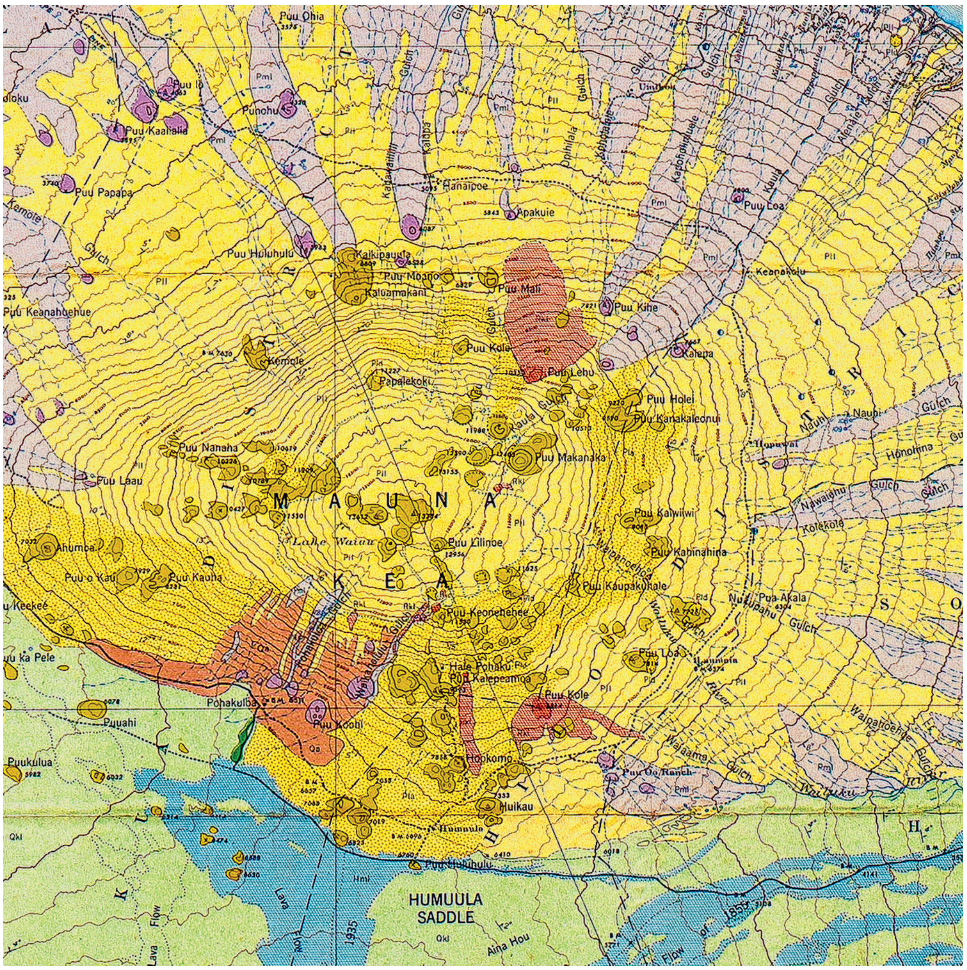
Report of the Hui Ho‘olohe

March, 2018



HE MOKU HE WA‘A, HE WA‘A HE MOKU

EnVision Maunakea

The Hui Hoʻolohe

Kuʻulei Bezilla, Michael Chun, Grant Hill, Noe Kalipi, Reggie Lee,
Don Mitchell, Kīhei Seto, Kanoa Withington

The Facilitators

Wally Lau, Clarysse Nunokawa, David Rodman

The Working Group

Gregory Chun, Kaʻiu Kimura, Susan Maddox, Stephanie Nagata, Doug Simons

Cover image: detail from Stearns and MacDonald, *Geologic and Topographic Map of the Island of Hawaii (1945)*

Other images: Hui Hoʻolohe

v 1.8

Contents

Who We Are and What We Did

We are the Hui Hoʻolohe, the "Listening Group," and this is what we heard and read from more than a hundred Hawaiʻi Island residents during 15 ʻaha kūkā between March and December, 2017.

We listened to Hawaiian cultural practitioners, ranchers, business people, scientists, hunters, recreational users, artists, kūpuna, ʻōpio, Hawaiian Homesteaders, environmentalists, activists, and others; all but a handful were Hawaiʻi Island residents, most of them island-born.

We listened in Hilo, Kona, Waimea, Keaʻau, and Kapaʻau; we received written submissions from Honokaʻa, Hilo, and Volcano.

We mostly listened to older adults, although two ʻaha kūkā were entirely high school students; we received written submissions from sixth graders and UHH students, and some community members.

We invited some individuals and groups who declined our invitations.

We did not turn away anyone who asked to participate.

We are aware that this report is not based on anything like a statistically complete and random sampling of Hawaiʻi Islanders. That was never our intent. Even so, the people we heard from were a diverse cross-section of the island's population.

We haven't quantified anything in this report beyond using descriptions such as "many," "most," "it was rare that," "only a few," and so on. In our internal meetings, it became clear we were in agreement about the themes we heard, and about how commonly (or rarely) we heard comments about particular issues. For example, almost everyone talked about Maunakea's special, sacred and spiritual nature, and how that worked its way into peoples' lives. Everyone described how they had come to know Maunakea. Sometimes these were asides, and sometimes the focus of their narrations. But the same themes emerged over and over again.

Because we are reporting *what we heard,* this report is built on paraphrasings and quotes from the participants. A Working Group member took detailed notes, and we listeners made notes as well. The Facilitators made an audio recording.

We have edited for clarity, because both the transcripts and the audio include the hesitations, repetitions, and self-corrections everybody makes when speaking. Although we will summarize and comment, we mean for the participants to speak in their own voices, so the reader can "hear" them much as we did. In a few places, by way of clarification, we present exchanges between the Hui Hoʻolohe and participants. Some of the quotes are from written submissions.

As a reader, you may encounter statements you believe to be false, or misleading; our kuleana is to *pass along what we heard,* not to judge it. We told all our participants that we would not be making recommendations about anything, although we would pass along any recommendations we heard from them.

We discovered a great diversity of thinking about Maunakea.

As the sessions went on, we were more and more pleased to learn that what we knew about our participants before they started to speak *did not predict what was important to them about Maunakea*.

We were always given shorthand descriptions of who was expected at the ʻaha kūkā. For example, we were once told we'd be sitting with kūpuna, community members, ranchers, and students. At that session we heard about spirituality and how Maunakea transforms beliefs and behavior. We heard about hunting and farming and hiking and how to respect sacred sites. We heard about fire management, the observatories, and the meaning of kapu in the modern world. We heard about forestry, educating children about Hawaiian culture, TMT protests, and playing in the snow.

At another ʻaha kūkā a businesswoman had nothing to say about her business; instead, she told us how Maunakea had been a literal source of sustenance to her family during hard times. A tour guide talked about spirituality. An astronomy student talked about what Maunakea meant for her art, not her astronomy. A photographer talked about conservation, and a conservationist talked about photography. A cultural practitioner supported the observatories, and another did not.

This pattern was always repeated. When we learned that asking who would be coming was pointless, we stopped. We began to assume that every ʻaha kūkā would surprise us, and most did. No group was like any other. Some delighted us, some saddened us, and some made us hopeful. We heard oli, we heard pule in different languages, and we saw genealogical charts and maps. We sat with people in traditional Hawaiian garb. We sat with people in shorts and long pants, dresses and skirts, t-shirts and aloha shirts, sandals and shoes and boots. We listened to people who were unused to public speaking, and to people who were orators. We heard people who spoke softly and cautiously, and we heard people who spoke confidently, sure of what they wanted to tell us.

Here's what we want to tell you: *there are more voices out there than we knew, and more probably than you know. Some are soft voices that haven't been heard over the past few years, and some are louder. But they all have important things to say about Maunakea*.

Come with us and listen to them.

We Begin

March 18th, 2017. Lili'uokalani Interpretive Center, Kona.

None of us knew what to expect.

That morning we arrived from Hilo, from Kona, from Kohala, from Waimea and from Honoka'a. We had met several times, we had made plans, and we had talked about how we hoped the first 'aha kūkā might unfold, but none of us really knew what would happen in the next couple of hours.

The room was light and airy. There was coffee, water, and food. We began arranging chairs in a semi-circle, setting up the easel for notes, organizing the audio recorder, hanging a large map of Hawai'i island, walking around. Most of us were a little nervous.

The first participant to arrive was a 94 year old Auntie who quickly engaged several of us in conversation. We were shy, but she was not, and there was lively conversation about Kona versus Hilo, being old versus being very old and the classic, *kids today*! Others arrived. Some were known to the Facilitators, some to the Working Group, and some to the Hui Ho'olohe. We ate and drank coffee or water, and chatted.

People chose where to sit. As would happen in all the other 'aha kūkā, participants mixed themselves with our group. Notebooks were taken out of bags; some people had laptops.

When everyone was in place, Wally Lau (a Facilitator) asked for a pule and Auntie said she would give one. We stood and joined hands, received her pule, and sat back down.

We went around the circle, introducing ourselves. Most people also took a moment to talk about their connection with Maunakea.

Our guests included the kupuna Auntie, another kupuna, retired from a State career, a professional with long cultural practitioner experience, a person who grew up on the mainland but came to attend UH Hilo, a rancher, and a cultural consultant.

Wally gave the introduction. "It's going to be interesting to hear your vision for Maunakea," he said, "what you feel about Maunakea, the whole mountain from top to bottom, to understand your vision of Maunakea's future."

"There's no right or wrong here," he continued, "and EnVision Maunakea is not about TMT or astronomy or only the summit."

He described EnVision Maunakea's three-part structure:

— the Hui Hoʻolohe, who are volunteers from different parts of the island, different communities, different professions and backgrounds, and are here to *listen*,

— the Working Group, who originated EnVision Maunakea and guide its process, and

— the Facilitators, who assist with displays and note-keeping and keep the civil conversation going.

"We're looking for common themes," Wally said, "for narratives or storylines coming from a wide range of people," and went on to explain that our task will be to accurately report what we hear, and not to make our own recommendations, although we will pass along recommendations our participants make. The public report, he continued, will go to state and local government officials, community organizations, to whoever can benefit from it.

Wally told the participants that we would be making an audio recording for our own use—one which would never be made public, just as our report would never include any names.

"We don't think this is the magic bullet to fix Maunakea's problems," he said, "It's about a community coming together to have a civil conversation."

Then Greg Chun, a Working Group member, spoke. The kind of meeting about to happen, he said, had its origin two years ago at the height of the TMT-related tumult.

"April 26, 2015," he explained, "there was a public hearing at UH Hilo auditorium. There were hundreds there who wanted to say something—mostly against the TMT. As is so often the case, there were a lot of people yelling at each other for three minutes at a time. There was no conversation, no discourse and no solution building."

Greg said it became a personal issue for him half way through the meeting when someone got up to speak and he recognized the voice. It was one of his uncles; his wife's

kupuna. Greg hadn't known he was there. As Uncle began to share his mana'o, Greg could see he was nervous and uncertain. His position was not clear until the end, when he said he just wished we could listen to each other more (there were a scattering of snickers from the audience) to find a way forward (more murmuring from the audience) and at the end he said, "It's my hope my mo'opuna one day will have a chance to learn from the observatories." Not from TMT, but he wanted his mo'opuna to benefit from the use of the mountain (more snickering, more buzzing, more murmuring).

Among the next several speakers, some made snide references to Uncle Paul. Later that day, a kupuna and his wife walked out without testifying because of the atmosphere in the room.

"We cannot let our conversations get to a point where we treat others, especially kūpuna, like that," Greg said, which is why he and the others in the Working Group started putting this process together. Friends of the Future (a non-profit organization) took a lead role.

As Wally had, Greg stressed that the process was not about the TMT or any other project. It was about all of Maunakea—not just the summit.

Finally, David introduced the 'aha kūkā protocol.

"This process is grounded in aloha, he said, "with respect for your mana'o, your time and each other's time and energy. We want to make sure we really hear you, and we'll try not to interrupt you."

He asked the participants to think about

— what their relationship with Maunakea is,

— how they see it unfolding over the next several decades and even generations,

— what opportunities they see for collaboration and co-existence with others who don't share their views,

— and about what other people or groups we should invite.

David brought out a koa bowl, the "talking piece." He said, "If you are holding the piece, you talk, and everyone else will respect and listen to your mana'o. If you are not speaking, then we ask you to really receive what the person with the talking piece is saying. Please don't spend listening time rehearsing what you're going to say when it's your turn. And we ask that no one interrupt another."

He said there would be no pressure to speak. Anybody who wants to speak just waits until the person speaking has finished, then asks for the talking piece. The Hui Ho'olohe and the Facilitators might ask questions to clarify something a participant has said, but otherwise will not speak.

"You can share your mana'o freely without concern that something may come back to you," he said, repeating Wally's assurances that no one will be identified by name in our report.

And then it began.

The participants began by talking about their backgrounds, especially where they had been born and raised (various places on the Hawai‘i Island, Japan, but raised in Waimea, a small town on the East Coast, and O‘ahu) and then went on to give their mana‘o. Some focused on David’s four questions, and some did not. Everybody took the talking piece more than once. Some talked about issues that bothered them, and some talked about issues and courses of action that they favored.

On that morning in Kona we couldn’t have known that much of what we were about to hear would be echoed in other sessions by other voices, in other words, but that’s what happened.

Here’s a sampling of what the participants said.

A rancher pointed out that a person’s perspective on Maunakea depends on where the person lives.

> — When you live there, you have a different perspective of the mauna. It is not magical. It is real cowboys and families living real lives. You see how to encompass everything around from ma uka to ma kai and how it affects everything.

Another person brought up an issue we encountered at other sessions—is ethnicity more important than being *from* or *of* Hawai‘i?

