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BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAI'I

IN THE MATTER OF Contested Case Hearing Re Conservation District Use Application (CDUA) HA-3568 for the Thirty Meter Telescope at the Mauna Kea Science Reserve, Ka'ohe Mauka, Hāmakua, Hawai'i, TMK (3) 4-4-015:009	Case No. BLNR-CC-16-002 THE UNIVERSITY OF HAWAI'I AT HILO AND TMT INTERNATIONAL OBSERVATORY, LLC'S JOINT BRIEF IN RESPONSE TO PETITIONER KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S

EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, DATED AUGUST 21, 2017 [DOC. 809], SUPPLEMENTAL EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, DATED AUGUST 21, 2017 [DOC. 819], AND JOINDERS IN THE EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, FILED BY CINDY FREITAS; CLARENCE KUKAUAKAHI CHING; FLORES-CASE OHANA; TIFFNIE KAKALIA; MEHANA KIHOI; PETITIONERS MAUNA KEA ANAINA HOU, KEALOHA PISCIOTTA, PAUL K. NEVES, KALIKOLEHUA KANAELE BRANDON KAMAHANA KEALOHA, AND JOSEPH KUALI'I CAMARA; J. LEINA'ALA SLEIGHTHOLM; TEMPLE OF LONO; WILLIAM FREITAS; AND DEBORAH J. WARD ON AUGUST 22, 2017 [DOCS. 820-829]; CERTIFICATE OF SERVICE

THE UNIVERSITY OF HAWAI'I AT HILO AND TMT INTERNATIONAL OBSERVATORY, LLC'S JOINT BRIEF IN RESPONSE TO PETITIONER KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, DATED AUGUST 21, 2017 [DOC. 809], SUPPLEMENTAL EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, DATED AUGUST 21, 2017 [DOC. 819], AND JOINDERS IN THE EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED JULY 26, 2017, FILED BY CINDY FREITAS; CLARENCE KUKAUAKAHI CHING; FLORES-CASE OHANA; TIFFNIE KAKALIA; MEHANA KIHOI; PETITIONERS MAUNA KEA ANAINA HOU, KEALOHA PISCIOTTA, PAUL K. NEVES, KALIKOLEHUA KANAELE BRANDON KAMAHANA KEALOHA, AND JOSEPH KUALI'I CAMARA; J. LEINA'ALA SLEIGHTHOLM; TEMPLE OF LONO; WILLIAM FREITAS; AND DEBORAH J. WARD ON AUGUST 22, 2017 [DOCS. 820-829]

Applicant University of Hawai'i at Hilo ("**UH Hilo**" or the "**University**") and Intervenor TMT International Observatory, LLC ("**TIO**") jointly submit the following brief in response to Petitioner KAHEA: The Hawaiian Environmental Alliance's ("**KAHEA**") Exceptions to the Hearing Officer's Proposed Findings of Fact, Conclusions of Law and Decision and Order dated July 26, 2017 [Doc. 809] dated August 21, 2017 ("**KAHEA's Exceptions**" or the "**Exceptions**"), KAHEA's Supplemental Exceptions to the Hearing Officer's Proposed Findings of Fact, Conclusions of Law and Decision and Order dated July 26, 2017 [Doc. 819] dated August 21, 2017 ("**KAHEA's Supplemental Exceptions**" or the "**Supplemental Exceptions**"), and the Joinders in the Exceptions filed by Cindy Freitas; Clarence Kukauakahi Ching; Flores-Case Ohana; Tiffnie Kakalia; Mehana Kihoi; Petitioners Mauna Kea Anaina Hou, Kealoha Pisciotta, Paul K. Neves, Kalikolehua Kanaele Brandon Kamahana Kealoha, And Joseph Kuali'i Camara; J. Leina'ala Sleightholm; Temple of Lono; William Freitas; and Deborah J. Ward, which joinders were filed on August 22, 2017 [Docs. 820-829] ("**Joinders**"), pursuant to Hawai'i Administrative Rules § 13-1-43.

As discussed in detail below, KAHEA's Exceptions, Supplemental Exceptions, and the Exceptions to the Hearing Officer's Proposed Findings of Fact, Conclusions of Law and Decision and Order dated July 26, 2017 in which KAHEA joins, are procedurally flawed and lack substantive merit, and therefore should be rejected by the Board of Land and Natural Resources ("**BLNR**"). UH Hilo and TIO request that, with the limited proposed revisions set forth in their respective exceptions filed on August 21, 2017 [Docs 816 & 813, respectively], the BLNR adopt the Hearing Officer's Proposed Findings of Fact, Conclusions of Law and Decision and Order filed July 26, 2017.

I. INTRODUCTION

On July 26, 2017, after presiding over forty-four days of testimony from October 2016 through early March 2017, and reviewing hundreds of exhibits, Judge (Ret.) Riki May Amano ("**Hearing Officer**") issued her detailed Proposed Findings of Fact, Conclusions of Law and Decision and Order [Doc. 783] ("**HO FOF/COL**"). The Hearing Officer recommended that the Conservation District Use Application HA-3568 ("**CDUA**") for the Thirty Meter Telescope ("**TMT**") Project and the attached TMT Management Plan be approved subject to a number of conditions stated therein. See HO FOF/COL at 260-263.

The Board of Land and Natural Resources ("**BLNR**") issued Minute Order No. 103 on July 28, 2017 [Doc. 784]. Pursuant to Minute Order No. 103, the parties to the Contested Case Hearing ("**CCH**") were given until no later than August 21, 2017 at 4:00 p.m. to file exceptions to the HO FOF/COL. Minute Order No. 103 expressly required the following for any exceptions:

> The exceptions shall: (1) set forth specifically the questions of procedure, fact, law, or policy, to which exceptions are taken (2) identify that part of the recommendations to which objections are made; and (3) state all grounds for exceptions to a ruling, finding,

> conclusion, or recommendation. The grounds not cited or specifically urged are waived.

Minute Order No. 103 at 1; see also HAR § 13-1-42(b).

Minute Order No. 103 also gave the parties to the CCH until September 11, 2017 at 4:00 p.m. to file any responsive briefs. Minute Order No. 103 expressly required the following for any responsive briefs:

> The responsive briefs shall: (1) answer specifically the points of procedure, fact, law, or policy to which exceptions were taken; and (2) state the facts and reasons why the recommendations should be affirmed.

Minute Order No. 103 at 2; see also HAR § 13-1-43(b).

The BLNR has scheduled oral arguments on the CDUA for September 20, 2017 at 9:00 a.m. See Minute Order No. 103 at 2.

