



December 23, 2020

The Honorable Ronald D. Kouchi, President and Members of the Senate Thirty-First State Legislature Honolulu, Hawai'i 96813

The Honorable Scott Saiki, Speaker and Members of the House of Representatives Thirty-First State Legislature Honolulu, Hawai'i 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, the University of Hawai'i is transmitting one copy of the Annual Report on the Mauna Kea Lands (Section 304A-1905, Hawai'i Revised Statutes) as requested by the Legislature.

In accordance with Section 93-16, Hawai'i Revised Statutes, this report may be viewed electronically at: http://www.hawaii.edu/offices/government-relations/2021-legislative-reports/.

Should you have any questions about this report, please do not hesitate to contact Stephanie Kim at 956-4250, or via e-mail at scskim@hawaii.edu.

Sincerely,

David Lassner President

David Kalle

Enclosure

UNIVERSITY OF HAWAI'I SYSTEM ANNUAL REPORT



REPORT TO THE 2021 LEGISLATURE

Annual Report on the Mauna Kea Lands

HRS 304A-1905

December 2020

Annual Report on the Mauna Kea Lands Legislative Reports HRS § 304A-1905

Pursuant to Hawai'i Revised Statutes (HRS) § 304A-1905, "Mauna Kea Lands; reporting requirements," the University of Hawai'i (UH) respectfully submits its report on (1) Maunakea lands activities; (2) current and pending lease agreements and fees; (3) the status of current and pending administrative rules; (4) income and expenditures of the Mauna Kea lands management special fund established in HRS § 304A-2170; and (5) other issues that may impact the activities on the Mauna Kea lands. Consistent with past practice, this report covers the fiscal year 2020 (FY20), which starts on July 1, 2019, and ends on June 30, 2020, but this report may also include matters outside FY20 where relevant.

Current and Pending Lease Agreement and Fees

In 1964 the Hawai'i State Legislature passed Senate Concurrent Resolution 16 (SCR 16) stating that the "State of Hawai'i and its citizenry are most desirous and willing to co-operate and aid in the promotion of our nation's space program and research to the benefit of the County of Hawai'i, the state and the nation." It was resolved that the governor set aside and establish an appropriate area on the summit of Maunakea for the installation and operation of telescope observatory and astronomical activities. In fulfillment of SCR 16, the Mauna Kea Science Reserve (Science Reserve) was established in 1968, and the Department of Land and Natural Resources (DLNR) and UH entered into an agency-to-agency lease granting UH a lease of the Science Reserve for a term expiring on December 31, 2033 (Master Lease). The lease is gratis, a common practice for leases between government agencies and one that supports the goal of benefiting the County of Hawai'i, the State, and the Nation.

Also in 1964, Governor John A. Burns recognized that Hawai'i has "... some obvious natural advantages in this area of scientific research, [and that Hawai'i] must capitalize on these, utilizing all our available resources at the University, in the industrial community and at the levels of State and local government." He also emphasized that Hawai'i is not "constrained by these physical advantages." "We can acquire competence in any field of scientific inquiry," and "[t]he limitations are only those we impose on ourselves." (Honolulu Advertiser, August 7, 1964).

Governor Burns understood the demand for manual labor in agriculture would decrease over time, and that future jobs would require technicians and scientists. The development of a research enterprise would provide jobs of the future. The two areas Governor Burns felt the State should pursue were in the fields of oceanography and astronomy, areas in which the State of Hawai'i unquestionably excels.

In a State-UH effort to establish astronomy as a viable research endeavor and establish Hawai'i as a center for astronomical research, the UH entered into subleases with 11 organizations to operate astronomical observatories. The Board of Land and Natural Resources (BLNR)

approved all subleases, which are co-terminus with the UH's Master Lease. Each sublessee is obligated to provide a guaranteed percentage of viewing time to the UH. Viewing time provides invaluable advantages for advancing UH, Hawai'i's only State-funded institution of higher education, as a center for excellence in research, including astronomy.

At little cost and risk to the State, UH is recognized as one of the Nation's leading astronomical research institutions and globally as the center of excellence for astronomical research. This recognition contributes significantly to the State's efforts to expand its high technology sector. The annual economic impact of astronomy in the State in 2012 was \$168 million (\$191 million in 2020 dollars (CPI-U)), with the largest impacts found on Hawai'i Island and Honolulu, \$91 million and \$68 million, respectively. Additional benefits accrue to the State and local communities through opportunities in scientific, professional, technical, and administrative employment within the local community.