> — My grandparents immigrated from Japan in 1800s and my paternal grandfather was fisherman in Kaka’ako. I grew up in a Hawaiian community with Japanese, Chinese, and Koreans. I’m not kanaka maoli by koko [blood] but I’m kanaka by mana‘o.

Another person chose to talk about the legendary past, using powerful symbolism:

> — I’ve heard stories of how my ancestors came on canoe, the mountain tops seen out of the clouds before land, and then disappearing. While sighting they marked areas they saw as ko‘a [shrines]. They wanted to thank God for finding land—Maunakea, Mauna Loa, and Hualalai. Walking along the po‘o [summit] of Maunakea, the prayer the ancestors offered was the same prayer I offered today. The three mountains were an ahu for the ancestors. Maunakea is like the body. The po‘o of the body is God’s house. The mountain is the same way; its veins carry fresh water from Lake Waiau down into the forest.

Here's a sampling of short observations different people made, each foreshadowing a theme we would hear many times:

> — When you travel and meet people outside Hawai'i, the conversation often mentions Maunakea, and you feel pride.
>
> — We need to get real contributions of science and real responsibility for caring for something that is sacred. It is the value we give it as sacred that sustains us.
>
> — I value the freedom to go whenever I want, no hours or restrictions. I'm happy because our family can get up in the morning, look at the mauna, and decide—is it a good day to go up, or hike on Mana Road and see the koa? I wouldn't want to lose the ability to drive.
>
> — The young generation picks up snow in a truck and takes it down from the mauna to build snowmen for fun. They don't see any connection between that action and respect. Education is needed.

From the next comment we began to understand how complex "management" complaints would be. We would learn that, to many speakers, the concept of management involved "mālama" more than "regulations."

> — Management has been an issue. What's happening is like somebody poked a hole in 200 years of history and lit a match. Greed, selfishness, and ignorance are not exclusive to any one culture, gender…graciousness and kindness are the opposites. I hope we can move with graciousness and kindness to positions where future beneficiaries can continue to benefit. The real gift is our people. I have grandchildren of 15 races.

One speaker told a story that amused us—yes, there were times when everyone in the room was laughing—but spoke to deeper issues:

> — About twenty years ago, some students from Moloka'i visited the island, and I asked them "When you came here what did you like about this island?" They replied, "You guys got Walmart!" I talked with them about what they had and how precious it was. Once it's gone, it cannot be recaptured. We understand about progress, but you can never get that back. What have we learned from the past? Is it so hard to change? We have to be very careful how we change it.

And finally,

> — We throw around "aloha" and "mālama" but do we really understand what they mean? Mālama ʻāina, somebody says "yes, I do," then throws a cigarette butt out the window. We are all responsible for saying something, learning how to have a friendly conversation. When you see someone throw rubbish, are you willing to say, "I think you threw your rubbish over there?" There is a friendly way to say it: we are all responsible, we all have kuleana to teach. We all have kuleana to mālama. I value the mauna just as it is. Peace on the mauna; you cannot get that at Target.

As we neared the two hour mark, the session became more casual. The talking piece was put aside, and there was general conversation. This was unexpected, but welcome, and it happened at every session after that. It was as though everyone in the room started thinking, "Time to talk story."

A final pule and it was over. Many people stayed for a few minutes—talking, having some water or coffee, eating. Participants talked to each other and to the Hui Hoʻolohe, the Facilitators, and the Working Group. Some of the participants helped fold the chairs and put them away, pack up the food, and break down the displays.

Some of us in the Hui Hoʻolohe took each other aside and said, "It worked. It worked."

And it worked every time after that.

What Maunakea Means

We've already said that one of the questions we asked was "What is your relationship with Maunakea?" By this we meant not only the practical ("I live on its slopes," or "I go up there regularly") but the emotional, the historical, the intellectual and, of course, the spiritual.

The material in this section is based on participants' responses to the question. Not everyone answered it directly, but most people would preface their mana'o by referring to it. Responses tended towards the personal. Participants talked about how they got to know Maunakea, what they learned, felt, and did there, what they valued about it, and what lessons they thought Maunakea has for others. Of course these overlap, and of course people, free to speak as they wished, moved among the topics at will. For us, this was often exciting, and always fascinating.

In the next section we will share what we heard about sacredness and spirituality. We decided to set aside an entire section for this, because those topics were part of *every* session. The distinction between how people think about Maunakea and how they value its spirituality is an artificial one, but we're going to use it here. Few speakers talked about the one without talking about the other. Few talked about "practical" matters without relating them to matters of the spirit, or ethics.

Most participants who grew up on Hawai'i Island offered examples from their youth. For those who came from different islands, first experiences were most commonly in their teen or even later years. For some, the first experience was recreational—perhaps going to the snow, hiking, or hunting—and for others it was for school, or as part of volunteering. Of course some grew up on its slopes. We heard touching accounts of estranged relatives reconnecting on Maunakea, sometimes while hunting, and sometimes while visiting the summit. We were impressed by how powerfully the participants expressed their feelings.

Very few participants first encountered Maunakea alone. In nearly every case, an older person—often a relative, but sometimes a teacher or leader—took them to it. To us, this spoke to the importance of shared tradition and anticipates what will emerge later: it's best for newcomers to be *introduced* to Maunakea by those who know it. This has obvious implications for visitors of all sorts, whether tourists or local residents.

In the next set of comments we heard something fairly common—experiencing snow for the first time—but note that the speaker immediately moved on to talk about the lower slopes and tree planting, which she felt as a spiritual experience. We have practical mālama 'āina work, an introduction from an actual Maunakea resident, a student admiring what Maunakea offers to teach him, an astronomer whose significant reaction to her first summit trip didn't involve an observatory, and a student who got sick there.

> — There were a lot of firsts for me on Maunakea. It was the first place I ever touched snow, saw snow, and walked through clouds. I had the opportunity to go to the lower slopes of Maunakea and plant koa trees. Driving up through a really old koa forest was a spiritual experience.
>
> — My first introduction to Maunakea was a trip with my father-in-law, who cattle ranched on leased land on Mana Road, and heard his perspective.
>
> — My relationship with Maunakea is pretty long standing. I've been going there to work since middle school. In elementary school we stayed in the cabins at the base to do astronomy.
>
> — I went there and weeded plants around Hale Pōhaku, where there are a lot of invasive plants.
>
> — The first time I went to Maunakea to observe, it was one of the most dramatic experiences of my life. There was nothing precise about what happened, or what I discovered. It was actually just going outside and being extraordinarily cold, being with the sky and the mountains. I had a feeling that the universe had given me a gift.

— I came to Maunakea 15 years ago as an undergraduate student for observation. The first night was an amazing experience, even though I got sick from the altitude. The stars and galaxies are amazing and connect you to the universe. The mountain is the connecting point between the earth and the universe.

One participant's youthful interest in technology eventually brought him to Maunakea.

— Growing up in Kohala, the mountain was just around the bend. It's so majestic, it's hard to express how wonderful it is. It provided opportunity for me; we didn't have much money, and I was eventually from a broken family. It gave me an opportunity to work in a field I love. I fell in love with technology at 9 years old when I saw my first computer in the classroom. That led me to the mountain; [a technology career on Hawai'i Island] is not possible without astronomy.

One encountered it entirely alone, with no preparation, which taught him an important lesson. "Otherwise your work won't be true to that place," is not something he learned in graduate school, but that understanding came to guide his research.

— I worked on Maunakea in 2006 as a PhD student studying the wēkiu bug. This was the first time. I had no introduction and no training. I drove my Harpers rental up Saddle Road and when I arrived at Pu'u Huluhulu it was snowing on the mountain. I had no idea how big Maunakea was. The road was closed so I looked at the ground and began becoming familiar with it. I learned you have to center on a place and feel the connection, otherwise your work won't be true to that place.

One person reminded us of how it was in the past, when a trip to the summit meant walking there. He was not the only person who knew of the famous mayonnaise jar. Perhaps someone reading this knows where it is.

— What I will share today is somewhere before the end of high school, when Maunakea did not have road past Hale Pōhaku—it was a walking trail. One time my older brother and younger sister and mother parked our pickup truck at Hale Pōhaku and hiked. It's really amazing now that we look back on it, how we did it. My brother and I went to the top and bypassed Lake Waiau; we saw my mother and sister behind us. We made it to the very top where there was a mound of rocks about three feet high, with a stick in the center and a glass mayonnaise jar with a tiny book and a pencil. We followed what everyone else did, we signed our names, put the book back in the jar, put the cover back on and

went back down. Mom and sister were still coming up and we all went back. The trek from Hale Pōhaku and back was done in 6-7-8 hours, walking by the path. Years later at Hale Pōhaku, I asked the Ranger about the jar; he heard about it, but no one knows where it went. The jar may still be around somewhere, maybe in someone's closet.

Another person related Maunakea to where he was and what he did as a child; it was later that he made the connection between where he played and Maunakea.

— I grew up swimming in the waters of Keaukaha, which come from there. The lava flow that came from there once upon a time is where I used to play. My relationship was there, not just the top; it was the whole thing. More people have a relationship with the mauna than they realize. My first time up felt like a journey visiting the kūpuna of the water I swam in and the land I played on. It was almost a back in time kind of thing.

Although a few participants certainly were aware of Maunakea, and sometimes went to it for fun, it played no important role in their lives. It was just *there*—until something happened that made them begin thinking about it in complex ways.

— I really never thought about Maunakea until I moved here [from another island]. There was a mountain with snow on top, that was it. The snow, the observatories and playing with snow; it was great. It really wasn't until all these things unfolded about TMT that I felt, this is something very significant. I still haven't grasped everything. When I point at Maunakea on the map, you know, when I look at it that way, I don't really feel it. But if I close my eyes and try to visualize Maunakea, I see an entirely different picture of it. Maybe that would be a good way and then I can get a better feeling of the significance of myself as person, as a human being and Maunakea because I don't own even a piece of a cinder up on Maunakea. It's akua who own the mountain and so that's what I want to come here to share and to receive. That's why I'm here.

A businessman was drawn to it by his young son, and set up what he thought would be a routine trip to the summit. And then it became something else.

— My 13 year old son, for his birthday, wanted to see sunrise on the Maunakea summit. I have no idea where he got the idea, maybe from his friends or at school. He said, "I want to see it for myself." So for the first time, I got a 4-wheel drive vehicle, got up at 3:30 am in Honoka'a and made the drive up. We sat at the

> VIC until just before sunrise and then went to the summit, right before it cracked the horizon. Just then we heard a conch shell. Someone was doing a protocol and chanting the sun up that morning. There were a bunch of others there who also decided to see the sunrise that morning. That was the whole thing, standing there next to the observatories, listening to the conch. I get chicken skin even now. The observatories didn't take away from the experience. But that protocol made that experience far greater than just watching the sun coming up, and my son still recalls that morning. Bringing in the entire mountain, we took Mana Road to go back home. It was the most clear, beautiful day in years. It is one of those experiences he will remember for a lifetime and that I remember very well myself.

UHH students, like college students everywhere, often decide to do something *just because*. This student meant to go to the snow in the middle of the night, and found something more than snow.

> — My first time at the mountain was an 11 PM compulsive decision between me and my friends to go see snow. We didn't make it to the summit to see the snow, since the roads were closed, but instead laid on the ground (a mile up the road from the VIS, because it was how much we were able to hike) and looked at all the stars I had never seen in my life. In that moment, when you look at the clearest sky in the world, is when you can feel the most how vast the universe is. Some of my friends expressed their feelings of insignificance, but to me it was inspiring. All of time and space, all of the galaxies, worlds, stars, elements, came together and somehow created consciousness so that I (with the universe in my atoms) could look back at the universe and see that we all came from the same Big Bang.

A rancher spoke of the ways that young people will be able to choose what their relationship will be and how this even applies to young people who grew up on the mountain.

> — I'm from a ranching family. Growing up, we ranched on the mountain. It is my home, enjoyment, fun, I look forward to camping. My young daughter grew up riding and hunting. On trips away from home, when I'm returning I see the mountain through the clouds and have a feeling of being home. My wife was brought up on the slopes on the other side. I think about what my daughter's enjoyment will be but that's up to her. We need to be respectful of how people choose what their connection will be. Everyone deserves their connection. Ranching, astronomy,

let's do it together. I do connect with protectorship, weather, earthquakes.

Participants told us they both learned about the mountain and about themselves, and some of what they learned they believed would be of value to others. Some of this material is in the next section. Here are some quick takes.

— I learned from my experiences up there, whether planting or weed control, I learned to care about the mountain.

— If I'm up there looking for quiet, I can find a kīpuka and make a quick connection with nature. And nights, where I can go and be cloaked in darkness and silence.

— It's so clear. The whole sky is alive.

— It's like an ecological university for me.

— When I hear the word Maunakea, I don't think about economics or astronomy as much as the whole mountain.

— Whenever an attitude adjustment is needed, we either go to the beach or mauna.

— Maunakea brings us back to nature. We have busy lives, so we need to take a moment to remind ourselves of it, to take the time to enjoy the sunset, the fresh air, the beauty around us. I appreciate how the ʻāina is a nature lab from the top down to the sea.

— My older brother goes up to Maunakea on his own. He's a doctor in Hilo, and has a stressful job, but that's his place of refuge. He goes up and spends time de-stressing there.

Most commonly, participants talked about feelings of peace, and that almost always came from the stillness, the beauty, and the height. In some cases, though, people felt energy, a sense of history, of a bonding and, sometimes, healing.

Almost no hunters spoke explicitly of hunting, about their quarry, about the hunts themselves. Instead, as this speaker did, they spoke of *how it was* when they hunted, and what that did for them.