II. STANDARD OF REVIEW

KAHEA and the other Petitioners/Opposing Intervenors do not state a position on the applicable standard that BLNR must review the HO FOF/COL. Hawai'i Revised Statutes ("**HRS**") § 91-11 sets out the procedure that is to be followed by an agency where a hearing officer has been employed:

> **Examination of evidence by agency.** Whenever in a contested case the officials of the agency who are to render the final decision have not heard and examined all of the evidence, the decision, if adverse to a party to the proceeding other than the agency itself, shall not be made until a proposal for decision[1] containing a

[1] The Hawai'i Supreme Court has held that a hearing officer's recommendations can serve as the agency's "proposal for decision" under HRS § 91-11. See White v. Board of Education, 54 Haw. 10, 14, 501 P.2d 358, 362 (1972); Cariaga v. Del Monte Corp., 65 Haw. 404, 408, 652 P.2d 1143, 1146 (1982); see also County of Lake v. Pahl, 28 N.E.3d 1092 (Ind. Ct. App. 2015) (holding that it is not uncommon or per se improper for a trial court to enter findings that are verbatim reproductions of submissions by the prevailing party); Ivie v. Smith, 439 S.W.3d 189 (Mo. 2014) (holding that while trial courts must act independently in making findings of fact and conclusions of law, it is not error for trial court to request or receive proposed findings and, in

> statement of reasons and including determination of each issue of fact or law necessary to the proposed decision has been served upon the parties, and an opportunity has been afforded to each party adversely affected to file exceptions and present argument to the officials who are to render the decision, ***who shall personally consider the whole record or such portions thereof as may be cited by the parties.***

HRS § 91-11 (emphasis added).

The Hawai'i Supreme Court has stated that "[t]he general rule is that if an agency making a decision has not heard the evidence, it must at least consider the evidence produced at a hearing conducted by an examiner or a hearing officer." White, 54 Haw. at 13, 501 P.2d at 361. Quoting from the Revised Model State Administrative Procedure Act, Fourth Tentative Draft (1961) ("**RMSAPA**"), the Hawai'i Supreme Court explained that this requirement "is to make certain that those persons who are responsible for the decision shall have mastered the record, either by hearing the evidence, or reading the record or at the very least receiving briefs and hearing oral argument. It is intended to preclude signing on the dotted line." Id. at 14, 501 P.2d at 362 (citation and internal quotations omitted).

The Hawai'i Intermediate Court of Appeals ("**ICA**") described the "function and effect of the hearing officer's recommendations" in Feliciano v. Board of Trustees of Employees' Retirement System, 4 Haw. App. 26, 659 P.2d 77 (1983). The ICA explained that the recommendations are "to provide guidance" and an agency is "not bound by those findings or recommendations." Id. at 34, 659 P.2d at 82. Indeed, an agency, after review of the reliable, probative and substantial evidence in the proceeding, may reject a hearing officer's

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appropriate cases, to adopt those findings); East Coast Paving & Sealcoating, Inc. v. North Allegheny School Dist., 111 A.3d 220 (Pa. Commw. Ct. 2015) (holding that there is nothing untoward about a trial court adopting a party's proposed findings of fact and conclusions of law as its own).

recommendations and "ma[ke] its own findings and conclusions based on the same evidence." Id.

Therefore, BLNR must determine whether the reliable, probative, and substantial record evidence as a whole supports approval of the CDUA. However, and notwithstanding that it is not binding, BLNR should give due consideration to, and be guided by, the HO's FOF/COL, particularly her determinations on the credibility of the witnesses that appeared before her. The RMSAPA provides that "[i]n reviewing findings of fact in a recommended order, the agency head shall consider the presiding officer's opportunity to observe the witnesses and to determine the credibility of witnesses." RMSAPA § 415(b) (October 15, 2010). Section 415(b) of the RMSAPA is consistent with the well-settled legal principle that "the fact finder is uniquely qualified to evaluate the credibility of witnesses and to weigh the evidence." Wilton v. State, 116 Hawai'i 106, 119, 170 P.3d 357, 370 (2007) (citation omitted); see also Haw. R. Civ. P. 52(b) (providing that "due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses").

Other jurisdictions have gone even further and held that a hearing officer's credibility determinations are entitled to deference so long as the record supports the determination. In Amanda J. ex rel. Annette J. v. Clark County School Dist., 267 F.3d 877 (9th Cir. 2001), the Ninth Circuit was confronted with the question of whether to affirm the State Review Officer's decision to deviate from the hearing officer's credibility determination of a witness. Joining its colleagues in the Second, Third, Fourth, and Tenth Circuits, the Ninth Circuit held that

> due weight should be accorded to the final State determination . . . unless [the] decision deviates from the credibility determination of a witness whom only the [hearing officer] observed testify. **Traditional notions of deference owed to the fact finder compel this conclusion. The State Review Officer is in no better position than the district court or an appellate court to weigh**

> **the competing credibility of witnesses observed only by the Hearing Officer.** This standard comports with general principles of administrative law which give deference to the unique knowledge and experience of state agencies while recognizing that **a [hearing officer] who receives live testimony is in the best position to determine issues of credibility.**

Id. at 889 (emphases added); see Doyle v. Arlington Cty Sch. Bd., 953 F.2d 100, 105 (4th Cir. 1992) (holding that where two state administrative decisions differ only with respect to the credibility of a witnesses, the hearing officer is entitled to be considered prima facie correct); Karl by Karl v. Board of Educ. of Geneseo Cent. School Dist., 736 F.2d 873, 877 (2d Cir. 1984) ("There is no principle of administrative law which, absent a disagreement between a hearing officer and reviewing agency over demeanor evidence, obviates the need for deference to an agency's final decision where such deference is otherwise appropriate."); Carlisle Area Sch. Dist. v. Scott P., 62 F.3d 520-29 (3d Cir. 1995) ("[C]redibility-based findings [of the hearing officer] deserve deference unless non-testimonial, extrinsic evidence in the record would justify a contrary conclusion or unless the record read in its entirety would compel a contrary conclusion."); O'Toole v. Olathe Dist. Schs. Unified Sch Dist. No. 233, 144 F.3d 692, 699 (10th Cir. 1998) ("[W]e will give due weight to the reviewing officer's decision on the issues with which he disagreed with the hearing officer, unless the hearing officer's decisions involved credibility determination and assuming, of course, that the record supports the reviewing officer's decision."); see also McEwen v. Tennessee Dept. of Safety, 173 S.W.3d 815, 824 (Tenn. Ct. App. 2005) (holding that if credibility plays a pivotal role, then the hearings officers' or administrative judge's credibility determinations are entitled to substantial deference); Stejskal v. Dep't. of Administrative Svcs., 665 N.W.2d 576, 581 (Neb. 2003) (holding that agencies may consider the fact that the hearing officer, sitting as the trier of fact, saw and heard the witnesses

and observed their demeanor while testifying and may give weight to the hearing officer's judgment as to credibility).

