



“I believe totally in getting the new telescope built on Mauna Kea. Our ancestors studied the heavens. Now a new generation of Hawaiians

can have the opportunity to advance what they discovered. A telescope that can accomplish this maintains the sacredness of the mountain. With this and in other ways, we need to be open to the future to carry us forward to the many tomorrows yet to come.”

– **Leimomi o Kamehae Kuamo'o Mo'okini Lum**

The Kahuna of Mo'okini Heeiau



“The historic legacy of Mauna Kea must continue its contribution to scientific knowledge.”

– **Judge Walter Meheula Heen**

First Director of the Office of Mauna Kea Management; former OHA Trustee



“I'm very proud to identify myself as a Native Hawaiian. At the same time, I'm also a scientist, I'm an astronomer and I believe that these two aspects

of me can coexist. And I believe that astronomy and the culture can coexist on Mauna Kea.”

– **Mailani Neal**

Native Hawaiian Astronomy Student; founder of We Support TMT petition



“As a Native Hawaiian, I believe Mauna Kea is a deeply spiritual place. We just need to have the collective will to share the Mauna.”

– **Kalepa Baybayan**

Master Navigator and Captain



**IMUA
TMT**

Imua TMT supports having the Thirty Meter Telescope in Hawai'i on Mauna Kea.



Many questions and concerns were raised about TMT and unfortunately, rumors and misinformation are also circulating. Imua TMT wants you to know the facts.

Imua TMT is a Native Hawaiian-led community organization advocating for the construction of the Thirty Meter Telescope on Mauna Kea. If you wish to hear from Native Hawaiian supporters of TMT, please email Imua TMT at imuaTMT@gmail.com and we will be happy to arrange a Zoom discussion.



How Hawai'i Benefits from TMT



"We support astronomy in Hawai'i as a clean, sustainable industry. The best astronomy on the planet is from Mauna Kea. Astronomy is a

part of our stargazing, navigating heritage throughout Polynesia."

– **Malia Martin**
Founder, Imua TMT



"I think telescopes maintain the sanctity of the mauna, worshipping the sky through observation and servicing a goal of bringing

humankind closer to understanding creation of life in the universe. It isn't traditional but neither were the ahū erected on the mauna, which didn't diminish their sanctity to those who built it. It isn't Hawaiians versus desecration. It isn't a war on culture and science. It isn't an issue where only Native Hawaiians get to have a say because we are no longer the only ones who live here."

– **Kauionalani Onodera**
Mechanical Engineer



"I am in support of TMT and I can't wait to take my kids up there to look at the stars."

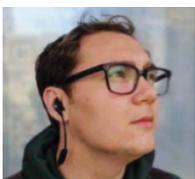
– **Ikaika Kamaiopili**
Native Hawaiian TMT Supporter



"I see Mauna Kea as a special place that allows us to understand and study our origins. As one's origin and genealogy are critical aspects

of Hawaiian culture, I view the pursuit of astronomy on Mauna Kea to be a beautiful blend of culture and science."

– **Heather Kaluna**
Astronomer, UH



"He kanaka 'ōiwi au ā me kāko'o au i ka 'ohe nānā kanakolu mika. I am a Native Hawaiian and I support the TMT."

– **Naea Stevens**
Native Hawaiian

■ **Educating Hawai'i's Keiki** – TMT launched The Hawai'i Island New Knowledge (THINK) Fund in 2014 to better prepare Hawai'i Island students to master STEM and to become the workforce for higher paying science and technology jobs in Hawai'i's 21st century economy. For the past five years TMT has made an annual contribution of \$1 million to the Fund. To date, through the Hawai'i Community Foundation and Pauahi Foundation, TMT has provided over \$5.5 million for Hawai'i Island students, their families and teachers.

■ **Paying Rent** – Since 2014 TMT has paid \$300,000 in lease rent. This will increase throughout construction to \$600,000 when the structure is built, \$700,000 when the instruments and mirrors are placed, and \$900,000 in the 10th year of construction. After that, TMT will pay \$1 million a year for the 50 years the the telescope is in operation.

\$800,000 of TMT's \$1,000,000 annual rent will go directly to the Office of Mauna Kea Management, which is responsible for enforcing the telescopes' leases, protecting Mauna Kea's environment, and preserving cultural sites.

■ **Native Hawaiian Programs** – 20% of TMT's annual \$1M lease rent will go to the Office of Hawaiian Affairs for the benefit of the native Hawaiian population it serves. \$250,000 of TMT's \$1M annual contributions to the THINK fund goes to the Pauahi Foundation, which provides college scholarships exclusively for Native Hawaiian students.