— I used to hunt birds and sheep on Maunakea. I'm familiar with the interior of the mountain. Whenever we went hunting and it was time to eat lunch or rest, I felt at peace with the mauna. Being up high and seeing Waimea at the bottom—that was a time of reflection and quiet, with no noise except the birds. For

me, that was an experience of being grounded. What I got from the mountain was that feeling of peace. I think that's what I get. I'm not sure others would feel the same thing. It's powerful. It's different from just driving across the Saddle.

— My connection besides hunting is a very spiritual one. If you look at all the challenges not only here in Hawai'i but worldwide, you see that somehow there's a spiritual disconnect. Places like Maunakea are very important spiritual centers.

Many participants spoke of the mountain as a refuge, but for this speaker both the mountain itself and the act of hunting itself were refuges. By the time we were listening to him—in August—we had become used to hearing people begin talking about one thing, shift to others that might seem at first unconnected, and then tie them all together. Pay attention to this speaker as he moves through the complexities of not only his life, but what's happening on the mountain, and finally derives lessons for the rest of us.

— [In Kona] we used to live off the land. I never knew anything about Maunakea. All I wanted to do was surf. My father said, "Try eat the surfboard. No can. Go to school, study and bring home fish." We would go hunt sheep, pheasant and turkeys. Maunakea was our safe haven. Our parents were rough, so we went hunting up Maunakea. I went to Vietnam. When I got back, I started hunting again and the mountain was a safe haven again. We used to talk story, watch sheep go down the mountain, look down at Waimea. My friend had a home for pheasants. All the 'āina had so much to offer, and they keep taking it away, taking it away. It is so powerful for people. The younger generation is learning Hawaiian, which is power for them. Share, share, always share.

Finally, a series of thoughts about Maunakea's physical presence.

— I see Maunakea all the time, and every time it stops me in my tracks and I have to appreciate it. It takes me out of my habits: there's Maunakea! It grounds me in my day and in my life.

— I have lived here my whole life except for college. I lived in Ka'ū so Mauna Loa was more my realm. Then, after moving to Waikōloa and going to school in Waimea and spending a lot of time there, Maunakea became kind of like an anchor for me. Wherever I am on the island I can look at it and it feels like home.

— What I value most about the mauna is its presence and how it contributes to my everyday life. If a week had been particularly stressful or negative, I know that when I go up to Maunakea the

> negativity will wash away and make me hopeful for the week to come. This is what I value most.
>
> — I see the mountain as being there not just to look at but to sustain us, to provide food, a place to live, to catch the clouds and provide rain and water to us. At the same time, it is a spiritual place. But all mountains are spiritual. If you lived in Seattle, you would know the people in Seattle, Native Americans, called [Mt. Rainer] Tahoma, the mountain that was God; they looked at it that way. It is not unusual for people to look that way at a great mountain. I have never heard anyone say the ocean is God in that same sense.

Apart from activities like hunting or cultural practices, we heard of several "practical" relationships participants had with the mauna. Some involved mālama ʻāina. Many participants described conservation activities in straightforward terms, but went on to say that acts helpful to Maunakea made them understand and appreciate it more, and even helped *them*. In other words, for these speakers the concept of mālama was complex and not one-way.

> — Being involved youth conservation corps, we did projects all around. Up to Hale Pōhaku putting in fence lines. I think I gained the most appreciation for the mountain and what was up there through those experiences. Getting your hands dirty taking care, planting, putting in fence lines to protect the māmane, protect the silverswords and what's funny is we never got to touch a silversword, we never planted any. I saw some only a couple of years ago during a conservation project with the Chamber when we planted silversword behind the Visitor Center in the enclosure. Fifty-something years it took me to finally plant a silversword and see it growing. That was something.

This speaker, for example, felt as though talking about connections wasn't enough. What's important is to put those understandings to work.

> — Maunakea is a place of connections, micro, macro. It is a huge complex process because people can put things together. We give lip service to connections [but it's something else to] take them on, take them on our shoulders.

For this speaker, mālama Maunakea can put young people on the right path:

> — We need to all get together to mālama. That's missing in today's world. We are looking outside to material things, drugs, and whatever it is. Reconnecting kids back to the mountain—if kids are nurtured, in turn they reset their foundation. Once set

> they can excel at anything, find their kuleana, aloha all things. They will excel in school and in what they do in life to contribute. That's the important part. For me, that's what I see. To nurture that source will help to heal the historic and cultural trauma. It's only through that where we can begin to heal, recognize different sources, take out the political and reinsert the spiritual.

Another sees Maunakea as a source of lessons, guidance for the right paths.

> — The future is the kids; teach them how to mālama and be respectful of other people.

Here are some things participants told us about Maunakea's physical being—what could be seen or learned there besides spiritual matters. Perhaps these are best called "practical" values.

> — One thing I value most is the pristine environment up there. When I think of Maunakea, I think of the very summit, the cinder cones and the shape. I love the wēkiu bug and what allows it to continue to persist because there are no invasives up there yet. Different insects and arthropods are unique and special. They are native to the harsh environment. I value those interactions.

Here we see literal sustenance coming from Maunakea. This speaker was one of the few who mentioned the practical side of hunting, that it provides food.

> — My father lost his business in the 1960 tidal wave. Our family was really poor. He fed his family by hunting pigs and birds from Maunakea. The mountain actually provided for our family; it was a resource. When he started a new business, Maunakea was his place of refuge.

Looking to the future for her children:

> — I am a scientist by background and I feel a connection to the mountain. Maunakea is the most incredible geological feature in the world. It has a spirit that cannot be diminished. It is our loss if we disconnect from it. The Maunakea plants and animals were here long before we came. Modern people look at all kinds of resources to make life better for themselves. If I don't take care, those resources won't be here for my children.

We were told about family connections, annual domestic rituals, and end of life rituals.

— Our family had a contract with an observatory for many years to clean offices in Waimea and observatories at the summit. So we got to see all the weather (wind, rain, snow). That means the summit and observatories are significant in our family's genealogy.

— My birthday gift is to go around the mauna. Every time is like the first time because there's always something new there. I value Maunakea because it is our home.

— I tell guys, you stick me up on the mountain, Mana Road, up by Hale Pōhaku or Keanakolu. You can leave me up there. I feel comfortable there. I tease my wife that's where I want my ashes.

From three high school students:

— I like to go up there to watch the sunrise and sunset. The scenery, that's what I really like to enjoy—the quietness, to think about your life and what you're going through. It really helps you think and it's really pretty.

— I think it's also a safe place. When we ask our parents if we can go up there, they're not hesitant to tell us yes or no—they know it's a safe place and a safe environment for us to go alone. The people that go up there go with the intention to have a good time, not cause any problems.

— I think what I like most about it is the sky, and the stars are really beautiful. The air is—well, everything about the air up there is just beautiful. It feels so different, like with Hawai'i and its many different worlds. It is wonderful to go up there…it is awe-inspiring.

A number of participants told us that, in their view, Maunakea has certain lessons to teach the rest of the world, apart from generating scientific knowledge.

— It is driven by what the mauna can do for the entire world in terms of knowledge to benefit all mankind. Maunakea is on her own journey, as are we. In years past there have been other telescopes and uses. The mauna accepted these scientific uses. It is about bringing knowledge to the world at large. We are continuing the journey of our ancestors and preparing for our children's future journey. The mauna continues to fulfill her destiny to bring more knowledge, to fulfill her kuleana according to Hawaiian traditions.

— Maunakea is a symbol of something else, some wrong or grievance. We have to take on grievances to be able to move forward.

Maunakea has lessons for visitors, as well. Here's some of what was said at a session for tour guides and tour operators.

> — Lots of people sense the energy up there. Those visiting from other places have said that. Maunakea represents this island to them. The power of nature is very strong. At first they don't talk with each other, but after sunset everything changes and they come together. I don't know how to explain it except to say, that is Maunakea. It provides mental healing. For me, too.
>
> — Japanese people are interested in Maunakea because it is easier to reach the sky there than at Mt. Fuji. They believe a lot of energy is at the highest point; there is healing from highest point. Everyone has stress about lot of things. For example, Japanese live in small spaces, their world is very narrow. Here they explore what it means to have more feeling, be more spiritual and more healing. They can feel that on this island. Up there they are crying because it is very special. They can feel it. Our cultures are very similar in nature—God is everywhere. That's where we came from. Lots of God stories here…Poli'ahu, Lilinoe, Wākea and Papa. Japanese love those kind of stories.
>
> — The Japanese are very, very respectful. They receive a lot of feeling from the mountain. They cry, and say they feel the earth moving.

In a written submission, a student hopes that people will feel the emotional and spiritual effects of passing from zone to zone that she did:

> — I view the mauna as a place of serenity and empowerment, combining the spiritual with the scientific. The trail to the summit gives the impression of climbing a stairway directly into another realm or into the heavens, as civilization descends farther and farther behind. The fragile, arid ecosystems serve as a reminder of the persistence and simultaneous frailty of life during our journey into the realm beyond. I view the surrounding lava fields as a symbol of destruction, darkness, and nothingness, from which everything in existence once emerged. As one approaches the base of the mauna, it can be perceived as the event of birth, be it stellar or human, as life begins to take root in the harsh ground. The road up the mauna represents the long, arduous journey of life, filled with beauty, hardships, fear, and sanctuary, though much of this depends on how one chooses to pause and interpret their surroundings. While some may view the immense height as a sensation of power and rooting, others may only find fear and disconnection. The silverswords and other endangered

> species, particularly, serve as fleeting glimpses of unique events that accent one's life, while the temples serve as a place to rest and reconnect with oneself, morals, and spiritual beliefs. As one approaches the summit, life begins to become much more sparse, and oxygen density decreases, resulting in the passage into the afterlife, as well as the achievement of enlightenment or the satisfaction of accomplishment.

Finally,

> — From a Western perspective, [the observatories are] bringing lots of money, expertise, and opportunities for my young daughter who went away and didn't come back. I came back because I love it here. Maunakea stands for that spirit, for that power. I've driven the road many times and seen some unbelievable things. My 'aumakua flying right next to me. Life of the land is most critical. We have an opportunity to teach the rest of the world how in this, we are in this most remote place and live together. Someone spoke about blood...I'm poi dog…the point is the opportunity we have. My father took me out every night watch the stars. We would lie down in grass; there was no vog. He was a master navigator. He would show me the stars: this is Betelgeuse, Arcturus, Hawaiki rising above Hōkūle'a, read it. It is wayfinding. We have a unique opportunity to wayfind our ways on this 'āina, that which feeds. It is all alive and part of its feeding is spiritual. We can't go back to that greatest of creators whose name was never spoken in Hawaiian because it was so sacred. There were different manifestations, they didn't worship one entity and that's where the power comes from Akua. These are gifts we must share. Everyone working together, especially when we don't agree. Maunakea is a symbol of all that is godlike.

What do these reflections tell us about people's relationship with the mauna? Although they are often very personal, there are some common themes. These themes, like threads, pervade their stories and weave a marvelous tapestry, one rich with beauty, wonder, and emotion. Many of these stories are from the *soft voices* we mentioned earlier. What they are telling is always significant, often full of implications not just for Maunakea, but for ourselves—all of us.

Often the impact was very personal and direct, but sometimes the effects spread through a person's life and relationships. No one spoke of negative impacts on themselves. Always, universally, these effects were positive. Sometimes they were revelatory or profound. At other times they were subtle but still positive.

One fascinating point was how often we heard that, even from a distance, the sight or presence of Maunakea created a sort of anchor, a sense of home, a feeling of place. Another was the diversity of ways people exemplified their feelings of wonder and connection. For some it was material, tangible things like plants, wildlife, or rocks. For others it was somewhat more ethereal, speaking about the light, or the clarity of the sky. Maunakea has affected these people in many ways. It occupies a special and wonderful place in their lives.

The Sacred and the Spiritual

At every session, participants referred to Maunakea as "sacred," and talked about their spiritual connection with it, but they did not speak with a single voice. Some used "sacred" in a literally religious sense: the ways in which their religion declared the mountain, especially the summit, to be sacred, and to be venerated in religious rituals. For example, a number of participants spoke of the upper regions as wao akua, "place of the gods" (as opposed to the lower regions, wao kanaka, "place of ordinary human beings").

Although some participants described religious ceremonies they performed at lower elevations, overwhelmingly it was the summit that was referred to as "sacred." When no particular ceremony or practice was described, participants often described it as "special," or "spiritual."

Certainly the summit was sacred in the past. Participants spoke of who would be allowed into the sacred zone, and who would not. Participants commonly linked sacredness to behavior, talking about what should or not be done there in the present—what might be called "proper behavior."

We heard very little "theology," and it's not hard to see why. It was clear to us that although some of our participants were well versed in matters of Hawaiian religion, they mainly talked to us about behavior in the sacred areas.

This series of statements speaks to individual behavior—how to act. Other participants spoke about what should be done (or not done), which is a different matter; we treat that elsewhere.

> — It is a spiritual place. A place for the gods. Everyone who's lived here knows that it's sacred. You know that when you go up there you're really connecting with your family. You wouldn't do anything bad or disrespectful. It's just an unspoken thing that you know.
>
> — Maunakea is a sacred place, like a religion. For us it's like going to church. We don't announce we're going to church, we just go.
>
> — There are realms that don't belong to us. When we are nīele [nosy], we interrupt forces that work together naturally. It is not for humans; it is not our place, not our kuleana. That realm is talking to us.
>
> — Sacred is about experiencing it. The way you interact is different when a place is sacred. You walk lightly, and you feel that on Maunakea. It's very personal to you. I don't have to understand your sacredness to understand that it's important to you.

One participant gave us examples of what can happen in the sacred regions. We heard a few similar stories:

> — These things happened in the highest region. One story is of the two convicted felons who, after their visit [to the summit] with me, cried like babies, went home and became outstanding citizens, fathers, husbands and community members. I also informed you about the broken family (father and son) who for the first time hugged each other and cried like babies. The son straightened out his life, married, bought a house and became a good father. He now maintains a good relationship with his father.