In preparation for seeking a new land authorization (e.g., a new master lease from the BLNR beyond 2033), the UH is updating the "Mauna Kea Science Reserve Master Plan," adopted by the UH Board of Regents (BOR) in 2000, and the "Mauna Kea Comprehensive Management Plan," adopted by the BLNR in 2009 (collectively, the Plans). UH is also preparing an environmental impact statement (EIS) for UH's proposed new land authorization to continue astronomy on Maunakea.

Among other things, the Plans integrate management actions that strive for a renewed balance across the cultural, natural, educational, and recreational values Maunakea provides the State. The Plans will also address decommissioning commitments UH has made.

The EIS will analyze impacts from alternative forms of land holdings and parcel configurations, including a request by Governor David Ige for approximately 10,000 acres of the land currently leased to UH under the existing lease arrangement with BLNR to be returned to BLNR, leaving approximately 525 acres leased to UH for astronomy purposes. An EIS Preparation Notice was published through the Office of Environmental Quality Control's February 23, 2018 edition of "The Environmental Notice." UH held public open houses in March 2018 in Hilo, Waimea, and Honolulu. UH is currently conducting outreach efforts with the community and interested persons to develop a draft EIS that incorporates public input and comments.

Thirty Meter Telescope (TMT) Sublease

On April 12, 2013, following a contested case for the TMT project, the BLNR granted the Conservation District Use Application (CDUA) and issued a Conservation District Use Permit (CDUP) that would allow the construction and operation of TMT. On April 9, 2015, BLNR issued its formal written consent for UH to enter into a sublease with the TMT project proponent, TMT International Observatory LLC (TIO).

The BLNR decision on the 2013 CDUP was appealed to the Hawai'i Supreme Court. The Court invalidated the permit and ordered a remand to the BLNR for a contested case hearing before the BLNR or a new hearing officer. On remand, the BLNR appointed a hearing officer who conducted a contested case hearing. The contested case involved 25 parties and took over a

year to complete. It included 44 days of testimony involving 70 witnesses. Over 800 exhibits were filed. On September 27, 2017, the BLNR issued its 271-page Findings of Fact, Conclusions of Law and Decision and Order containing 1070 Findings of Fact and 512 Conclusions of Law, which approved the CDUA, the TMT Management Plan, and resulted in a CDUP for the construction and operation of TMT.

Various project opponents appealed the BLNR decision on the 2017 CDUP. Pursuant to 2016 Hawai'i Session Laws Act 48, the appeals were made directly to the Hawai'i Supreme Court (SCOT Nos. 17-0000705, 17-0000777, 17-0000811 and 17-0000812). On October 30, 2018, the Hawai'i Supreme Court affirmed the BLNR's September 27, 2017 Decision and Order authorizing the issuance of a CDUP for the TMT. Also, on August 18, 2018, the Hawai'i Supreme Court overruled a lower court's order by holding that a contested case hearing regarding whether BLNR should consent to the TIO sublease was not required on the record in that case (SCAP No. 17-0000059).

The process for obtaining the CDUP approval took approximately seven years from the permit application's initial submission in 2010, including two contested cases, several judicial appeals, and two Hawai'i Supreme Court decisions.

Unlike the other existing observatory subleases, the TIO sublease provides for lease fee payments by TIO. Pursuant to TIO's sublease, annual lease fee payments starting at \$300,000 are phased based on construction activity, with the full annual lease fee payment of \$1,080,000 to be paid when TIO is operational. To date, \$1,907,676 has been paid. These payments are deposited into the Mauna Kea lands management special fund as the legislature directed in 2009 Hawai'i Session Laws Act 132 (codified at HRS § 304A-2170). In addition, as a result of UH's negotiations, TIO committed \$1 million per year in donations to community benefits, primarily by advancing STEM education on Hawai'i Island, and a similar amount to a workforce pipeline initiative as operations become imminent to maximize employment opportunities for residents. TIO sublease is expected to be a model for the other subleases when they are renegotiated upon the issuance of a new land authorization to the UH.

Current and Pending Administrative Rules

HRS Chapter 20-26, "Public and Commercial Activities on Mauna Kea Lands," was adopted by the BOR on November 6, 2019, and approved by Governor David Ige on January 13, 2020 (MK Rules). There are no other pending administrative rules at this time.

The MK Rules are consistent with HRS § 304A-1903, which authorizes the UH to adopt administrative rules pursuant to procedures prescribed under HRS Chapter 91 to regulate public and commercial activities on "Mauna Kea lands," which is defined as follows:

¹ "The proceeds of the special fund shall be used for: (1) Managing the Mauna Kea lands, including maintenance, administrative expenses, salaries and benefits of employees, contractor services, supplies, security, equipment, janitorial services, insurance, utilities, and other operational expenses; and (2) Enforcing administrative rules adopted relating to the Mauna Kea lands." HRS § 304A-2170(b).

