|
| A. | Personnel                   | \$870,000   |
| B. | Equipment                   | \$110,000   |
| C. | Communications              | \$153,000   |
| D. | Office                      | \$31,000    |
| E. | Utilities                   | \$24,000    |
| F. | Total Estimated Budget Cost | \$1,050,000 |