Some participants explicitly linked sacredness with exclusion—in other words, the only proper activities were those associated with Hawaiian religious practices. Others were more inclusive. There was disagreement as to whether a summit kapu meant that no one should go there, or that people should only go there if they had a purpose. Although this wasn't always stated so directly, the notion that visits to the upper regions should be done for serious reasons was commonly expressed.

> — Recently during a solstice ceremony, a gentleman from India asked if he could participate. "Is it OK if I do my own practice?" When it was his turn at the ahu, he participated in his language with his practice. Hawaiian practice is to be one with the earth.

> Mālama and aloha everything around us that nurtures us into ancestry. Every native person has the same practice, as long as you know what Hawaiian practice is, join us. Allow sacredness to happen in a sacred place.
>
> — Lots of misunderstanding about sacredness. We are talking about the entire mountain. Whatever that person, they have to understand the summit is sacred/spiritual. It is not to keep off, it is to go to communicate with the supreme being.
>
> — When I think of people telling me what should be up there, I think that's one man's opinion. As for the akua, they are in a different realm. What we do doesn't mean anything to them. They will be here long after we're gone.

Some participants understood that Maunakea is considered sacred by some, but didn't feel it personally:

> — I'm Native Hawaiian and I don't think it's sacred; maybe because that was not passed down to me.

Participants often referred to the tension between the sacred and the secular (meaning recreational, scientific, commercial, and other non-religious activities). It was common for someone to describe Maunakea's sacred nature and then follow up by talking about what, therefore, should not be done—sometimes very generally, and sometimes very specifically. Here are some statements taking up different themes: influences of the outside world, using the mountain's power for one's own gain, needing to have a reason for going, and one that was often repeated in other contexts: go there if you have reason to, but leave as soon as you can.

> — The mountain is sacred. So why must we encroach? We keep encroaching whether in ocean and on land. Where is the end? To me, beauty is in the natural setting; that's beauty to me. To me, a lava field is beauty. Why must we alter the land so much? I've seen a lot in 77 years. I've never spoken like this before and it is time that I speak. Sacredness and mana of the mountain is the most important thing to me.
>
> — Talking to a kupuna, I asked her about the mauna, and she said "Never been there. I don't need to go there."
>
> — My granddaughter asked if I was going to the mountain [for the protests]. I said, "No, and, if you go, make sure you know why. If you're only going to shout or going because someone else is there, that's the wrong reason."

— I agree the mountain is very, very powerful. People can use power in not so good ways, and I believe firmly a lot of people are using power from the mauna in a bad way for their own personal gain. Unless people can stop and look at the power as a positive thing, we will be fighting for a long time.

— [There are] ancient springs on Maunakea only the highest could attend to; ali'i were allowed in those realms. There was a deep reverence…do not stay or dwell…go and leave.

Although there was explicit discussion of sacred sites at Hale Pōhaku, almost all talk of the sacred, not surprisingly, centered on the summit. At every ʻaha kūkā session we encouraged the participants to talk about the entire mountain, not just the summit. But almost invariably the talk returned to the summit regions.

It was mainly the ranchers, hunters, naturalists, and artists who gave us "the rest of the mountain" statements, and although not many of these touched on the sacred as such, a great many of them touched on the spiritual, almost always in a personal sense.

— People have lived here for generations and their mana is still here. It is in the soil. When we eat from the land, we take that in. Rocks, trees, it's all here. There is energy. I think the connection to Maunakea is, for a lot of people, like it's almost a fulcrum where it all comes together in a powerful place.

— I think there are people within every religion, as well as people who are nonreligious, who experience the natural world as sacred, whether they use that term or not. In a sense I believe the whole earth is sacred. But there are certain places that are exceptionally powerful—you can feel the energy. Maunakea is one of those places.

— In times past, there was no separation between the "sacred" and the secular. Religion and life were inextricably intertwined. A multiplicity of deities guided daily lives, were revered and were honored frequently by ritual. We seem to have lost much of our familiarity with the natural world, the wonderful outdoors. We proclaim the heights of our mountains "sacred," and for many they are indeed places where divinity resides.

More commonly, we heard our participants describe their relationship to Maunakea as "spiritual" in a non-religious way. We said earlier that we learned never to anticipate where a participant's narrative would go, which was one of our joys. Here's a hunter's description complete with a beautiful insight.

— [Maunakea is one of the] sources that ground us, nurture us. It's hard to explain; it's more than just the clean air, the feeling

> you get sitting on a rock, not thinking about hunting. It has a spiritual impact when you're up there. It is all simplicity and complexity. It's perfect. That is one of the treasures we have and we really need to share with the world. It's that place that our kūpuna could recognize and utilize for their spiritual purposes. Aloha ʻāina and mālama ʻāina are intended to be spiritual acts.

An entomology graduate student relates her understanding of how the mountain works:

> — The spirituality is definitely not religious for me. I'm on a cinder cone looking at bugs and even though it rained hours ago, you can hear water percolating underground, the breeze in your face . . . I cannot explain it . . . that's my definition of spirituality.

Many participants spoke of the quiet, the peace. For example,

> — I think it's the peace, quiet, nature, being close to nature, feeling the cold, connected to the elements and exposed to the elements. There is something we find in nature that makes us feel alive. That is the spiritual side for me.

Some artists spoke of spirituality in these ways:

> — As a writer, and what I guess one would call a "nonreligious mystic," I feel a strong spiritual connection with Maunakea. It is the inspiration for much of my work, even when it does not appear literally in a poem, and an important part of my spiritual practice. I offer my own spirit's deepest attention to this place. I write poems about the plants, the changing light, the austere, silent spirit of the mountain. Even when the poems are not "about" Maunakea, they aspire to express its unique spiritual integrity, clarity, and space. What I feel when I am on the top is that Maunakea is in connection—in conversation— with the whole universe. It feels unbounded, expansive, full of light, weightless.

From an observatory support staff person, who chose not to talk about his technological life:

> — I view the mountain mostly as an artist first, vision and visual artist. When I go up there, especially alone, and park at Puʻu Huluhulu and feel the breeze for a few minutes…it's not religious. It is respectful to ask permission and then to feel that cold kiss on the cheek; I know my day is going to be OK.

From an artist-turned-astronomy student:

> — As an artist, I see comfort in the serenity and natural beauty of Maunakea, as it offers a strange unifying balance between the heavens and our seemingly insignificant selves. The distance from civilization adds to a warm feeling of controlled isolation, which I personally find to be a valuable distraction from everyday stress and chaos. The mountain's respectable, grand size allows me to experience a new found strength, persistence, balance, and fervor directly resulting from the realization of how weak I am in the grand scheme of the Earth alone, and ultimately in the eyes of the universe. In both ways, Maunakea is sacred, as it allows us to ground ourselves while reaching out to touch the heavens, the realm of the gods and our own creation.

Some participants reported profound experiences that flowed from simple acts, such as stopping on the Saddle Road before dawn and getting out of the car:

> — For me one of the most spiritual experiences was on the side of the Saddle Road; I pulled over at 5 AM— I was traveling with a colleague—he jumped out and was speechless—and he talks a lot—speechless. It was what the world's best planetarium aspires to be: the stars around the perfectly clear sky, still, quiet. It really made you think about how we are so small.

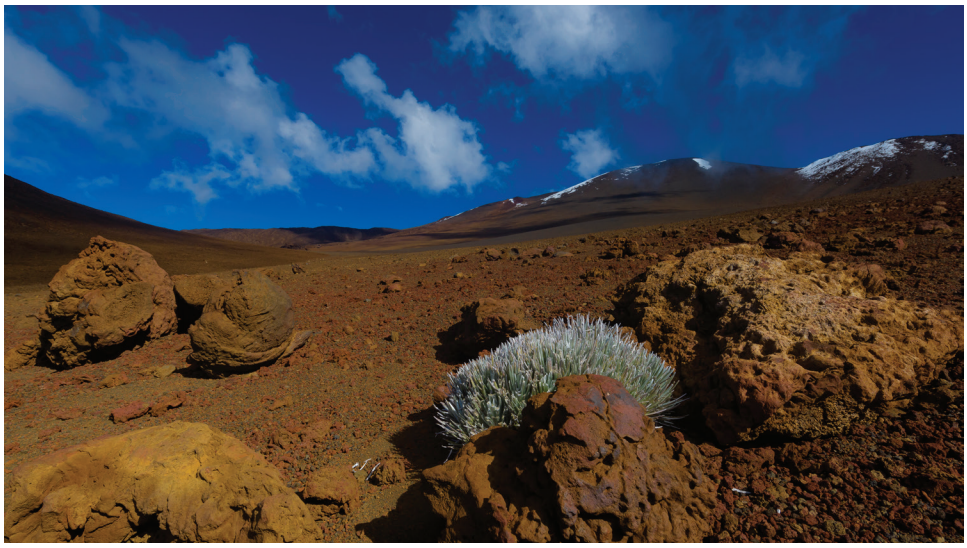
The same person later said,

> — If I had to pick one thing that's most significant—and I had no idea until I went up—it was the silence, such a profound silence. You think you know silence until you go up—your thoughts and your breath—quiet like nothing I ever experienced before or after, the quiet up there.

These notions of sanctity, of spirituality were sometimes intertwined with feelings of cosmic connection, being part of a bigger whole, being close with nature, and feelings of wonder. Some expressed feelings of being laid bare, being exposed to the universe. And for some, the feelings seemed to stem from things that were wholly metaphysical, such as the mana of previous generations imbued in the rocks and land itself.

Interestingly, there was something of a dichotomy in the ways these feelings led people to regard summit access. For some, the sanctity of the summit meant it should be kapu except for religious purposes. One or two went so far as to say even they should not be permitted. For others, the feelings of wonder and connection led them to believe that as long as access itself did not threaten the summit, it was a place that all of mankind could share for its mutual betterment.

We heard what can only be called prescriptions: *Know why you're going there,* and *If you go there, do what you have to do and leave*. As we will see in the next section, these can be brought to bear on Maunakea's issues.



Visions for Maunakea

We heard many different visions for Maunakea. This did not surprise us, given the diversity of our participants. Many visions were general ones, suggesting how the mountain should be treated. Others were very specific, typically involving what should *not* be done.

As always, we were struck by the diversity of viewpoints, but perhaps more so by the flexibility we heard. By "flexibility" we do not mean "vague" or "wavering." What we mean is that participants recognized there would have to be compromises and cooperation. We rarely heard anything in the form "This is how it's got to be up there." Rather, visions usually took the form "Here's what I'd like to see happen up there," followed by thoughts about whether, or how, that vision could be fulfilled.

Very few participants talked about competing visions for Maunakea as zero-sum (if I win, you lose). On the contrary: we sensed a general willingness to explore how one group might get what it wants, and another might as well.

Some general visions:

— I think the mountain should be shared.

— I envision a healthy mountain; the watershed feeds families and the land, and the abundance that comes from a healthy mountain and sense of place filtered back down to us.

— My vision is the mauna…it has a vision…it always has had. We have to mālama it. We don't belong there.

There were specific visions. Some involved how people might treat the mountain, and others suggested how people might treat each other—always in Maunakea's context.

— It is such an inspiring place to learn and yet very elite group that gets to learn on Maunakea. We need to do everything we can to change that and be inclusive so everyone who wants to learn is able to do so. My vision would be that the interaction would happen at a mid-level visitor center; some sort of education heiau at the visitor center where people can go and learn in whatever method they want to learn about the universe.

— What we are proposing is that Native Hawaiians have a prominent place like we had before when voyaging from the South and like Mālama Honua. Above the clouds we can still be at that place of exploration and a real prominent place. The message of Hawaiian culture is sustainability; everyone knows that. What people don't have a clue about is that the spirit of aloha is really, really important.

— If all interested Maunakea groups come together in sharing days, if you had a bunch of people from observatories plant trees, then tree planters come to the telescopes and see what we do, so all could see things first hand, feel and know the people. We need active person to person connections. Those in charge of organizations need to value that. We have 'ōhi'a festivals coming up, so why not a Maunakea festival giving all organizations a chance to educate the public together?

Other visions laid out what should not be done on Maunakea.

— I don't ever want to see people up there doing what they do at the beach, like drinking or doing a barbecue or playing loud music.

— The [summit] kapu has been already violated by our own people for years and years. Because our people have violated the kapu maha'oi by hunting, playing, and whatever. Telescopes are no different than people violating the kapu. Eventually I would

like to see them removed. I would also like to see that top level kapu brought back. To play in snow, play at the lower level. You cannot just kick out telescopes and not address the violations of others.

— Stop all tourists from going to the summit. Astronomy: I want it if it's built within a temple. Close the others, and have one observatory. Put the observatory down into the ground.

At every ʻaha kūkā the Facilitators encouraged participants to give their manaʻo about the entire mountain, not just about the summit region which, with its observatories, is only a fraction of the entire mountain's area. As it happened, most of our participants wanted to talk about the upper regions. This region is approximately from Hale Pōhaku (the Visitor Information Center; the tree line) and ma uka to the summit. Overwhelmingly we heard about the Saddle side of the upper slopes, effectively the areas comprising the roads and the Astronomy Precinct. This is not surprising, because access to Maunakea's upper slopes outside of those areas is very difficult. Few people go there, and no one lives there.

Participants gave their manaʻo about the lower slopes, meaning from approximately ma kai of the tree line, less frequently. When they did, they were talking about the lower slopes ringing the entire mountain. This is not surprising because there are roads through them, access is not very difficult, and some of our participants actually lived on those slopes.

A few participants worried about the intense focus on the upper slopes:

— But what of all the other places others hold special? Are they less for not being at the summit? Are not our forests full of unique life found nowhere else on earth, special? What about our ridges, valleys, lava lands, shorelines, beaches, reefs, the deep sea, our backyards, and the myriad forms of amazing flora and fauna we encounter throughout these areas. What of them?