... lands that the University of Hawai'i is leasing from the board of land and natural resources, including the Mauna Kea Science Reserve, Hale Pōhaku, the connecting roadway corridor between Hale Pōhaku and the Mauna Kea Science Reserve, and any other lands on Mauna Kea that the University of Hawai'i leases or over which the University of Hawai'i acquires control or jurisdiction.

As required under HRS § 304A-1903, the UH drafted the MK Rules to strive for consistency with DLNR rules applicable to lands located in the forest reserve and natural area reserve adjacent to the UH-managed areas.²

In preparing the MK Rules, UH consulted with the Office of Hawaiian Affairs (OHA) and DLNR. The public outreach and consultation efforts leading up to the final MK Rules included six formal public hearings on Hawai'i Island, Maui, and Oahu; numerous outreach sessions with persons, groups, and agencies with an interest in cultural, astronomy, educational, environmental, and other issues related to the management of Maunakea. UH received, reviewed, and considered over 700 comments. The BOR considered several drafts of the MK Rules at open public meetings and made changes directly responsive to public testimony at the meeting during which the Rules were approved.

Income and Expenditures of the Mauna Kea Lands Management Special Fund (HRS § 304A-2170)

During FY 2020, \$98,252.32 in fees were collected from commercial tour operators, \$642,293.50 in lease fee payment from the Thirty-Meter Telescope, \$72,811.06 carryover from FY 2019, and \$2,755.78 in interest for a total of \$816,112.66. A total of \$465,428.16 was used to help defray the cost to operate the Maunakea ranger program, Visitor Information Station, and road, facility, and infrastructure maintenance expenses.

Total payments of \$164,273.86 made to the Office of Hawaiian Affairs (OHA) in 2020 were as follows: \$18,409.90 (FY 2019 4th Quarter payment) and \$145,863.96 (total of 1st and 3rd Quarter payments). Note no payments for the 2nd Quarter were made to OHA due to the absence of commercial tour activity resulting from the closure of the road from protest activity. A payment for \$2,245.20 for 4th Quarter 2020 was paid to OHA following the start of FY 2021.

The \$78,811.06 carryover from FY 2019 includes 4^{th} Quarter FY 2019 payment to OHA and a mandatory reserve ranging from 5–16% of total expenses. The funds collected were deposited into the Mauna Kea lands management special fund.

Maunakea Lands Activities and Other Activities

The UH currently allows a maximum of eight commercial tour permits, one less than the number allowed by the BLNR. Each commercial tour operator is charged a \$6.00/tour

² Note that lands UH does not lease or have control or jurisdiction over would not be subject to the MK Rules; e.g., if under a new master lease, 10,000 acres are returned to DLNR, those lands would be subject to applicable DLNR administrative rules such as the forest reserve and natural area reserve administrative rules.

passenger fee, which is submitted to the Office of Maunakea Management (OMKM) every month. All fees are used to cover management activities on Maunakea. Twenty percent of the fees collected are set aside for payment to OHA.

The COVID pandemic has significantly impacted commercial tour operators. Operations ceased for a period of time and recently restarted with minimal activity as allowed by county and state directives. Consequently, the sum of fees collected from permitted tour operators has decreased.

The existing permits are a carryover from DLNR. With the adoption of the MK Rules, UH is now working to bring existing permits into compliance with the new MK Rules. The MK Rules allow UH to consider additional options for managing visitors' access, including concessions, a shuttle system, and permitting. UH is evaluating these options as part of the updates to the Plans.

Decommissioning

Pursuant to the CDUP for the TMT project, the BLNR imposed special conditions regarding the decommissioning of telescopes on Maunakea, including the following:

The University will decommission three telescopes permanently, as soon as reasonably possible, and no new observatories will be constructed on those sites. This commitment will be legally binding on the University and shall be included in any lease renewal or extension proposed by the University for Mauna Kea.

Decommissioning efforts follow the process prescribed in the "Decommissioning Plan for the Mauna Kea Observatories, A Sub-Plan of the Mauna Kea Comprehensive Management Plan," January 2010 (DP). The DP lays out a framework and process for the deconstruction of an observatory facility and its supporting infrastructure and restoration of the site. There are four components of the process, which are documented in a Site Decommissioning Plan (SDP) for each decommissioning effort: (1) a Notice of Intent, (2) an environmental due diligence review, (3) a Site Deconstruction and Removal Plan and, (4) a Site Restoration Plan.