Consequently, BLNR should consider and give due regard to the Hearing Officer's credibility determinations so long as those determinations are supported by the reliable, probative, and substantial evidence in the whole record. See HRS § 91-14 (providing that administrative findings, conclusions, decisions and orders must be supported by "the reliable, probative, and substantial evidence in the whole record").

III. GENERAL OBJECTIONS TO KAHEA'S EXCEPTIONS AND SUPPLEMENTAL EXCEPTIONS

UH Hilo and TIO object to KAHEA's Supplemental Exceptions to the extent it was untimely filed at 8:26 p.m. on August 21, 2017, after the 4:00 p.m. deadline on August 21, 2017. See Minute Order No. 103 [Doc. 784] (requiring exceptions to be filed by August 21, 2017 at 4:00 p.m.).

UH Hilo and TIO object to each of the points in KAHEA's Exceptions and Supplemental Exceptions to the extent that they are irrelevant, inapplicable, immaterial, mischaracterize the evidence, misstate or misrepresent the record, rely on evidence that is not credible, biased, or incomplete, and/or not supported by the record evidence. UH Hilo and TIO also object to KAHEA's Exceptions and Supplemental Exceptions to the extent they assert alleged "findings" or "conclusions" that are beyond the scope of issues set forth in Minute Order No. 19 [Doc. 281] or beyond the scope of the authority delegated by BLNR to the Hearing Officer, or by the legislature to BLNR for these proceedings.

UH Hilo and TIO further object to KAHEA's Exceptions and Supplemental Exceptions to the extent that they raise procedural issues that were previously raised (in some cases, multiple times by multiple parties and through multiple motions for reconsideration) during the course of

the CCH, and the arguments were previously fully briefed, considered and rejected by the Hearing Officer or BLNR.

UH Hilo and TIO further object to KAHEA's Exceptions and Supplemental Exceptions to the extent they seek to challenge the Final Environmental Impact Statement ("**FEIS**") for the TMT Project. This proceeding is not an EIS challenge; KAHEA's ability to make such a challenge expired long ago, and he cannot use this proceeding to reopen the FEIS approval process. This proceeding pertains only to the CDUA and is entirely governed by applicable constitutional law, HRS Chapter 183, and the Conservation District rules, HAR Title 13, Chapter 5 that are genuinely at issue here.

UH Hilo and TIO also object to KAHEA's Exceptions and Supplemental Exceptions to the extent they are not supported by the record and/or applicable legal authority. As set forth in the HO FOF/COL, substantial evidence has been adduced to show that the CDUA satisfies the eight criteria as set forth in HAR § 13-5-30(c). The record also shows that the TMT Project is consistent with UH Hilo's and BLNR's obligations under the public trust doctrine, to the extent applicable, as well as under *Ka Pa'akai*, and Article XI, section I and Article XII, section 7 of the Hawai'i Constitution.

Ultimately, it is evident that KAHEA is categorically opposed to the construction of the TMT Project regardless of whether or not it satisfies the legal criteria applicable to the CDUA. No location on the mountain, and no combination of mitigation measures, will make the TMT Project acceptable to KAHEA. That position is not supported by the law.

Appendix A contains general objections to KAHEA's Exceptions and Supplemental Exceptions which UH Hilo and TIO hereby incorporate by reference into their response to each of KAHEA's Exceptions and Supplemental Exceptions to the extent applicable.

In addition to the general objections in Appendix A, UH Hilo and TIO respond to KAHEA's Exceptions and Supplemental Exceptions below. Citations to the evidence in the record provided herein are not intended to be exhaustive or comprehensive, but demonstrate evidentiary support for UH Hilo and TIO's responses and objections. Pursuant to Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b), UH Hilo and TIO object to all unsupported assertions in KAHEA's Exceptions and Supplemental Exceptions, and BLNR should disregard all such unsupported assertions.

The FOF/COL and page numbers referenced herein follow those as provided in KAHEA's Exceptions and Supplemental Exceptions. References to the HO FOF/COL are denoted by the prefix "HO FOF" and "HO COL" for the numbered FOF or COL, respectively, in the HO FOF/COL.

Acronyms and defined terms used herein are defined in the Index of Select Defined Terms in the HO FOF/COL.

IV. RESPONSES TO KAHEA'S EXCEPTIONS, SUPPLEMENTAL EXCEPTIONS, AND JOINDERS

A. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT SATISFIES THE EIGHT CRITERIA UNDER HAR § 13-5-30(C)

1. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT IS CONSISTENT WITH THE PURPOSE OF THE CONSERVATION DISTRICT

The first criterion, set forth in HAR § 13-5-30(c)(1), requires that the proposed land use be "consistent with the purpose of the conservation district[.]'" HAR § 13-5-30(c)(1); HO COL 128. KAHEA argues that the Hearing Officer's proposed FOFs 431-464 and COLs 129-141, finding and concluding that the TMT Project is consistent with the purpose of the Conservation District, are clearly erroneous, wrong and against the reliable probative and substantial evidence.

Exceptions at 5-6. Contrary to KAHEA's argument, the Hearing Officer correctly found and concluded that the TMT Project is consistent with the purpose of the Conservation District.

First, KAHEA argues that the purpose of the Conservation District prohibits any use of conservation lands that does not leave the lands or natural resources completely undisturbed. Exceptions at 6. To support its argument, KAHEA quotes a portion of HAR § 13-5-30, providing that under the Conservation District rules, "land uses shall not be undertaken in the conservation district." Exceptions at 6. This partial quote suggests that the Conservation District rules prohibit land uses. Viewed in its entirety, however, HAR § 13-5-30 actually states that: "**Unless provided in this chapter**, land uses shall not be undertaken in the conservation district." HAR § 13-5-30 (emphasis added). KAHEA omitted the italicized phrase, offering an incomplete and intentionally misleading quote of HAR § 13-5-30.

The Conservation District rules do not prohibit development within the Conservation District as KAHEA argues; rather, the rules expressly contemplate development. The purpose of the Conservation rules is "to regulate land-use in the conservation district[,]" which land uses are appropriate if regulated "through appropriate management." HAR § 13-5-1; HO COLs 87, 129. KAHEA's argument that the Conservation District rules prohibit development crumbles under its own weight – even KAHEA admits that astronomy development is an expressly permitted land use in the Conservation District with a valid CDUP. Exceptions at 6; HAR § 13-5-24(c); HRS §183C-1; see HO FOFs 191, 469.