— I spend as much time as I can up on the mountain, at all elevations. The summit is only a small part of the immense and astonishing richness that is the whole mountain. Knowing only the summit, people never know Maunakea, and cannot truly honor it. And respecting and honoring the mountain means the whole mountain.

— Everything shouldn't just be about the summit. It should be about all—the ranchers, the military, anyone with any stake needs to have a say.

There are intensely-competing visions of the upper slopes, especially the summit. We heard widely-varying opinions about the summit. We heard from people whose visions include having all the observatories removed, the terrain restored, and access to the summit restricted. From them, we heard phrases such as "we [ordinary people] don't belong there," or "I don't like people at the very top" and "no further development." For some, the goal was to re-establish the summit kapu specifically and literally. These were minority views.

Several participants framed their visions with "times have changed." Some of these felt as though only the spirit of the kapu should in some way hold at the summit, and to others, the present was so different from the past that there was no point to talking about a kapu at all.

Importantly though, *no one* taking the "times have changed" position suggested that the summit activities should be unrestricted. On the contrary: those visions were about limits and conditions on development, the smallest possible crowds, and even access restrictions.

Although at every ʻaha kūkā we encouraged participants to talk about the entire mountain, many people wanted to talk about the observatories. When they did, we listened. Most often, they were used as examples of what should (or shouldn't) be done at the summit.

This is a good place to mention that although participants did not talk about the TMT at every meeting, they referred to it at many of them. If they talked about it, we listened. Most often the references were passing ones, but sometimes people had specific points they wanted us to hear. Typically if someone mentioned it, others responded in turn with their manaʻo. At a few meetings it didn't come up at all.

Some were unequivocally opposed to TMT. Others framed their opposition in terms of the number of observatories at the summit, and worried that a new one would bring more traffic and even more tourists. Some participants made a point of declaring their neutrality. Some said they would accept it "if procedures were followed," and a few actively favored it. Those neutral or in favor of TMT commonly suggested that if TMT were to be constructed, then one or more other observatories should come down.

We do not believe we have enough information to say whether our participants in the main supported the TMT, or opposed it. Collecting that information was never our goal; what we're mentioning here is *what we heard* while people were talking not specifically about the TMT, but about other topics as well.

This is also a good place to note that even when contentious topics such as the TMT were talked about, there *never* was an argument or a clash. Any voices raised were raised in passion—never against another participant.

As for the observatories in general, we heard two threads that were often, but not always, intertwined. One explicitly involved the observatories (should they be there at all?) and the other involved who should have access to the summit, and what for.

Let's deal with the observatories first. Even when the TMT wasn't mentioned explicitly, there were strong sentiments along the lines of "there are enough observatories up there now." It was common for participants to make statements such as:

> — As older telescopes become obsolete, require them to be removed, and the ground under them rehabilitated. 'Restoration' of the ground is impossible, but our land can and should be returned to some semblance of what was.

Some participants were troubled not just by the observatories, but by underlying ownership and use rights at the summit:

> — Native Hawaiians own the land, not science. How can you balance 13 permits, 22 buildings? Did there have to be 22 structures for science and not a single place designated where Native Hawaiians can worship?

Some took a historical approach. For example (from a person who wanted to see the summit kapu put back in place):

> — Over time and with much Western influence, the old practices diminished and access to the summit had become more common due to road construction. The first telescopes were built and initial protests had no impact because of lack of support from the Hawaiian community. Let us remember that back then we were taught not to protest the government because they were elected officials and knew best how to govern us. More roads came and more telescopes were built. Hawaiian practitioners began accessing the mauna via new roads. As we can see, the Kapu akua has been violated for awhile now by road building, telescope construction, hunting, hiking, recreational visitors and even Hawaiians who, according to ancient customary and traditional practices were not allowed to enter the mamao [highest level]. We must cease encroaching on this level (mamao) and strive to protect and preserve what sacredness (mana) we have for future generations.

And:

> — The kapu has been already violated by our own people for years and years. Because our people have violated the kapu maha'oi by hunting, playing, and whatever. Telescopes are there already. I am opposed to building a new one. [But] you cannot just kick out telescopes and not address the violations of others.

From some high school students:

> — Telescopes might be a threat to the future generations being able to go up there and enjoy it the way we do. I feel like more people would go up just because of the telescopes— and there are many that are not being used but they're still there. Building more would take up more space, more people going up to see it. I don't want to see that.
>
> — I don't like the telescopes being OK— they will keep building more and more, and building other things on the mountain, and pretty soon everything will be changed, like everything else.

From a sixth-grader:

> — But in other hand [TMT] will have some sacrifices. For example, sacrificing something that might have been native or was harmed toward Hawai'i on the Maunakea mountain. Those kinds of things might have effect on the living things that might be very important or something that Hawai'i needs. You will never know when the area might be polluted with dangerous stuff that can effectively hurt the animals that go there.

From a business person concerned about overuse:

> — There needs to be a control of how heavily, and in what ways, the mountain is used. The problem as a civilization is that we don't start by asking that question. We break it and then determine we have exceeded the constraints. And that's the case with observatories. There are too many in the wrong places. The point is, before adding restrictions we first need to understand what will be restricted and what is the capacity, then we can come up with a means for managing those constraints.

A different position from a writer:

> — I don't sense any negativity [on the part of Maunakea] toward the deep space telescopes. It feels as though it accepts them as belonging there. That their purpose is in keeping with the spirit of Maunakea.

One participant made an unusual and perceptive observation —that knowledge gained from the observatories may be thought useful by some people, but not by those struggling to get along.

— I think Maunakea was sacred before the telescopes, is still sacred and will be sacred if there is one more in the future. I think the knowledge that comes from Maunakea supersedes any one religion or any one culture. The problem or challenge is that the knowledge being gained up there is only important to people who have most of their basic needs already met. For people struggling to get by on the island, which many are, it is not as valuable, useful and relevant to their lives. I can see where it's a hard sell to a lot of people. I empathize with that.

An exchange between two participants during talk story time.

— Rancher: Telescopes have different functions, collect different data…would you agree enough already after TMT?

— Astronomer: I would agree with that.

— Rancher: Let's work with what we have. Some are outdated, then upgrade or take them off.

In summary, most of the people who spoke about the observatories accepted their presence in theory, agreed that they produce valuable knowledge, encouraged the removal of decommissioned ones, and most emphatically recognized that, as the saying goes, "mistakes were made."

Nobody uncritically accepted the summit in its current state.

When participants were talking about visions of appropriate behavior in the upper slopes, they commonly used phrases such as "if you have a reason to go, then go," and "don't stay; come down when you're finished." We heard two distinct opinions about the upper slopes from kūpuna and cultural practitioners. One was that because the kapu had been broken so many times over so many years, reinstating it would be pointless. The other was that the kapu was still alive, but not being observed even by some who should.

— I went up one day to talk with group stationed there [protestors] and they weren't very respectful to me. That's OK, but the fact they go to the top of the mountain to do whatever they do… who made them kahuna nui? What gives them the right? Actually Hawaiians, from what I was taught, even Hawaiian people have no right to be there. Yes, you can argue that we don't have to follow that any more, but that's not the point. That's how I feel.

— So years ago, in 1972, riding up to Humu'ula, I asked my grandfather if we could go to the top of the mountain. And he said, "This is as far as you go. You don't belong up there. Know your place. Up there is not for you. Maybe ali'i nui, someone else."

One participant pointed out that:

> — If you had to take the top level and have no one there because there are no ali'i, then no one can go to the summit. From a practical standpoint, it's impossible.

Another touched on an important point: no doubt there were many reasons for a traditional kapu on the summit. The sheer altitude and difficulty of reaching the summit may have contributed to the feeling it was wao akua and thus kapu for religious reasons. Pragmatically, it was an easy kapu to enforce. Today, the ease with which the summit is reached impacts our feelings and certainly affects matters from a practical standpoint.

> — In the whole discussion about akua and all that, I try to think of our culture in practical terms. A lot of kapu were in place for reasons of resource management, politics, whatever. They existed for a reason. Now, I wonder about the whole notion of wao akua in the day of the Toyota 4Runner, when you can get inside and just go. In my mind we have kind of evolved to be practical about things.

Most of us in the Hui Ho'olohe had questions that we liked to ask the participants, usually at the end, when we were talking story. One went like this: "Is there anything about what happens on Maunakea that you see as *absolute*? Something that *must* or *must not* happen there?" Here's a sampling of answers.

> — It shouldn't be a divisive space. It should be a space of this, our community—who we are—a part of us, because this is our island.
>
> — As the number of visitors to Maunakea grows, and let's say grows exponentially to thousands every day, in order to support that you need this commercial aspect, providing food, comforts, gift items. That would be a deal breaker for me. I don't think the summit area of Maunakea should become commercialized. Any commercial food stations, souvenirs…the place for it, may be at [Maunakea Recreation Area], but not up there. There is a certain level on the mountain where less is better. Always, less is better.
>
> — My vision excludes installation of things like ski lifts or those devices, though I know people have asked for those.
>
> — I'm against Hotel Waiau.

Apart from developments in the Pōhakuloa area (the Army's area and Maunakea Recreation Area) few participants had specific visions for the lower slopes. Most of them spoke about looking after the lower slopes, in particular restoring as much forest as possible, and removing invasive species.

Watersheds extend all around Maunakea. They are sometimes on private land and sometimes on public land. Participants who spoke of them agreed that their health affects everybody. Keeping the watersheds healthy involves restoring forests but, as several participants said, you cannot restore forests on active ranch lands. So discussions about forest restoration and watershed protection often turned into discussions of land use—what should be allowed, and where, and what needs to be changed. These are, of course, difficult issues, and are discussed in the next section.

> — My training is in conservation and watershed protection. I'm encouraged by comments to mālama 'āina. Methods may be different in different places, but the priority is working out how it all fits together, which will enable people to respect it and there will be less controversy. Watershed protection is critical; if we do not secure the water supply we cannot take care of the land, native species, wildlife, etc.
>
> — In terms of restoration, how far back do we go? There have been 200 years of cattle and sheep, so we have to go at least that far back if we want to "restore" it. There aren't enough places for people go to and see the forests, such as along Keanakolu Road. Why aren't more trees being planted?
>
> — I would like to see some things taken down, restore the place. I feel a responsibility to the mountain, so I plant trees.

At a few 'aha kūkā we heard about possible uses for the lower slopes. For example, some participants suggested uses for the Maunakea Recreation Area (formerly Maunakea State Park) other than for Mayor Kim's Peace Park.

> — To bring the whole island together on larger scale, it has to happen around Maunakea somewhere, and how can we do that? At the county park there is an opportunity to have community gatherings with people from Waimea, Hilo, Kona, where bringing the entire community to that park, not at the top, could unite the community, not separate it.
>
> — It could maybe be a place of education and bringing community together around Maunakea. There are walls, the external walls, bathrooms, main building, snack room or path around exercise area—all are opportunities to put information pieces there about Maunakea, factual things about astronomy and Maunakea generally, as an educational piece. Education not necessarily

> about culture, but perhaps about scientific knowledge, things discovered because of Maunakea, would be awesome. At the park would be good because people are stopping there already, and not everyone goes to the top. It would be for residents and tourists, not just as tourism, a point of celebrating the success of Maunakea or the rich cultural history of Maunakea.

In summary, many of the visions we heard were visions of a *restored* Maunakea—cultural restorations, habitat restorations, landscape restorations. We heard visions of Maunakea as a nexus of restoring harmony among people.

In no one's vision was the status quo acceptable, although there were differing ideas about how it should be modified.

It was very common for a participant to begin talking about a vision, and soon move on to problems, issues and difficulties. We'll take up those topics in the next section.

Issues

Although we did not ask people to identify troublesome issues or to talk about their concerns, we were never surprised when they did. How could they not? It's important to talk about visions, but it's equally important to talk about difficulties, obstacles, and unsolved problems. The two almost always went together.

'Aha kūkā participants identified many issues. Some—too many people on Maunakea, for example—were common among all our participants, and everyone who talked about it said it was a serious issue. Others were more localized, or more personal, more or less bothersome to different people, but not less important for that.

It's worth noting that almost every participant who told us about problems on Maunakea also expressed confusion and frustration about who was responsible for dealing with these problems. There was a general awareness that several entities—some private, some public, some state, some federal—were potentially in charge. To our participants, there seemed to be considerable overlap and also many gaps. Maunakea is a patchwork of rights and responsibilities, they told us. Our participants were uncertain about who has (or should have) kuleana over what, and where, and when.

We will not revisit the observatories here. It's not that our participants didn't talk about issues directly related to the presence and functioning of the observatories (although this was rare), but that they talked much more about issues related to *the number of*

people at the summit, which is only partly related to the observatories. Summit overuse by visitors is ultimately an access issue.

> — I think the real emphasis is the feeling the mountain is getting overrun. All of a sudden there will be a Starbucks.

Because the summit is the highest point in both Hawai'i and the Pacific, huge numbers of visitors want to be there at sunrise or sunset or take in the views during the day. Some visitors—mainly from Japan—feel that the summit is important spiritually. We talked about some of this in earlier sections. Others are "high pointers" (people trying to get to the highest point in every state or country). And some, we learned, head for the summit just so they can say they've been there. See the illustration that heads this chapter.

> — When you think of Hawai'i Island, you think of Maunakea and the volcano and you see the observatories. They are all on social media, the internet, in guidebooks. Astronomy is significant. Sunsets. Also high pointers look for different parts of the world and for bragging rights to say where they have been. Again, with social media it will get more congested, more popular. It's like going to the Eiffel Tower; you can enjoy it from the base, and yet everyone wants to go to the top. Tourists are never going to come this far and not experience the top.