The Caltech Submillimeter Observatory (CSO) and UH of Hawai'i Hilo's teaching telescope Hōkū Ke'a (Hōkū Ke'a) are undergoing the decommissioning process. Both CSO and Hōkū Ke'a issued a Notice of Intent in 2015, are working on the various components of the SDP in coordination and consultation with UH and DLNR, and are preparing environmental assessments under HRS Chapter 343 to address impacts associated with removal and restoration activities.

In addition to CSO and Hōkū Ke'a, the United Kingdom Infrared Telescope (UKIRT) has been identified as the third telescope to be decommissioned, and planning scenarios are being developed and discussed with stakeholders.

Related to decommissioning, on November 6, 2019, the BOR adopted Resolution 19-03, "Resolution to Act on Items Relating to Maunakea Management" (BOR Reso 19-03). Accordingly, a schedule to decommission CSO and Hōkū Ke'a by December 31, 2021, was

presented to the BOR. This presentation and schedule is available to the public at http://go.hawaii.edu/Fp3. The Resolution also establishes a December 30, 2025 deadline to determine which three additional telescopes will be decommissioned in compliance with existing or future permits or governmental approvals. UH has begun these discussions with sublessees, and UH is preparing a framework for decision-making for public comment and review as part of the Plans update process.

Center for Maunakea Stewardship: Internal Restructuring Plan

At its August 20, 2020 meeting, the BOR considered and adopted agenda item VI.B, "Approval of Revised Internal Restructuring Plan for Management Operations of Maunakea Lands (continued from May 21, 2020)." The proposed plan is a requirement of BOR Reso 19-03, paragraph 8, which provides that the "purpose of the plan is to improve operations and management and make it more efficient, effective, and transparent." Outreach was a key element of BOR Reso 19-03, paragraph 8.

After consultation and outreach, by which formal and informal discussions were conducted with various stakeholders, findings were reported to the BOR. Outreach included seeking input and comments from the Maunakea Management Board, Kahu Kū Mauna, 'Imiloa Astronomy Center, Existing Maunakea Observatories (individual and group), Maunakea Observatory Support Services staff, Office of Maunakea Management staff, Interested Legislators, Congressional Staff, Governor's Office and Cabinet, Governor's Land Authorization Working Group (DLNR, National Science Foundation, UH, Governor's representative), Thirty Meter Telescope International Observatory Board of Governors, Pūko'a Council, Kūali'i Council, and Maunakea kia'i (through a third-party; kia'i did not respond to our direct outreach).

Among other things, the restructuring included the creation of the Center for Maunakea Stewardship, which coordinates all activities on land managed by UH on Maunakea with direct reporting to the UH Hilo chancellor. The restructuring also provides more direct input from cultural, community, and stakeholder advisory groups.

Details of the "Center for Maunakea Stewardship: Internal Restructuring Plan for Management Operations of Maunakea Lands," are posted online at http://go.hawaii.edu/3zF.

Maunakea Governance

At its April 16, 2020 meeting, the BOR considered agenda item V.C, "Status Update on Items Relating to Maunakea Management Pursuant to Board of Regents Resolution 19-03 (Discussion Only)." The BOR was presented with alternative governance models to fulfill the requirements of BOR Reso 19-03, Paragraph 9, which asks "whether the management of the Maunakea Science Reserve would be better served if transferred to a governmental authority or other third party entity, or through alternate management mechanisms."

A number of existing management models used by other state agencies and private organizations that manage large tracts of land with diverse and complex land management issues were reviewed. Land managers were asked about the benefits and challenges of working under various land management structures. Five models were developed: Attached State

Agency Model, BLNR Management Model, Third-Party Model, Collaborative Stewardship Model, and Collaborative Stewardship Model within UH. These models are more fully discussed in the presentation to BOR available online at http://go.hawaii.edu/3zb.

UH's preference is for Collaborative Stewardship with UH. This model can be implemented without legislation, minimizes the complications arising from HRS Chapter 171 provisions governing disposition of public lands, and leaves only the astronomy precinct and Hale Pōhaku under direct UH management in full collaboration with stakeholders. If world-class astronomy envisioned in the 1960s by the State, Hawai'i County, and UH leaders is still one of the key objectives for Maunakea, UH must play an active role not only in astronomy but other educational opportunities that the unique cultural and natural attributes of Maunakea provide.

The BOR took no action on this matter and noted that a change to a completely new model would require action by state entities outside UH.

Cultural and Natural Resource Education

'Imiloa Astronomy Center, Maunakea Observatory Support Services, and the Office of Maunakea Management are working on designing and installing new informational exhibits about the resources on Maunakea, including culture and archaeology, at the Visitor Information Station. These exhibits are intended to help educate and foster visitor awareness about Maunakea's cultural heritage, natural environment and scientific significance.