Second, KAHEA argues that the TMT Project is not consistent with the purpose of the Conservation District because the University's "multiple management plans" are inadequate. Exceptions at 6-7. Despite alluding to multiple plans, KAHEA only addresses one (1) plan, the Comprehensive Management Plan ("**CMP**"), and argues in conclusory fashion that "the

University's Comprehensive Plan is essentially a plan to plan that does not in and of itself accomplish anything of consequence." Exceptions at 6-7 (citing Mauna Kea Anaina Hou v. Bd. of Land & Natural Resources, 126 Hawai'i 265, 272 (App. Jan. 25, 2012) (mem.) ("**Hou I**").

To the extent KAHEA refers to the CMP as "the University's" plan, thereby implying that the University unilaterally approved the CMP, KAHEA mischaracterizes the record. Exceptions at 6. It is undisputed that the CMP was reviewed by Kahu Kū Mauna for the council's comments and input. HO FOF 147. Thereafter, the CMP was submitted to the Mauna Kea Management Board ("**MKMB**") for review, and then to the BLNR for approval. Id. On April 8 and 9, 2009, the BLNR held its regular meeting in Hilo to consider the CMP. HO FOF 148. On April 9, 2009, the BLNR approved the CMP subject to certain conditions, including, that the University submit for approval four (4) sub-plans. See id.

Some of the Petitioners requested that a contested case hearing be held on the BLNR's decision to approve the CMP. HO FOF 149. After that request was denied, Petitioners appealed to the Third Circuit Court. Id. (citing Mauna Kea Anaina Hou v. Board of Land and Natural Resources, Civ. No. 09-1-336). The Circuit Court ruled that Petitioners had failed to show that their rights, duties, and privileges had been adversely affected by the acceptance and adoption of the CMP. Id. As a result, the Circuit Court had no jurisdiction under HAR § 91-14 to hear the appeal and, therefore, dismissed it. Id.

Subsequently, the Petitioners appealed the Circuit Court's ruling to the ICA on the limited question of whether the BLNR and the Circuit Court had correctly ruled that Petitioners were not entitled to a contested case hearing. Id. The ICA *affirmed* the Third Circuit Court's decision in Hou I. Id. Therefore, to the extent KAHEA relies on Hou I in support of its argument that the CMP is insufficient within the meaning of HAR § 13-5-24, such reliance is

misplaced because Hou I did not hold that the CMP was insufficient by any means. Exceptions at 6. KAHEA mischaracterizes the ICA's holding.

As set forth in the CDUA, the TMT Project complies with the purpose of the Conservation District through the management and mitigation measures described in the BLNR-approved CMP and sub-plans, the TMT Management Plan, which complies with HAR § 13-5-24, and the BLNR-imposed conditions to the CDUP, as well as the University's internal Master Plan. HO FOF 436. By following the provisions of the Master Plan, CMP, sub-plans, and TMT Management Plans, and all CDUP conditions, the TMT Project complies with the purpose of the Conservation District and the applicable Conservation District rules. See Kilakila `O Haleakalā vs. Bd. of Land & Nat. Res., et al. No. SCWC-13-0003065, 2016 WL 5848921, at *25 (Haw. Oct. 6, 2016) ["**Kilakila III**"] (finding that the Advanced Technology Solar Telescope or "ATST" "complies with the broad purposes set out in the statute and agency rules regulating conservation district") (citing HAR §13-5-1and HRS § 183C-1); HO FOF 437.

Under this comprehensive management framework, to which the University and TIO have committed themselves, the TMT Project will be far better and more thoroughly managed than any telescope in Mauna Kea's history. See HO FOF 449. The management of the TMT Project appropriately addresses cultural and natural resources, public access, and the ultimate decommissioning of the TMT Project and restoration of its site. HO FOF 456. Implemented in accordance with its plans, the TMT Project will not consume significant natural resources; will not pollute; will not harm species of concern, or the environment generally; will not prevent contemporary, customary, historical and traditional cultural practices; will not impede recreational uses; and will not threaten the public health, safety, or welfare. HO FOF 457.

The TMT Project will make optimum and sustainable use of the natural resources that

make Mauna Kea an ideal location for astronomy; will facilitate the management of Mauna Kea; will be an enormous benefit to the public welfare by contributing significant funds to Hawai'i Island; will provide jobs; will inject significant money spending and revenues into the local economy; will contribute new programs and funds to Hawai'i Island schools; will enable the University to remain at the forefront of astronomy in research and education; and contribute to the overall knowledge base of mankind. HO FOF 458. Those discoveries made using TMT will provide inspiration to generations of students for which many of Hawai'i's citizens can be proud, id., and enable the continuance of the Hawaiian tradition of exploration and a legacy of discovery, and a field of work for Hawaiians to lead. See HO FOF 707.

Based on the record evidence and notwithstanding KAHEA's Exceptions, the Hearing Officer correctly found and concluded that the TMT Project is consistent with the purpose of the Conservation District in satisfaction of HAR § 13-5-30(c)(1). HO FOF 464; HO COL 141.

2. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT IS CONSISTENT WITH THE OBJECTIVES OF THE RESOURCE SUBZONE

The second criterion, set forth in HAR § 13-5-30(c)(2), requires that "[t]he proposed land use is consistent with the objectives of the subzone of the land on which the use will occur[.]" HAR § 13-5-30(c)(2); HO COL 142. The TMT Project is located in a Conservation District. HO FOF 432. The Conservation District is divided into various subzones, some more restrictive than others. HO FOF 465. Uses that are not appropriate in the most restrictive subzone may be appropriate in the Resource subzone. Id.

The TMT Project will be located in the Resource subzone of the Conservation District. HO FOF 466. Within the Resource subzone, astronomy facilities – such as the TMT Project – (along with other specifically enumerated uses such as commercial forestry, mining and

extraction, and aquaculture) are permitted with proper management. HAR § 13-5-24(c); HO FOF 469. Notwithstanding the foregoing, KAHEA argues that the Hearing Officer's proposed FOFs 467-76, 478, 480, 481, 483-489, 492, and COLs 143-165 are clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 7. Contrary to KAHEA's arguments, which are addressed below, the Hearing Officer correctly found and concluded that the TMT Project is consistent with the objectives of the Resource subzone.