The message that came through clearly to us was: *there are too many people on Maunakea*. Almost everyone who spoke was troubled by what seemed obvious overuse, which was damaging not just physically and ecologically, but culturally. We were told of crowd issues at the Visitor Information Center, too. There are ahu lele at the VIC, in regular use by practitioners. The large number of visitors and the consequent lack of privacy disturb the practitioners.

> — [There needs to be] consultation of native practitioners with those whose purpose is to impact a sacred area. We don't want people coming to these sacred places. Most don't know they are doing anything wrong. At the ahu, we dress it, clean it, and pray. So you will know the problem, people leave beads, crosses, crystals, pictures. That is inappropriate. Tourists take photos during a ceremony. They drive past during a ceremony. They are encouraged by, and pay big money to, the tour operators, to visit. Our practice happens during the cycle of the full moon, and yet 200 visitors come up for stargazing at that time. There are illegal tour operators up there.
>
> — It is really hard when you go [to perform a ceremony] and don't have even one minute or one hour to be in silence. In the

> chanting area you cannot go without having huge vans blasting with hundreds coming to star gaze. Kapu aloha is very hard to keep in a ceremony when you just want quiet time to speak to akua. I am talking about mutual respect.

It was not only the cultural practitioners who complained that visitors disrupted their activities, or made them impossible. We heard from local amateur astronomers and astrophotographers who have for years set up their instruments in the open areas and parking lots surrounding the VIC. But now, they told us, on any given night their traditional viewing areas are overrun by visitors and cars.

(It may be that not all readers of our report are familiar with the Maunakea Access road. We were told that between the Saddle Road and Hale Pōhaku there are only a small handful of places where a telescope user can get off the road and set up an instrument where it will not be swept by headlights. So the loss of Hale Pōhaku is significant.)

Some of the issues (and potential problems) mentioned are explicitly visitor issues. Here is a person knowledgeable about the visitor industry talking not just about the number of visitors but what they like to do now, as compared to the past. He told us, disturbingly, "it will break in the next two years."

> — We have had four years of increase, single to double digits year over year; 15% this year over the previous year. That's 1.7 million visitors more. Almost 20% more next year projected. There is a different person taking vacation today. In 2007, there were 1.6 million and they sat at pool with a mai tai and looked at Maunakea. Now people are going everywhere they can possibly go; and they want to be on the top. Without restriction, we're going to be looking at a different world. We're looking at 30% to 35% more next year. It is a whole new customer that wants accessibility. Jumping ahead, we need to start figuring it out because it will break in the next two years.

From a sixth-grader writing about the future:

> —With all of the four wheel drive vehicles coming up on Maunakea, pollution could keep on expanding up on the summit. The clear skies would not be available for visitors to view and adore, if pollution is carried up on the summit. More and more pollution is being produced up on the mountain because of these vehicles. Not only the visitors get involved but also the scientists who work in the observatories, up on the summit of Maunakea.

Another person pointed out that the new Saddle Road (Daniel K. Inouye Highway) is part of the problem. Because—unlike the old Saddle Road—it's not dangerous and

difficult to drive, it's much easier to approach Maunakea than it was even a few years ago.

> — The new Saddle Road just created a whole new accessibility to the mountain we didn't have before. Previously rental cars couldn't go on Saddle Road, now they promote the new road.

It's unclear how many cars and visitors are too many.

> — Do we know how many are going and how many is too much? The space needs to stay healthy, to maintain the spiritual connection. Anything we love we don't want to see deteriorate. We want to keep it healthy. I'm not sure how. I don't know if limiting access of the local community is a good thing. What about the practicality of our culture? Those conversations are important. I want to protect businesses that take people up there and are taking care of Maunakea in the right way. I want them to still able to do so. Not limited to the businesses already there. We need to know what's too much.

We were told several times that the heavy traffic is driven by social media as much or more than by curiosity. From a tour guide:

> — [On Maunakea] I feel the earth moving. I want to show people that. In the big city, people only see something on the table. As humans, they make decisions from that limited knowledge. Everyone needs to understand that humans are part of the universe, especially those who make decisions and the rules. I have to show that stuff to the people. Maybe that can help for humanity's future. It is very obvious that Maunakea is being abused. With the internet, you can go everywhere and someone posting on Facebook, Instagram, and people will come to see what somebody else saw. Silversword photos. You have to catch up with the digital age; you have to do something about that.

But the heavy summit traffic is not all driven by social media, nor by organized tours (or illegal ones, for that matter). Some participants blamed the rental car companies. We were told that although private individuals are discouraged from taking 2WD cars to the summit, there is no enforcement. The presence of 2WD cars on the summit road is a safety issue. However, participants said, aggressive marketing of 4WD vehicles to people who don't know how to drive them generates a different set of safety issues, in which drivers wrongly assume that a 4WD vehicle solves all problems by itself.

> — [At the summit once I saw] a lady visitor from Germany with two young children. She didn't know how to put the Jeep into

4-wheel drive. Her kids were about 5 or 6, in a Jeep she didn't know how to drive. That personal experience scared me.

— At the higher elevations, people don't know how to drive, they lose control and endanger others. Maybe to go to a certain place you need to be in a bus. Another aspect is with those born and raised here with 4-wheel drive, who go all the time. They know how to drive and shouldn't be barred.

According to one participant, the aggressive marketing is income-driven:

— Rental car companies have found huge revenue source in upgrades. Now when you approach the counter you are hammered to get a 4-wheel drive so you can go to Waipi'o and Maunakea's summit. People book online for a small car and then the extras and upgrades on site provide huge revenue, and the renters don't know how to drive. People are excited to be here and they upgrade.

A tour guide pointed out some of the traffic and economic complexities:

— We just had a guest, not even in a rental car, but a 4-wheel drive vehicle, with no experience. If you are not skilled and not confident, then you need to go with professional tour operators. Remember the two accidents on the mountain? One local pickup on the side facing the mountain, with a female and two kids. After the police arrived and were tending to the scene, another vehicle came down, honking its horn because their brakes failed. They were going really fast, veered against the first accident. The vehicle rolled over and the driver died and the passenger was critically injured. They were our guests, staying with us. They figured they would do it on their own because it was cheaper.

What about Hawai'i Island residents? The complaints we heard were almost all related to snow. As everyone knows, when there's a big snowfall large numbers of people head for Maunakea.

A sixth-grader wrote:

— Recreation activities that you can do on Maunakea include snowboarding, play with the snow, and also making a snowman. You can do anything fun with the snow like make your own fort, or even make a snow angel. I love playing with snow but when my dad brings down some snow, it's not too much. I've felt how snow is, but I've never been up there before, but in the future, I'd like to go up there and play with all the snow that there is.

We heard no one suggest that people shouldn't drive to the snow, but we did hear cautions, and there were mild complaints. Again, we heard "do what you came for, and leave."

> — Today if people have a reason to be there, I feel it's OK. If there's no reason, then don't go there. Snow holua sledding…I can understand the younger generation wants to have a good time. But think—follow the rules and regulations on how to have a good time. Taking alcohol up is not pono. Go up in a Hawaiian way: do what you came for, and leave, and show respect to all who are there.

> — People from here to go up to the mountain when they want, but they still need to be educated to respect the land and culture, and they need to be respectful when they go up. We've all seen the trucks piled with snow 10 feet high. Taking so much off so others can't enjoy it is irresponsible. People here need to be educated, too, to understand Maunakea is a resource not just for small segment or kind, but a resource for everyone.

There are issues at the heavily trafficked Visitor Information Center at Hale Pōhaku:

> — When I go to Maunakea with my grand nieces and nephews from O'ahu, we get as far as the visitor center. It's too crowded and so we say, "Let's go." There's the trinket shop, the telescopes, the tour vans. We go further down and walk around. It is like another thing we are selling; not even telescopes. Everyone who visits wants to see [the telescopes] and we can't blame them. We might get a truckload of snow. We end up going on [a lower slopes road] and we don't tell anyone about it because it could turn into a hell. We only have so many places we can go.

We heard no other kinds of complaints about local people in the summit region, apart from (as in the previous example) dangerous driving.

The main concerns participants had about the lower slopes were ecological ones: invasive species, the behavior of some recreational users, and environmental damage, including by fire.

The invasive plant gorse is one. Naturalists, photographers, ranchers, and hunters all worried about it. Gorse is spreading from DHHL lands to private ranch lands, to the Hakalau National Wildlife Refuge, and to DLNR lands. Controlling gorse might appear to be simple, we were told, but in practice is very difficult. The participants who talked about gorse invariably talked about not just the difficulty of killing it, but about whose kuleana controlling it was.

— The gorse is a huge problem and it's DHHL's kuleana . . . DHHL's attack on the gorse [using Sugi pine plantings to keep it from spreading] isn't a good solution because gorse can seed the lower forest.

— Tens of thousands of acres of DHHL land is covered with gorse. We need to bring it back to koa and māmane, which would be great for the watershed and the birds. We need forests at higher elevations.

We were told that it should be possible to attack gorse, but that kuleana and management issues have hampered effective control. There seems to be no will to do it, and so gorse continues to spread and damage the lower slopes.

We found it interesting that gorse was discussed at only three ʻaha kūkā and was only discussed at length in two. This isn't to criticize those who didn't talk about gorse—they probably knew nothing about it. And yet, according to those who did, it's a grave threat to Maunakea's forests and wildlife. As participants said, the lower slopes are many times larger and what happens there can have direct effects on human populations in ways that what happens at the summit cannot.

We also learned about lesser-known issues. Of these, the most dangerous is fire. At one ʻaha kūkā, where most participants were photographers and naturalists, a Hui Hoʻolohe member asked whether the lower slope roads—for example the road leading to the Palila Bird Trail near Puʻu Lāʻau—should be upgraded to allow passage by 2WD cars. The unanimous answer was a strong "No." Participants said that more vehicular traffic—meaning more people who are not familiar with Maunakea and how to behave in its forests—would greatly increase the risk of fire, which would be very difficult to control.

Speaking about the forests along Keanakolu and Mana roads, a rancher had the same opinion:

— If the lower section at 6,500 feet elevation is not protected from fire, Maunakea is a huge tinderbox. [In the past] the fire department addressed the problem by letting it burn because they did not have sufficient resources to fight fires.

This is a difficult problem, and no solutions were suggested beyond provisioning reservoirs that could be used for fire fighting as well as livestock. Participants said that the Pōhakuloa Training Area (PTA) firefighters, the first responders, would be overwhelmed by a large, fast-moving fire. One participant predicted that if a large fire ever started, it would burn unchecked ma uka to the tree line, only dying when it ran out of fuel.

Another issue relates to security and enforcement for recreational uses such as ATV and bike riders. Along the road from Hale Pōhaku ma uka, the Maunakea Rangers have nominal control. But elsewhere, we were told, there is nobody beyond the occasional DLNR game warden during hunting season.

> — You cannot just allow bikes to run up and down the pu'u. I'm sure there needs to be a place and time for that activity, but don't believe it's on the mountain. There are better uses for the mountain. DHHL has no security or processes for recreational people or bike riders. As a lessee, you are your own security. We see riders going up the pu'u on bikes and ATVs. DHHL is not a good steward. I have to confront recreational users myself. With my white hair, they call me Uncle. But at least they've been respectful; they're just young and stupid.

Lack of information is an issue that's more important on the lower slopes than at higher elevations, where people rarely stray from the roads. For example, there are a few places in the Saddle or off the Maunakea Access Road where a resident (or independent visitor) can find roads leading into grasslands or forest. The Kilohana Hunter Checking Station, just off the old Saddle Road, is one such place. Suppose that, one participant told us, a person goes there and wants to hike or just wander around. The person will find no maps, will have no idea where the roads and trails go, where and why there are fences, whether there is water or any shelter, and what dangers (such as wild dogs) there may be.

> — [We need information about] places for spiritual practice, where you can go and what you can do, what is allowed, what is safe. I was born and raised here, but even I don't know where I can do certain things. When I'm on the mainland, in the Southwest, it's not hard to find offices, even in small towns. I'll go in, say I'm visiting from Hawai'i and I want to go hiking. The staff is nice and polite and asks me, "What do you want to do?" and they can provide that information. Here, I wouldn't know where to send anybody. What information will help people be respectful of those areas and uses? Identifying areas for activities is a tough one; some do damage the land. Motorsports, shooting, hunting, these may step on toes, but that's their connection with the mauna.

It appears that visitors are not particularly interested in the forests. A tour guide was asked whether visitors had any interest in the lower slopes.

> — Some people may be interested in the māmane and koa forests, but the time frame of a tour is an issue. Mana Road is not safe. The summit is still the original. They have to go to the top.

Although the Pōhakuloa Training Area (PTA) is only partly on the Maunakea slopes (much of it is in the Saddle and on Mauna Loa) it's obviously an important presence. Even so, our participants brought it up rarely, and often only peripherally to other

discussions. Opinions were mixed. Favorable opinions tended to be general ones, while unfavorable ones were more specific.

Favorable or neutral statements were about the services it can provide (in this set of responses, firefighting isn't mentioned). Here are some favorable ones:

> — There aren't many places on DKI [new Saddle Road] where it is safe to stop if you break down. Pōhakuloa personnel are usually on the rescue before police. In an emergency that's important. PTA is a really important asset for the state and the Pacific Rim.
>
> — Pōhakuloa has come a long way through the years. When I was growing up, it was a rubbish dump we raided and collected ammo cans. It was a dump from food stuff to equipment to ammo cans that boys like to collect. But now there are big efforts to recycle, trash goes where it's supposed to go. It is a different world and I see that with other areas and resources on the mountain. We are moving forward, fixing the stuff we screwed up before, and it feels good. I want to see that stuff continue. Pōhakuloa is a big one; when we got to visit and take a tour of the area, it was just different; the improvements done environmentally were big.