■ **Diversify the Economy** – TMT will bring hundreds of millions of dollars in construction revenue for Hawai'i-based companies. TMT will create 300 union construction jobs. TMT will allow the University of Hawai'i to attract billions of research dollars. TMT will revitalize the astronomy sector, ensuring future large-scale diversification of our economy.

■ **Long-Term Jobs on Hawai'i Island** – once completed, TMT will expend about \$40 million annually in observatory operations and employ about 140 employees. TMT's commitment is to fill these positions with as many Hawai'i residents as possible.

TMT will continue funding the seven-year-old Workforce Pipeline Program, and increase the funding to \$1 million dollars per year. This will continue the programs that will lead to a highly qualified pool of local workers.

■ **Scientific Research and Discoveries** – TMT will add to the best astronomical research in the world that is happening on Mauna Kea, cementing Hawai'i's reputation as the international leader in astronomical science. The University of Hawai'i's nationally recognized Institute for Astronomy will also benefit from the important infrastructure TMT will provide to enhance students' learning by studying the universe.

■ **TMT Support During COVID-19** – TMT donated \$100,000 to the The Food Basket – Hawai'i Island's food bank during COVID-19 lockdowns. TMT provided \$50,000 for an on-line STEM program in collaboration with Hawai'i Science and Technology Museum which launched at Hilo Intermediate School in June. TMT's Hawai'i staff have been sewing masks and donating them to an on-island foster children program!

RUMOR

REALITY

Mauna Kea is sacred to all Native Hawaiians

Any claim that Mauna Kea as a whole was sacred to Native Hawaiians was extinguished, as a Hawaiian matter, 200 years ago when Mo'i Liholiho aka Kamehameha II proclaimed "Ai noa", free eating, and broke the centuries old 'ai kapu by eating with his mother Keopuolani and Kuhina nui, Ka'ahumanu. Liholiho and his Kahuna Nui Hewahewa ordered the destruction of the kapu religion and its shrines. Liholiho then defeated the last adherents to the Kapu system at the Battle of Kuamo'o in 1819, ending once and for all any claims of special political status for the Kapu religion as a Hawaiian matter.

Furthermore, as explained by Kahuna Leimomi Lum, a telescope that can advance the celestial studies of our ancestors maintains the sacredness of Mauna Kea, even as a matter of Kapu doctrine.

Finally, there is actually no documented evidence that Mauna Kea was particularly sacred to Native Hawaiians in a way that prohibited digging on the summit or any use at all. Indeed, our ancestors mined rock out of Mauna Kea in an area 100 times the size of the TMT site.

TMT development plan does not respect Hawaiian cultural practices.

TMT site and its vicinity were not used for traditional and customary native Hawaiian practices conducted elsewhere on Mauna Kea, such as depositing piko, quarrying rock for adzes or gathering water from Lake Waiau.

The TMT site is not on the summit ridge which is arguably more important culturally than the plateau 500 feet lower where TMT will be built.

TMT's management plan for Mauna Kea specifically provides for cultural, ceremonial or religious activity.

TMT will block views from the summit ridge of the rising sun, setting sun, or Haleakalā.

One of the reasons for the choice of the TMT site was the fact that it cannot be seen from the actual summit or from Lake Waiau or Pu'u Lili'noe. The view of TMT from the summit is blocked by the northern ridge of Kukahau'ula. Where it would be visible, other large telescopes are already in view.

Contaminants from TMT — whether from construction or the observatory itself — will leach into the island's groundwater.

Hydrologists, both independent and paid to work on the EIS, have determined there is no reasonable prospect of adverse impact on groundwater. TMT will install a zero-discharge wastewater system, with all wastewater collected and transported off the mountain in double-lined tankers for proper treatment and disposal. The closest drinking water wells, at Waiki'i, are 12 miles away and those in Waimea, Hamakua, and Hilo are an even greater distance from the Mauna Kea summit area. The best hydrological data we have indicates that, even if contaminants were released in the summit region, it would take several thousand years to reach any existing drinking water well on Mauna Kea's flanks — a time much longer than natural degradation processes would require to completely break down any potential contaminants.

Hawaiians have not been heard regarding TMT.

There has been over a decade of litigation; two contested case hearings, the second of which lasted 44 days and heard from 71 witnesses; and an entire volume of the 3-volume EIS included letters and other input from many of the opponents (as well as supporters) of TMT. The truth is when pro-TMT Hawaiians speak up they are shouted down by the loud, vocal, minority protesting the telescope.

Mauna Kea is Crown Land therefore descendants living today own the mountain.

The last sovereign, Queen Lili'uokalani, placed all of her property in a charitable trust for the benefit of orphan and indigent Hawaiian children known as the, Queen Lili'uokalani Trust. She herself had no descendants.