First, KAHEA argues that "[c]ontrary to the [Hearing Officer]'s findings and conclusions, identifying astronomy facilities as one of many possible land uses does not exempt Applicant from demonstrating it complies with all eight criteria." Exceptions at 7. This argument is irrelevant and must be rejected because the Hearing Officer did not find or conclude that the TMT Project is *exempt* from demonstrating that it complies with all eight (8) criteria. Instead, the Hearing Officer correctly found and concluded that, based on the record evidence, the TMT Project complies with all eight (8) criteria.

Second, KAHEA argues that the Office of Mauna Kea Management ("**OMKM**") has failed to "update" the CMP as KAHEA claims it was required to do every five (5) years. Exceptions at 7. This argument must be rejected because it is unsupported by the record evidence. As an initial matter, it is undisputed that the BLNR's approval of the CDUA is subject to the eight criteria in HAR § 13-5-30(c). Even assuming, *arguendo*, that the University is not in compliance with the CMP, which is disputed, see infra, KAHEA fails to cite to any legal authority holding that such alleged lack of compliance is a basis to deny the CDUA and/or that it prohibits or precludes the BLNR from approving the CDUA. See generally KAHEA's Exceptions.

KAHEA's argument that OMKM has failed to "update" the CMP is vague and ambiguous. Nevertheless, to the extent KAHEA is suggesting that the CMP required the University to submit a five-year report as part of management action, MEU-1, this argument is inaccurate/false, mischaracterization, incomplete, unsupported/unsubstantiated, not credible, and misleading (presented out of context). Management action, MEU-1, provides in full: "Establish a reporting system to ensure that the MKMB, DLNR, and the public are informed of results of management activities in a timely manner." Ex. A-9 at 7-64. Under "[a]dditional [c]onsiderations[,]" the CMP provides that "[a] variety of annual and five-year reports are required as part of the evaluation process for the CMP." Id.

There is no dispute that the University, through OMKM, has been submitting annual reports to BLNR from 2010 to the present. See Exs. A-16 to A-22. These annual reports provide timely updates on the University's progress and results on the management actions in the CMP. See Exs. A-16 to A-22. Moreover, these annual reports are cumulative, meaning they reflect the progress and results since the CMP was first implemented. Tr. 12/12/16 at 180:8-181:11; November 25, 2014 OMKM Regular Meeting Minutes, Ex. A-133 at 6 (noting that the next annual report – *i.e.*, the 2015 annual report – "would essentially cover the past five year of activities"); Ex. A-16 to A-22. Consequently, although it may not have been expressly described as or titled a five-year report, the 2015 annual was a five-year report given the cumulative nature of OMKM's annual reports. The University has therefore "[e]stablish[ed] a reporting system to ensure that the MKMB, DLNR, and the public are informed of results of management activities in a timely manner" in compliance with MEU-1.

Similarly, to the extent KAHEA argues that a five-year review and revision was required, this argument is also inaccurate/false, mischaracterization, incomplete, unsupported/unsubstantiated, not credible, and misleading (presented out of context). Management action, MEU-2, provides in full: "Conduct regular updates of the CMP that reflect outcomes of the evaluation process, and that incorporate new information about resources." Ex. A-9 at 7-64. Notably, under "[a]dditional considerations" for MEU-2, the CMP provides that "[t]he CMP ***should be*** updated every five years." Ex. A-9 at 7-65 (emphasis added). Consequently, the five-year update or revision is not required as argued by the KAHEA in its Exceptions. In any event, as reflected in the annual reports, the five-year CMP "[r]evision process [has been] initiated by OMKM for eventual submission to BLNR." Ex. A-20 at 18 of 18; Ex. A-21, Appx. A at 27 of 27. OMKM noted in its November 25, 2014 Regular Meeting Minutes:

> The CMP has gone through an initial review. However, being that it is only five years since the CMP was put into action, it was felt that insufficient time has passed to fully vet all the management actions. For this first evaluation, the changes are basically housekeeping measures. For example, updating old information, replacing the two word spelling of place names with one word and eliminating redundancies. Some actions were clarified to avoid confusion by ensuring there is only one set of actions instead of multiple actions for the same issue. For example, the CMP includes an action relating to invasive species management, but the CMP also requires the development of an invasive species management plan.
>
> The CMP actions were also reviewed for consistency. In particular, the primary reasons for action are resource protection and health and safety of visitors and those who work on the mountain.

Ex. A-133 at 5-6. Consequently, the University has been reviewing the CMP as contemplated by and in compliance with MEU-2. The mere fact that the University may not have completed this review at this time does not mean that it is not in compliance with MEU-2.

In sum, the reliable, probative, and substantial evidence in the whole record supports the conclusion that the University is in compliance with the CMP and its Subplans. There is no question that the University has been applying and using the CMP as intended, that is, as "a guide for managing existing and future activities and uses, and to ensure ongoing protection of Mauna Kea's cultural and natural resources." Ex. A-9 at iii.

Third, KAHEA argues that the TMT Project must first reduce existing cumulative impacts of prior telescope projects to a level that is less than significant and adverse. Exceptions at 7. Contrary to KAHEA's argument, HAR § 13-5-30(c)(4) does not require an analysis as to whether (and how) **existing** cumulative impacts will be mitigated. HO COL 192. Rather, the proper analysis is whether, viewed within the context of such existing cumulative impacts – and under the assumption that such cumulative impacts will continue – a new proposed land use will cause substantial adverse impacts to existing natural resources in the applicable area. Id. (citing Kilakila, 138 Hawai'i at 402-05, 382 P.3d at 214-17).

This argument must also be rejected because it is unsupported by the record evidence. The CDUA and supporting documents provide sufficient information for the BLNR to consider whether the "proposed land use" itself – and not other existing uses and/or conditions – will cause "substantial adverse impact to existing natural resources within the surrounding area, community, or region[.]" HAR § 13-5-30(c)(4). In the context of the existing summit area cumulative impacts – and under the assumption that such cumulative impacts will continue – the TMT Project does not create or cause substantial adverse impacts to existing natural resources in

the applicable area. HO COL 183. The existing uses and resources are already committed to astronomical uses and objectives, and based upon commitments of the CDUA and University proposals, several facilities will be removed thereby significantly reducing existing adverse impacts on the more sensitive and visible summit ridge areas within the Astronomy Precinct. Id.

Based on the record evidence and notwithstanding KAHEA's Exceptions, the Hearing Officer correctly found and concluded that the TMT Project is consistent with the objectives of the Resource subzone. HO FOF 492; HO COL 165.

3. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT COMPLIES WITH APPLICABLE PROVISIONS AND GUIDELINES CONTAINED IN HRS CHAPTER 205A

The third criterion, set forth in HAR § 13-5-30(c)(3), requires that "[t]he proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled 'Coastal Zone Management', where applicable[.]" HAR § 13-5-30(c)(3); HO COL 166. KAHEA argues that the Hearing Officer's proposed FOFs 497-507 and COLs 167-177 are clearly erroneous, wrong and against the reliable, probative and substantial evidence because the TMT Project "would undermine important scenic viewplanes, destroy areas of historic importance, and increase the risk of water pollution." Exceptions at 8. As explained below, KAHEA's argument is unsupported by the record evidence.

HRS Chapter 205A establishes the guidelines for the use of the CZMA. The TMT Project complies with the provisions and guidelines contained in HRS Chapter 205A, entitled "Coastal Zone Management" where applicable, in satisfaction of HAR § 13-5-30(c)(3). Under HRS § 205A-1, "Coastal zone management area" or "CZMA" means all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea. HRS § 205A-1; HO COL 168.

The applicable guidelines[2] under HRS Chapter 205A run parallel to the purpose of the Conservation District, including, for example, the protection of historic resources, scenic and open space resources, and recreational resources. HO COL 171. The evidence presented demonstrates that the TMT Project complies with the purpose and objectives of the Conservation District and also with the objectives of HRS Chapter 205A, specifically including those objectives that do not overlap with the objectives of the Conservation District and that are unique to Chapter 205A. HO COL 172-173. The objectives of HRS Chapter 205A that do not overlap with the Conservation District's objectives relate specifically to the protection of water quality. HO FOF 497.

The TMT Project will have no significant or adverse impacts on water resources, including no significant impacts upon Lake Waiau and ground water, and no significant effects upon the area surrounding the project through surface water runoff or through wastewater (which will be collected and transported off the summit for treatment and disposal). HO COL 175. While construction of the TMT Project will create some new impermeable surfaces at the five-acre TMT Project site, due to the high permeability of the surrounding area, surface rainwater will percolate into the ground whether or not the TMT Project is built. HO FOF 500. The TMT Project will not create any additional adverse impact on existing water resources. Id.

The TMT Project site is 12 miles from the nearest wells that extract groundwater. HO FOF 506. The groundwater beneath the summit of Mauna Kea is impounded and compartmentalized by subsurface geologic structures. Id. Because the TMT Observatory will use a zero-discharge wastewater system, wastewater will not be released from the TMT Project

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[2] The TMT Project is outside the coastal areas which are included and addressed under the Special Management and Shoreline Setback area guidelines under Parts II and III of HRS. Chapter 205A. HO COL 169. Therefore, Parts II and III of HRS Chapter 205A do not apply here. HO FOF 496; HO COL 170.

so no percolation of wastewater will reach the aquifer. HO FOF 506. Moreover, Mauna Kea is comprised of very porous lavas that naturally treat and filter water percolating downward. Id. A discharge on the summit area would be naturally treated and filtered through thousands of feet of the porous lavas, which would remove any contamination from that discharge before reaching any groundwater. Id. (citing Ex. A-44). Under the circumstances, contamination of groundwater is extremely remote and very unlikely from the TMT Project. Id.

The TMT Project will implement plans for storage and waste management, including a Spill Prevention and Response Plan ("**SPRP**") and a Materials Storage/Waste Management Plan. HO FOF 505. In addition, to minimize the potential for an accidental spill while waste materials are in transit down the mountain to a proper disposal site, no tanks or containers being transported will be filled to the top. To further ensure the safe transport and disposal of hazardous waste,[3] the TMT Observatory will utilize only Environmental Protection Agency-permitted and licensed contractors to transport hazardous wastes. Id. The TMT Observatory will also utilize a secondary containment area to store all hazardous materials or wastes. HO FOF 503. That containment area will be inspected daily for leaks. Id. Fuel storage and piping will also be double-walled and will be equipped with leak monitors. Id. Based on these measures, the chance of a spill entering the surrounding environment is negligible. Id.

Based on the record evidence and notwithstanding KAHEA's unsupported arguments, there is no reasonable prospect of an adverse impact on either drinking or coastal waters from the TMT Project. Accordingly, the Hearing Officer properly found and concluded that the TMT Project complies with the applicable objectives, provisions and guidelines in HRS Chapter 205A. HO FOF 507; HO COL 177.

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[3] No mercury will be used at the TMT Observatory. HO FOF 503.

4. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT WILL NOT CAUSE SUBSTANTIAL ADVERSE IMPACTS TO EXISTING NATURAL RESOURCES WITHIN THE SURROUNDING AREA, COMMUNITY, OR REGION

The fourth criterion, set forth in HAR § 13-5-30(c)(4), requires that "[t]he proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community, or region[.]" HAR § 13-5-30(c)(4); HO COL 178. Under the version of HAR § 13-5-2 that was in effect when the CDUA was submitted to the BLNR, "Natural resource" is defined as "resources such as plants, aquatic life and wildlife, cultural, historic and archeological sites, and minerals." HAR § 13-5-2 (1994); HO COL 180. A later amendment added to this definition "recreational" and "geologic" sites, "scenic areas, sociologically significant areas," and "watersheds." HAR § 13-5-2 (2011); HO COL 180. The Hearing Officer properly considered the impacts to the resources that exist within the surrounding area, and the TMT Project has been assessed in the context of what resources are already in place.

a. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Adverse Impact on Biological Resources

As reflected in the Hearing Officer's findings and conclusions, the record evidence establishes that the TMT Project will not have a significant adverse impact on biological resources. There are no unique plants within the proposed project site. HO FOF 534. Although there is vegetation in the summit region, because of the incredibly harsh environment, there is an extremely low cover of lichens, and bryophytes (less than 1%) in the summit region. HO FOF 533. Most, if not all, types of the vegetation found in the summit region can be found at lower elevations on Mauna Kea. Id. There are no endangered or threatened species of flora in the TMT Project area. Id. There are no species of flora unique to the TMT Project site. HO FOF

532. There are no currently listed threatened or endangered species known to occur in the Astronomy Precinct. HO FOF 536.

Notwithstanding the foregoing, KAHEA raises several arguments regarding impacts to biological resources, all of which must be rejected. First, KAHEA argues that the Hearing Officer's FOFs 298-311 are misleading, clearly erroneous, wrong and against the reliable probative and substantial evidence because the "[d]evelopment of astronomy facilities, utility corridors, and roadways has caused substantial adverse impacts to the fragile floral ecosystems on Mauna Kea." Exceptions at 15. KAHEA's argument relates solely to the alleged impacts of *previous* astronomy facilities and not at all with the *proposed* TMT Project. As explained below, this argument must be rejected because it is irrelevant, misstates the applicable law, is unsupported by the record evidence, and assumes facts not in evidence.