And some unfavorable ones:

> — PTA—that's really a tough one. The military is sacred to many and I have family and friends now serving in Western Pacific. The whole idea of PTA, I admittedly have not given it much thought. I'm a little bit cool to the idea. I think the military's main objective is to protect us from other dangers. That's a very worthwhile objective…but at what expense do we protect ourselves from outside threats? Bombing our land to an irreparable state like Kaho'olawe?
>
> — When you make a connection to Kaho'olawe, it hits a nerve with lot of people, who are not seeing conservation. [PTA] is doing a lot of zero waste activities and doing better at having a little impact from buying food and stuff. But what are they doing with other things? Is it only bombs or just gun practice?
>
> — PTA is grossly negligent. They cannot make the same mistakes as Kaho'olawe. PTA is sitting on an aquifer that may be contaminated before we ever need it. This water that goes into that aquifer is the most sacred form of water on the planet.

In summary, *at every ʻaha kūkā* participants worried about the number of people on Maunakea's upper slopes. *Every* person who expressed an opinion saw the problem as serious. No one thought it would solve itself.

With only a few exceptions (such as the cultural practitioners at Hale Pōhaku) the issue was not so much what the visitors were *doing* (or were *unable to do,* such as drive 4WD vehicles) but that there were *too many of them*. In other words, we heard very few reports of inappropriate behavior, but we heard many people express serious concerns about the sheer number of visitors (and vehicles).

Issues on the lower slopes are smaller-scale and, in theory at least, can be brought under control with hard work and innovative thinking. In practice, though, our participants expressed frustration with what they saw as a confusion of responsibilities.

For both the upper and lower slopes we heard about as many complaints in the form "no one's in charge" as we did in "they're not doing their job."

Ways Forward

At the beginning, we said that the Hui Hoʻolohe's kuleana does not include making recommendations. But it's certainly true that our participants did, and in this section we'll look at some frustrations and pass along some of the recommendations we heard.

On the matters of the TMT and the current observatories, our participants did not speak with a single voice, except perhaps to recommend "no more." But "no more" sometimes meant "no more after the TMT," sometimes "no more unless others are removed," and sometimes it meant "no more at all." Based on what we heard, we could never answer a question phrased as "were the participants for the TMT, or against it?"

Everyone seemed to recognize that the observatory issues were large-scale and very difficult politically, economically, and culturally. The issues at the VIS—and the potential for new centers in that area—seemed less difficult.

Many participants wanted to talk about education. As we understood them, the common theme was that if more attention were paid to education, Maunakea would benefit (it's hard to mālama if you don't know what would be helpful) and so would young people, and visitors as well. Recall the earlier statements such as "It's like an ecological university for me," and that visitors who behave inappropriately often have no idea what's appropriate and what's not.

Ideas about education ranged widely. In some cases the suggestions were school-based, but there were many ideas involving physical learning centers on Maunakea itself. A great many participants talked about how they had come to know Maunakea (as we discussed in "What Maunakea Means"). Education—deliberate active instruction—was key, and in the main it was directed to young people.

From a high school student:

> — the one group of people to really consider educating is the children. The ones younger than us because they are the ones coming after us. We can even choose the middle school because they might understand more than the kindergarteners—but the children younger than us will be taking over the high school and they come after us, they are as important as us high schoolers. If you teach them now and they learn now, they'll have a grasp for it, they'll know about these things even if you simple it down. Better if they know about it now so when time comes for them to take over, they'll already know about it.

From a sixth-grader (who, as so many adults did, began with a simple idea and spun it into something more complex):

> — They should create hiking trails because most people like to go hiking. Also, they would be more interested visiting Maunakea because the hiking trails would keep them busy and experience more about their surroundings while hiking up the mountain. They can also see more views and they can stop anytime they want and enjoy the view. After looking at the views, they can keep hiking and to find more interesting things about the mountain.

Several participants spoke about possible educational centers:

> — What is most significant about the mountain to me is how it is such an inspiring place to learn and yet only a very elite group gets to learn on Maunakea. We need to do everything we can to change that, and be inclusive so everyone who wants to learn is able to do so. My vision would be the interaction would happen at a mid-level visitor center; some sort of education heiau at the visitor center where people can go and learn in whatever method they want to learn about the universe. The sky connects to Polynesian and western culture. Maunakea connects all that. There is so much potential for learning and connecting people to the mountain and the sky inspiring people to learn, both about modern astronomy and historically.

— What we are proposing is that Native Hawaiians have a prominent place like we had before when voyaging from the South and like Mālama Honua. Above the clouds we can still be at that place of exploration and a real prominent place. The message of Hawaiian culture is sustainability; everyone one knows that. Can you imagine stargazing for students with a place to stay overnight? Makes sense about survival and future positions where you need to be in the future so it's still viable. Students who have the opportunity to do that, come out and look at the night time stars, what's in their mind? All we can do is give youth this type of tremendous opportunity. I think you would like to have a place where local people feel proud that Maunakea is the best in the world. Maybe we don't show enough appreciation or respect for culture. We want to set up a center so the average person feels proud and says to others, "Hey, come."

— We need childhood connectivity through activities. There are monthly weed pulling activities, but how many people know? If you are in a circle of knowing what's happening, that's fine, but we need a real community wide effort. Do they know they can pull weeds? The community can come together in the center.

Or a World Heritage Site:

— [Mayor Kim] talked about a heritage site [at Maunakea Recreation Area]. If that's what he thinks, perhaps it could be a UNESCO World Heritage Site. That could be amazing as it would force certain types of actions, but it would bring many more visitors. People want to check off visiting UNESCO sites from their bucket list.

Even virtual centers:

— Things I hear about Maunakea, I wonder if that's true, or where did I hear that? There are so many misperceptions, especially about the telescopes and the mountain. It would be wise if there were some type of fact sheet. Everyone could go on a website, or sheets passed out every opportunity, just facts about Maunakea. It would also be wise to have facts signed off on by telescope people both pro and against. Whoever did it would need to be well respected, well known on both sides so there are no complaints. I think that would help the entire community build on what we have in common, what we know to be true.

One person suggested more training and a more active educational role for the Maunakea Rangers:

— [OMKM has] to start doing education, especially since UH does education. There are so many things we can learn from Maunakea about nature. They should make some kind of education available to the general public.

— We need to identify the sites up there and make them visible. Educate people so they are aware. There's nothing stopping people from driving off the road. Last week we went up for a morning sunrise ceremony. There was a vehicle off the road, and I wondered: "How did that Jeep get all the way over there in the historic preserve?" It is partially our fault, because there is no adequate signage. Our whole focus is to identify things there, put up signage and allow families to practice.

For the cultural practitioners at Hale Pōhaku,

— There is a lack of protective measures, no interpretive signs that say, "This is sacred to Native Hawaiians, please respect their right to practice." Signage needs to be multi-language.

This is a good place to talk about whose opinion about Maunakea should be heard and taken seriously, and whose opinions may be more powerful or valuable than others. In our sessions, there were clear differences of opinion (but never any arguments) about this. Here are some examples.

— I have lived my adult life on this side of the island in Capt. Cook and Mauna Loa is my mountain. Which is cooler? I don't know. I don't have a right to say what goes on there [Maunakea]. I've driven on the mountain hundreds of times, but it is not where I'm from.

— Since TMT, every part of the island wants to claim it as their mauna. They never did before. Keaukaha claims the mountain, but they are an ocean community.

— Outsiders come with different attitudes. Those from Hilo or Puna, where Pele dwells, are fierce, and they like telling others about their own places. Hawaiians cannot tell others what to do. It is for the people of the place. Maunakea is our place.

However, not everyone agreed.

— [In Honolulu] people were happy to come and stand together. Having the march in Waikīkī, they could feel good to be part of it. We have a say; people on O'ahu have a say; it's all valid.

— That's a thought. I'm not more important; I lived away and now want to raise my kids here. My gut reaction would be, no; perhaps some may be more passionate depending on their connection. Everyone gets the opportunity to sort out the facts…some may have to work harder to get a voice.

— I keep hearing people say, "I'm haole, I don't connect without the cultural, emotional connection." Someone once told me, "You don't have to have Hawaiian in you to be Hawaiian; there is aloha spirit." People connect with people they "know" are Hawaiian and then find out they actually aren't Hawaiian. It is the way you perceive yourself. So I think letting people know they don't have to be Hawaiian to connect with [Maunakea] would be good. We can all help find common ground. It's not the easiest thing to find a welcome into the community of aloha and support, and allow it to come to a conclusion. "I'm not Hawaiian, do not listen to me" is not correct.

— I'm Japanese by ancestry, but born and raised here. There's another culture that has evolved here, which is the local culture. Even if we are different ethnicity, we have the same values. Education is needed from the local culture for newcomers. We need to teach them about our value system and about Maunakea and then we can come to a compromise as to how we use Maunakea for the future.

It was rare that participants didn't talk about cooperation, especially when talking about controversies. Cooperation was spoken of as a goal but, at the same time, participants pointed out that it's not so easy to attain.

— We don't know the answer. It's too easy to just be defensive. When everyone is defensive, then no solution is possible. We are advocating that everyone talk story.

— Most people aren't that educated about what's going on. They think, "Well, it's just a mountain," but if you look beyond the surface you see it's really rich. Personally I would go close to it. I think more people need to understand both sides of the story rather than one mind set. There is a lot of value for Maunakea and I think people need to have open mind going into these things. People need to learn more about the Hawaiian culture, instead of just saying science is good, they also need to understand there is another world to be open to.

A retired scientist suggested cooperation might emerge from jointly valuing what we can find on Maunakea.

> — We should expand our vision. I hope eventually we can all value what the people opposing and those with different points of view value. Culture, watershed, geological, flora, fauna, scientific value. If we can value all of them instead of only one, that may be the key.

A person who moved to Hawai'i Island from O'ahu:

> — [Maunakea] is very important and sacred. Everyone in the community can participate in how it is significant and of value. Making it a place for people to use in a pono manner. Not necessarily police the mountain but allow people be there as long as they treat it appropriately. How do we make it a place of community collaboration, protect its natural resources, keep it beautiful and significant together as a community? Being able to do that as a hui is important. The mauna is really important and something everyone in the community values, in different ways. We need to unify around what is important.

From a Hawaiian cultural practitioner:

> — It's my hope and vision that we can come together in cooperation and not conflict, that we can envision Maunakea, Hawai'i nei, our environment and our resources being stewarded in a pono manner, as our ancestors demonstrated they can be. Together, we have a sacred kuleana to mālama—to cultivate, sustain and pass on the vast legacy that we have inherited from our kūpuna to future generations.

In the same vein, a naturalist feels as though the very act of mālama 'āina leads to cooperation.

> — It always strikes me that on inherently controversial issues you start by what you agree on and put away those things you do not agree on. I'm encouraged by comments to mālama 'āina.

As does a geographer:

> — My feelings are that there is room for coexistence of many things. Cultural practices, scientific advancement, agricultural/pastoral uses, I see it all as one. I want to be involved with others. Everything is inter-related; we are all part of it. The island is a

> whole. I'm extremely upset about what's been happening. It is hurtful and unsatisfactory. I want to help make it so it makes us all better, more knowledgeable. This is home for all of us, and I want all parts of it—historical, cultural, scientific, etc., respected. This requires all people to be involved from whatever view. That's what I want to see for the future.

And someone who came to a meeting in support of his kupuna:

> — From my perspective what I hear, see and know, there will be progress no matter what. We can't stop; but whatever we do, it needs to benefit kids down the road. Eventually we are all going gain something from it in a good way if it's done harmoniously and with respect to past history. I'm hoping people will be more open to it. Of course, people only see one side. If we step back a little bit more and see both sides, then we can come to compromise. What I see and feel, it that down the road it will be good.

Certainly we heard no voices raised against cooperation, but participants did not speak of it with a single voice. Our sense of what we were told is that for cooperation to be successful, all parties need much more than a superficial understanding and feeling for Maunakea. As we saw in the discussion of education, there seem to be many paths to that goal. Importantly, it needs to involve not only young people, but adults—even those who are residents. As we saw in the "What Maunakea Means" chapter, people who have learned about Maunakea by feeling it and trying to understand its nature by direct interaction—*by being on the mountain*, in other words—will be more open to sharing and cooperation.

Another set of problems involve not what's in place on Maunakea, but what to do about the people going there. Most participants thought the best way forward would be to seriously reduce the numbers, not just of people, but of vehicles. In theory, participants said, this may seem straightforward because there is only the one road. All you need to do is control traffic on that road. In practice, of course, this would be very difficult, because the road from the Saddle Road to the summit is controlled by multiple entities.

Sentiment was overwhelmingly in favor of enforcing a "4WD-only" restriction for the road above the VIS, but how that might be managed, and by whom, remained unclear. No one who spoke on that matter thought that a 4WD-only restriction alone would solve the traffic problems, partly because of the rental car companies that push 4WD vehicles to inexperienced drivers. Nevertheless, there was agreement that it would help.

There was general agreement among our participants that some form of private/rental car restriction-plus-shuttle would have to be put in place.

Some quick takes:

> — Tour companies are my choice of accessibility for tourists because they receive education before, during and coming down and leave with far greater knowledge. The visitor with a 4-wheel drive vehicle just goes up to say they did it.
>
> — I'd rather have one van with 12 people than six Mustangs with people who don't know how to downshift.
>
> — [The VIS] parking lot used to be the space for tours to do stargazing; now rental cars have taken over the lot.
>
> — There could be an amateur observing area at another place [at the VIS].
>
> — Stop all tourists from going to the summit. We have to manage the amount of people going up to see the stars.
>
> — It's really clear that the traffic is scary. It's dangerous, so we have to have some mechanism to control traffic.

One participant suggested that summit or VIS stargazing could be moved to Maunakea Recreation Area:

> — When access to the summit was curtailed during all the TMT controversy, a lot of tours stayed at the park instead and did stargazing and took their lua [bathroom] break. The park works for stargazing. You could limit demand by having stargazing there rather than up on top. There is enough capacity there.