It would be better to build TMT in place of one of the existing observatories.

The decision was made specifically to not place the TMT at the site of one of the existing summit ridge facilities. The reason was that doing so would require a large amount of grading, most of it in wekiu habitat, and because the visual impact would be much greater.

Dynamite will be used to prepare the TMT site for construction and TMT will be nuclear powered.

No dynamite will be used in the construction of TMT and TMT will not be nuclear powered. It will draw electricity from the Big Island's grid.

There remain culturally significant architectural sites or protected species at the TMT location.

Extensive environmental impact studies have identified no such areas on the five-acre site. The nearest site of cultural significance is located 200 yards away from the TMT location. Similarly, the wekiu bug — an insect endemic to the region that was once considered threatened (but is no longer) — nests in cinder cones that are not close to the TMT site and, other than on a small portion of the access road, will not be disturbed during construction.



"I'm a Hawaiian, and I fully understand the cultural and environmental effects TMT may have on Mauna Kea. But I also believe

that the scientific, financial, educational, and economic benefits that come with TMT will make vast improvements on the Big Island. Hawai'i can be the front runner for astronomy, something our ancestors always believe in. Imua TMT."

– **Bernard-Benjamin Villa**
UH Hilo, Performing Arts



"If Kamehameha I was ruling Mauna Kea today, he would build a heiau (temple) platform and mount the TMT on it."

– **Peter Apo**
Former Trustee, Office of Hawaiian Affairs



"The TMT is made up of the Pacific Rim nations of Canada, the US, Japan, India, and China. What better purpose can we aspire to than cooperation among

nations, rather than war? And what better place for cooperation than on Mauna Kea, in Hawai'i, the land of Aloha?"

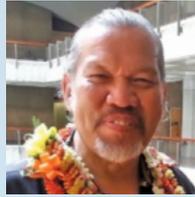
– **Richard Ha**
Hawaiian Businessman



"As a resident of Hawai'i island, and a Native Hawaiian, I believe that our Island provides a living laboratory for science. From mauka to makai

we can access astronomy, volcanology, geology, and marine sciences. We need to be leaders in melding science and culture because as we already know, the Hawaiians had a strong and prospering society before western contact. Science can learn from us, and while we cannot go back, we can move forward together! Just as Hokulea relied on both traditional navigation supported by the instruments of their escort vessel, we need to find a way to embrace each other and become leaders for the world. "

– **Angela Thomas**
Educator from Waimea



"The TMT project is like a search for the aumakua or ancestral origins of the universe. How is this any different from us as Native Hawaiians

searching for own roots in things both natural and spiritual?"

– **Wallace Ishibashi**
Senior Advisor, OMKM



"I am proud that my lineage includes both Native Hawaiian and Native American plus other Polynesian, European, and

Asian ancestry. I am grateful to have been born and raised in Hawai'i with Hawaiian values, thought processes, and traditions. AND I support TMT which does not mean that as a Native Hawaiian, all is forgotten and forgiven."

– **Jacqui Hoover**
Executive Director of Hawaii Island Economic Development Board



"The TMT is poised to make the most important discovery of all time: life on another planet. It'd be cool to

give that planet a Hawaiian name. A name that will spread the Hawaiian language to every corner of the globe and into perpetuity."

– **Chris King**
Computer Engineer



"The reason we support TMT is because we believe it is being done the right way. We really need these STEM jobs and Hawai'i Island is so limited.

We told them that we needed more funding for STEM education to pay their fair share of rent and they listened. They followed through."

– **Amber Imai-Hong**
Hawai'i Space Flight Laboratory



"I am a proud Hawaiian, I have true Aloha for our people of Hawai'i and the 'Aina. At the same time, I believe our world is ever changing, and

so must we. I believe in the importance of education, knowledge, and cultivating a desire to learn in our Keiki. Years ago, we arrived to these great lands, guided by the stars. Let the heavens guide us now. I support TMT."

– **Melanie Long**
Hawai'i Business Owner

"It will afford me unfeigned satisfaction if my kingdom can add its quota toward the successful accomplishment of the most important astronomical observation of the present century and assist, however humbly, the enlightened nations of the earth in these costly enterprises."

– **King David Kalākaua**
on Hawai'i's role in the observations of the Venus Transit of December 8, 1874



imuatmt.org

<https://tinyurl.com/ImuaTMTpanels>



"TMT will bring millions of dollars in investments and jobs to Hawai'i, while simultaneously ensuring that Hawai'i, its people,

and our ideas remain at the forefront of human scientific endeavor."

– **Samuel W. King II**
Attorney