As stated previously, the fourth criterion, HAR § 13-5-30(c)(4), requires that "[t]he **proposed** land use will not cause substantial adverse impact to **existing** natural resources within the surrounding area, community, or region[.]" HAR §13-5-30(c)(4) (emphasis added). If the "substantial adverse impact" was caused by **previous** land uses, it cannot be caused by the "**proposed** land use." In addition, this criterion requires consideration of "existing" resources—not resources as they existed before any other, previous development occurred. As a matter of law, a project's impact must be assessed in light of previous development. See, e.g., Kalipi v. Hawaiian Trust Co., Ltd., 66 Haw. 1, 8-9, 656 P.2d 745, 749-50 (1982); Geer v. Fed. Highway Admin., 975 F. Supp. 47, 73-74 (D. Mass. 1997) ("although there were noise and visual impacts those impacts were not substantial given the urban context of the project and the existing impacts under a no-build option"); see HO COLs 181, 182, 183.

Second, KAHEA argues that the Hearing Officer's FOF 536 is unsupported by the record evidence. Exceptions at 16. Specifically, KAHEA argues that the TMT Project Site is "habitat" to the Douglas Bladderfern, a species of concern. Id. However, the record evidence was not disputed that although the Douglas' bladderfern was found in Area E, it is known to be "widespread, occurring on all main Hawaiian Islands, and on Mauna Kea it is more common to the east, in the vicinity of Area F." Id. Area E, the proposed site for the TMT Observatory, is not considered critical habitat for the Douglas' bladderfern. Id. KAHEA's argument, which implies that the TMT Project Site is the only place the Douglas Bladderfern may be found, is misleading and mischaracterizes the record evidence.

To the extent KAHEA argues that Petitioner Ward's FOFs 151-159 regarding the Douglas' Bladderfern and other biological resources were improperly omitted from the Hearing Officer's FOF/COL, this argument should be rejected for the reasons discussed above and for those reasons set forth in the University of Hawai'i at Hilo and TMT International Observatory, LLC's Joint Response to Deborah Ward's Proposed Findings of Fact, Conclusions of Law, Decision and Order, filed May 29, 2017 [Doc. 657], filed June 13, 2017 [Doc. 723]. Moreover, although Ward provided testimony regarding certain entomological, biological, and botanical issues to support her claim that the CDUA is inadequate, Ward did not offer any scientific studies or data to support her opinion. HO FOF 559. Ward conceded during cross-examination that she is not an entomologist, biologist, or botanist. Id.

In addition, although KAHEA states that certain unspecified species of lichen and the Mauna Kea Silversword can be found on the summit of Mauna Kea, Exceptions at 15-16, thereby suggesting that the TMT Project will have a significant adverse impact on biological resources, KAHEA's argument is unsupported by the record evidence. With regard to lichen,

although KAHEA's witness, Eric Hansen, testified to the presence of unique assemblages of lichens found at the TMT Project site, he acknowledged that those species of lichen can be found elsewhere on the mountain and that the particular assemblages of lichens found at the TMT Project site could be found elsewhere. HO FOF 538. With regard to the Mauna Kea Silversword, although it is an endangered species, it is known to occur at lower elevations and not at the TMT Project Site. HO FOF 536.

Third, KAHEA argues that the Hearing Officer's FOF 534, finding that any potential impacts to botanical resources will be appropriately mitigated, is unsupported by the record evidence. Exceptions at 16. Ironically, it is KAHEA's argument that is unsupported by the record evidence. Although KAHEA claims that no mitigation measures are described in the Hearing Officer's FOF/COL, this is simply not true. The record evidence details the numerous mitigation measures that will mitigate any potential impacts to botanical resources. The TMT Project will implement the following mitigation measures with regard to potential impacts on biologic resources, including wēkiu bugs:

(1) Implementation of a Cultural and Natural Resources Training Program that will give TMT personnel and construction workers an annual orientation regarding Mauna Kea's natural resources;

(2) Implementation of an Invasive Species Prevention and Control Program that will outline steps to be taken to avoid the potential impacts associated with invasive species;

(3) Pursuant to CMP Management Action FLU-6, the TMT Access Way has been designed to limit disturbance and displacement of sensitive wēkiu bug habitat, including reducing the Access Way configuration to a single lane in certain areas and paving the roadway where adjacent to such habitat to reduce dust-related impacts;

(4) Pursuant to CMP Management Action FLU-6, construction-phase measures will be implemented to reduce impacts to sensitive habitat and arthropods will be monitored in the area of the TMT Access Way prior to, during, and for two years after the occurrence of construction on the alpine-cinder cone habitat;

(5) Implementation of a Ride-Sharing Program that will reduce the number of vehicle trips per day to the summit; and

(6) The planting of two new māmane trees for each māmane tree directly impacted by possible TMT Project activities.

HO FOF 552 (citing Ex. A-3/R-3 at 3-75 to 3-77).

Fourth, KAHEA argues that the Hearing Officer's FOFs 543, 552, 555-557, 559, 561-562 are misleading, clearly erroneous, wrong and against the reliable, probative and substantial evidence on the basis that they purportedly downplay the adverse impacts to the wēkiu habitat. Exceptions at 17. This argument must be rejected because it is unsupported by the record evidence. The arthropod and botanical surveys conducted in 2008 and 2009 of the TMT Project areas in the Mauna Kea summit region did not encounter any species listed as endangered or threatened under either Federal or State of Hawai'i endangered species statutes. HO FOF 536. Specifically, the TMT Observatory will not be built in critical habitat for the wēkiu bug or any species of concern. HO FOF 359(g).

In addition, although the wēkiu bug was previously proposed as a candidate species for Federal listing under the Endangered Species Act, the United States Fish & Wildlife Service ("**FWS**") formally removed the wēkiu bug as a candidate from the Federal Endangered Species Act on October 26, 2011, stating threats to the wēkiu bug did not put the species in danger of extinction throughout all or a significant portion of its range. HO FOF 541. Notably, in formally removing the wēkiu bug as a candidate from the Federal Endangered Species Act, FWS cited OMKM's continued monitoring of the bug and its habitat, scientific studies to assist in managing and protecting the wēkiu bug's populations and habitat, the CMP, subplans, and procedure for formal review of new projects all contribute to the protection and conservation of the wēkiu bug. Id.