A high school student suggested finding ways to integrate visitors so that they help solve the problems they create:

> — I think we need to make visitors part of solution instead of part of the problem. Having them help instead of hurt on the top of the mountain. Not include them as problem, but integrated into solving the problem. I think it would be good to make mountain have a limit how many can to up, like the national parks. You can't have a billion people there. I think it's important and an opportunity to educate or say we can remove you from this place if you are being disrespectful. Going to the mountain is an opportunity and not a right. We don't want to make visitors who are being educated feel like they are ruining the mountain, or disrespecting it, but letting them know they can help preserve it. Like down at Kona airport where coral art graffiti was a big problem. People gathered all the coral and took it away.

A cultural practitioner talks about what went wrong on a visit, but makes the point that education and signage would help. We admired his gentle manner with visitors.

> — There are many sacred sites; my hālau would go there. Once I took 150 people at the same time and the Rangers were not happy. There is not enough signage to educate visitors and create awareness. At one ahu, visitors were standing on the pu'u…they thought was photo shoot spot. One person took a photo, then all the rest followed. I tried to yell in the thin air, but I had to walk to the top to tell them, "This is not what you think it is. In your mind you thought it was built for you, but it's easy to see it was built a long time ago." I contacted DLNR to request signage. We held a solstice ceremony there and put ho'okupu [offerings] on the ahu.

Everyone who talked about ways to control access recognized that charging a fee for access might be part of the solution. No one thought it would be easy to plan and implement, though.

> — There needs to be a balance between open access and controlled access, because Maunakea will probably have more visitors—two times, three times what we have now. I like to see the mountain being respected, but also have people learning from it culturally, educationally, with astronomy included. It's interesting how I would have to get a permit to take a hālau up there to do a protocol. If we have Hawaiians wanting to do protocol for solstice, then do they charge me? Who is the mountain for?
>
> — [A few years ago] there was a very good idea from OMKM that all the public cars would go to a big parking lot and then people would go up via shuttles. That way they can be controlled.
>
> — We have to think of the future. Think five or ten years ago and so many things have happened since then. Think about five or ten years from now—what's going to happen? In the past five years there has been an increase of more than three times, five times more people going up there without control. It used to be, when I did stargazing 25 years ago, no one else was there. Now, it's used for the public and no one can go into the parking lot. OMKM doesn't want the public to know what's happening on Maunakea. They invite people to stargazing but that's a problem. Maybe 200 cars every day now, so what will it be like five years from now? We've got to do something now; it's not too late. The next step is we need to talk about five years from now when maybe there will be 500 cars. The summit at nighttime is so dangerous. If TMT construction starts, with all those small cars, what's going to happen?

> — They need to stop independent tour operators. Now Chinese and Koreans come in non-permitted vans, come so many times and the rangers are supposed to do something, but they just wave them through. Once we do something, they point fingers. To me, if you say "come," more people will come to this island. Maybe they can increase the number of permitted companies, or maybe have some training programs. Right now they have an orientation, but that is nothing. If they need us, we can volunteer for that.

The issues of controlling visitors versus controlling local people in general (and cultural practitioners specifically) seemed so difficult to our participants that they were never explored at length. No one went beyond the obvious ideas (if you show a Hawai'i ID, and have a 4WD vehicle, you can go up; otherwise you go in a shuttle or not at all). Implementing ideas like these seemed extremely difficult to our participants. However, that did not make anyone back away from the conclusion that traffic and visitors must be controlled somehow.

The question of a possible fee came up several times. One participant told us that when entrance fees are implemented on the mainland, traffic generally drops about 30% even if no other restrictions are in place. Several participants pointed out the usual agency/kuleana difficulties.

We think a summary statement of what we heard would be: Something *must* be done, and *soon*.

Management of Maunakea was brought up at every session but one. There was a general feeling that it is not being managed as well as it could be (some participants were rather more critical than that). As we've reported, there seems to be no single "management," only a patchwork of managing entities, and this is certainly true when we're talking about the entire mountain. Some participants talked about very specific management issues (most often control of visitors and access to sacred areas), but generally people just shook their heads and offered us various versions of "we need better management up there."

Many comments were general. Some said that mālama and management are not interchangeable, and confusing them with each other will lead to problems.

> — Management puts us above the plane of things. Mālama is the word, we can all agree. Management is control and for self-serving.

> — When we use terms like management and resource, for me it is very western perspective because mountains are not a resource. They are sources that ground us, nurture us. Maunakea has its own story and purpose of being here. My vision is to mālama. It's

about Maunakea. It's not about us, it's about Maunakea. In the process of mālama, taking care in a sense, it nurtures us when doing the act. Our spirit. It nurtures us physically and intellectually when we begin to mālama the source.

— There is gross mismanagement; there is no need for Maunakea to be managed. Leave it alone. Do what you can to take care.

But not everyone:

— In my life, I've been a seaman. Coming back to the islands, I see Maunakea and I'm glad to be back home. Then when I'm on land, I say, "These buggahs all screwed up!" This isn't just one person's idea. Certainly we should look to county and state to show some leadership and not to cave to a big group with money. Look to those in leadership to figure it out. I don't see any difference between management and mālama. We live on an island.

And there's the entire question of kuleana, which this speaker distinguishes from authority or power:

— If we have kuleana, we need to back up to that and say, "OK." In the Navy, if you're on guard and you go to sleep the ship goes aground. You were the one with the kuleana. Kuleana and authority are different. Those who have kuleana cannot delegate kuleana.

One participant feels as though the UH IFA (Institute for Astronomy) should be more proactive.

— There is a general sense that management is disinterested in outreach and that really worries me. In addition to not communicating what is true about Maunakea, it means if someone doesn't feel like they are experiencing Maunakea, then more people are going to go to the summit for themselves. Access should be more regulated, more restricted going to the summit and there should be a heavier investment in having something at the visitor center level to celebrate Hawaiian culture. Related to personnel/leadership issues, I don't have any faith that IFA understands this. They are nice, good people, but they won't own or deal with the problems. An astronomy facility has to be environmentally responsible for the entire mountain and everything.

One group of cultural practitioners was frustrated by VIS area rules, which interfered with their religious practices. They told us that no one seems to have kuleana for these issues.

> — We don't want rules saying ho'okupu [offerings] will be removed after 24 hours and destroyed. We do have broader uses also, such as sometimes gathering things for propagation. As is always the case, the endemic special red seeds not there any more. Invasives have taken over. There is no accommodation for practitioners to remain for 24 hours; they will be arrested.

There are important questions about who should be involved in management. To some extent, the people who spoke to the question "who gets to talk" dealt with this issue. We won't repeat what they said.

> — For a management plan, who should be at the table? Cultural practitioners, DLNR, DHHL. Try to find people with no agenda. One problem is when the people have to follow the agency's "vision." It's better if they are independent. Also they must have native people in general involved.
>
> — When you talk about land management, you need to include the landowners. Do they talk about Maunakea and have a different relationship? There need to be deep conversations among the landowners.
>
> — I advocated for local management, localized conversations to help with how better manage the mauna. Any transition of management to county? Does the state know what people think should happen? How many times has the Governor been up there? OHA…I don't think they know, even though some trustees have gone up the mauna. They represent the State of Hawai'i. It is a statewide initiative, but at the end of this day, it is our island, localized.
>
> — [OHA doesn't have the management skills]. I know this is state land, but I think the best management comes from people who live on this island and from a community approach. Whether UH-managed or DLNR-managed, both are statewide entities. They need community-wide support, which they have been doing, but maybe it needs to evolve more. OMKM needs to outreach into the community more for this type of conversation. I don't think switching hands solves the problem, and they don't have experience knowing what happened in the past.

In various places we've already reported what people said about the patchwork of kuleana, the uncertainty about who's in charge of what (and when). Here are some comments about leadership and management in a more general context.

> — With the exception of a few people, I saw a lack of leadership from the astronomy community. When astronomy is silent, issues rise up and the silence gets filled by misinformation (like military lasers in the observatories, the watershed is being damaged, and half of the telescopes aren't working). This fills the vacuum created. [There should have been] a conversation between IFA and the broader community. That didn't happen. As a result, we have those [false assertions]. There has been a failure of leadership in the astronomy community and now we need to deal with that.

> — Having more management on Maunakea, yes—but we don't like having a guard or having to show ID, but Volcano is very well protected because of this, and it could be a good thing because it promotes more awareness, and people to say "stop fooling around"—so there has to be a balance.

In summary, "management" was much talked-about but most often in a general way. Certainly we heard specific complaints about the ways that specific entities (most often OMKM and DHHL) managed Maunakea, but in general we feel as though what we heard as "management" was a mashup of many different activities and problems. Saying that isn't meant to dismiss the considerable frustration we heard—it's only to point out that the term was in the main used generally and only rarely specifically.

It could not be more clear that regardless of what "management" meant to our participants, *they were not happy with it*.

Our Final Mana'o

We'd like to close with three quotes that can speak for themselves, and a final comment of our own.

> — Each of us are different creatures, from different places, with different opinions, outlooks, and passions. It is as it should be. Our differences make us stronger, and allow us to learn from one another, making all of us better people. The art of negotiation and compromise is an important part of the learning. We must allow ourselves to recognize our strengths, skills and abilities, as well as our faults and weaknesses, and we must strive to recognize the same in others. Too, we must understand that change may take longer than we wish.

> — For me, Maunakea has divine powers and I wish not to see it disturbed any longer. We have allowed outside influences to dictate the use of the mauna without considering the feelings of our host culture. We Hawaiians live in a challenging world today. We are caught between Western thinking and Hawaiian thinking. We have always adapted to change, distancing ourselves from the thinking of old. All too often I have seen the Hawaiian way of thinking not accepted by the leaders of government, private industry and even by our own Hawaiian people.

— We live on an island. "He moku he wa'a, he wa'a he moku."
The island is a canoe, the canoe is an island.

In the end, what the Hui Ho'olohe learned is this: a great many people know a great many things about a great many aspects of Maunakea, and will share them with anyone who cares to listen.

Please listen to them.

About the ʻAha Kūkā

We'd like to include some of what we heard about our process and, after that, list the specifics of our ʻaha kūkā. Although after the first ʻaha kūkā we were confident our process would work, we weren't certain. But it did work, and over the 15 sessions we regularly heard comments about it. Here's a sampling.

Not everyone who came agreed with our process.

> — I am trying to understand the why and the validity of the EnVision Maunakea process. There needs to be a neutral consultation. Coexistence is not a process. I have very strong feelings but don't want to be a part of relationships with UH and the observatories. I'm not sure if this is a consultation. It is a vague process. How will the work be used? It is very broad and there is a lot of uneasiness. It is not a fair and unbiased process. It is more pro-astronomy. I do not recognize its validity; I am participating, though its views are not unbiased.
>
> — We have been waiting to hear when you would be coming to the community. Labor unions said the only interest is businesses, the Chamber and PUEO and likely would not include practitioners. EnVision is only soliciting input from individuals; we worship collectively and as families. In any event, there was

a broad news push and the general consensus is that this is a political body. There has been no notice of meetings; no contact. This is a preordained report.

But many did.

— Great to have a forum where can just share beliefs. Other places don't have opportunity. Here you can voice your beliefs and no one is negative; everyone is accepting.

— It doesn't matter if we are on opposing sides, we are going to be able to voice our opinion here. I wish we could do that among friends, without rolling up sleeves and going outside.

— Have done so much homework.

— You mentioned our kuleana is to find ways to coexist. I'm tired of meetings. I wasn't going to come, but then I heard a comment at farmers market. It is because we are Hawaiians, it is natural for us we have the na'au. You guys develop na'au (heart for it). You passionately understand your kuleana in protecting what has been given to us.

— Thank you for inviting me. Since Wally is a reasonable kind of guy, I came. I didn't know why I was coming, but I'm very glad I did come.

— We have a chance to do lots of good things, through mediation and groups like this, to work out differences.

— This work of compromise—I don't think our chiefs practiced such a thing in ancient times. It was this one or nothing. I don't want to go back. No, but this is very sensitive subject to me. I found the courage to come and express mana'o, and hopefully what I shared today, I take it seriously.

— I think these kinds of gatherings are not just for Maunakea but also for all of Hawai'i. Thank you for organizing. This has to be projected throughout Hawai'i for all.

Not everyone who was invited to an 'aha kūkā came. The number of participants ranged from 2 to 14.

ʻAha ʻKūkā Dates and Locations

March 18th, Kona.

Community members, kūpuna, cultural consultants, educators, ranchers, professionals at a non-profit

April 8th, Hilo.

Scientists, community members, kūpuna, cultural practitioners, business people, retired scientists

April 29th, Waimea

Homesteaders, cultural practitioners, kūpuna, community members, observatory staff, conservationists, naturalists, photographers

June 3rd, Kona

Kūpuna, community members, ranchers, students

June 10th Hilo (two sessions)

Astronomers, professors, undergraduate and graduate students, observatory staff members, community members, photographers, naturalists, conservationists

June 12th, Waimea

Community members, professionals at a non-profit, business people, hunters/ recreational users

August 15th, Kona

Ranchers, community members with and without prior political experience, cultural practitioners, kūpuna, business people, hunters, labor union representatives, educators

August 26th, Hilo

Community educators, astronomy support people

October 22nd, Hilo

Cultural practitioners

October 27th, Kea'au

High school students

November 18th, Kona

Tour company drivers and owners, tour industry consultants

November 21st, Kona

Communications consultants, non-profit business owners, community members with prior business experience

December 7th, Hilo

Business people (active and retired), tourism-related people, community members

December 9th, Kapa'au

High school juniors, some from other islands

Written submissions

Sixth graders, Honoka'a
UHH students, Hilo
Community members (2)