Fifth, KAHEA argues that the Hearing Officer's FOF 543 is erroneous to the extent it states that the proposal to restore wēkiu habitat was withdrawn from the TMT FEIs, and no restoration is underway. Exceptions at 17. This argument should be rejected as irrelevant, misleading, and taken out of context. As discussed above, the TMT Project site is not critical habitat for the wēkiu bug or any species of concern, HO FOF 359(g), and the wēkiu bug has been removed as a candidate from the Federal Endangered Species Act.

Sixth, KAHEA argues that the Hearing Officer's FOF 561 is erroneous because a number of non-native species have been introduced to the summit region, and although the *Ochetellus glaber* was introduced to the Hale Pohaku area recently, it is a black ant, not a fire ant. Exceptions at 17. This argument is irrelevant. Notably, KAHEA does not dispute that the only recent evidence of invasive species introduced to the UH Management Area was the *Ochetellus glaber* or that it was introduced near the Hale constructed by persons opposing the TMT Project across from Hale Pōhaku. Instead, KAHEA takes issue merely with the characterization of the *Ochetellus glaber* as an invasive "fire ant" as opposed to an invasive "black ant." This is a distinction without a difference because whether the *Ochetellus glaber* is a fire ant or a black ant, it is nonetheless an invasive species, and ironically, it was introduced to Mauna Kea by persons opposing the TMT Project across from Hale Pōhaku, and not by the TMT Project itself.

Based on the totality of the evidence and notwithstanding KAHEA's Exceptions, Petitioners and Opposing Intervenors, including KAHEA, have not refuted the University's extensive scientific studies, reports and testimony that the TMT Project will not have a significant adverse impact on biological resources. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not have a significant adverse impact on biological resources. HO FOF 562; HO COLs 195, 199.

b. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Impact on Archaeological and Historic Resources

As reflected in the Hearing Officer's findings and conclusions, the evidence establishes that the TMT Project will not have a significant impact on archaeological and historic resources. HO FOF 670; see HO COL 195. The TMT Project is the result of a decade long process involving extensive consultation, consensus building, design refinement, and cooperative problem solving, with all constituencies of the community, and particularly, Native Hawaiians. This comprehensive process has informed and guided the planning of the TMT Project from its very inception.

The TMT Project will be located within the Astronomy Precinct of the MKSR, which is a clearly defined area set aside specifically for astronomical facilities. In addition, the proposed location of the TMT Project is in relatively close proximity to the eleven (11) other previously developed facilities for astronomy within the Astronomy Precinct. HO FOF 901. In particular, the 13N site, within Area E, north of and below the summit ridge was specifically chosen for the TMT Project in large part to mitigate impacts on cultural and historic resources, viewplanes, and biological resources.[4] HO FOF 318.

Substantial and credible evidence was presented establishing that the Northern Plateau was chosen in large part to avoid the most culturally sensitive areas of the summit ridge. As a direct result of locating the TMT Observatory at its chosen site, it: (1) will not be visible from

[4] The testimony by Prof. Fujikane, an English professor and a witness for KAHEA, that locating the TMT Project on the Northern Plateau should not be considered a mitigation measure because there was no room for the TMT Project on the summit, Tr. 1/9/17 at 225:25-226:7, is directly contradicted by the credible testimony of Hayes that the TMT Project could have been considered for the summit. HO FOF 950. Prof. Fujikane's testimony also ignores the Master Plan which specified Area E as a preferred location for a next generation large telescope because of the minimum impact on existing facilities, wēkiu bug habitat, archaeological sites, and viewplanes while providing suitable observation viewing conditions. HO FOF 332.

culturally sensitive locations, such as the summit of Kūkahau'ula, Lake Waiau, and Pu'u Līlīnoe; (2) is more than 200 feet from known historic properties; (3) will not be visible from Hilo and the southern portion of Hawai'i Island, including the Kona areas; and (4) is outside of the wēkiu bug's preferred habitat. HO FOF 318. Notwithstanding the foregoing, KAHEA claims that the Hearing Officer's FOFs 563-833 and COLs 179-194 are inaccurate, irrelevant, incomplete, and/or misleading, clearly erroneous, wrong and against the reliable, probative and substantial evidence. KAHEA's arguments, addressed below, must be rejected.

First, KAHEA argues that the TMT Project would be the first observatory to be constructed at the "specific zone on the north plateau that includes several hundred shrines and other religious structures." Exceptions at 9. Contrary to KAHEA's argument, the credible and substantial evidence supports the Hearing Officer's findings and conclusions that, after extensive consultation, there are no known ahu (other than those that were erected after or in protest of the TMT Project) or historical features near the TMT Project area. HO FOF 632. Extensive surveying revealed no archaeological or historic sites and no burials on the TMT Observatory site, the TMT Access Way, or in the Batch Plant Staging Area. HO FOF 601, 631-632, 686. There are no historic properties located within 200 feet of the limits of grading at the site of the proposed TMT Observatory 13N site. HO FOF 318.

Second, KAHEA argues that the CDUA was incomplete because it failed to assess the impact of the TMT Project on the Mauna Kea Summit Region Historic District ("**MKSRHD**"), including the ability of the MKSRHD to be listed on the National Register of Historic Places. Exceptions at 9. Contrary to KAHEA's argument, the credible and substantial record evidence demonstrates that the TMT Project considered potential impacts to the MKSRHD and found that the TMT Project "would have minimal adverse impact on the character of the District." Ex. A-

1/R-1 at 2-6; HO FOF 565.

The University's witness Richard Nees ("Nees") testified that all AIS reports prepared in relation to the TMT Project comply with HRS Chapter 6E, and its implementing regulations found in HAR §§ 13-275 through 282. HO FOF 565. Nees also testified as to the extent of cultural and historic resources present in the Mauna Kea Summit Region Historic District, and opined that the TMT Project would not result in a substantial adverse impact to such resources within the surrounding area, community or region. Id. Notably, there were no challenges to the acceptance of the Astronomy Precinct Archaeological Impact Survey ("**AIS**") or the TMT FEIS, including the AISs that were attached. HO FOF 577.

In addition, the University's witness, Robert Rechtman ("Rechtman") conducted five (5) archaeological studies of the TMT Project site from 2013 to 2015. HO FOF 566. These studies included archaeological monitoring reports and archaeological field reconnaissance reports of the TMT Project site. Id. Rechtman concluded that all of the constructed features encountered were modern in nature. Id.

Third, KAHEA argues that the University has "conceded" that construction of existing astronomy facilities had cumulative impacts on cultural, archaeological, and historic resources that are substantial, significant, and adverse, and that existing astronomy facilities are prominent visual elements on the summit of Mauna Kea. Exceptions at 25. To the extent KAHEA is implying that because the University acknowledges that the summit area of Mauna Kea has already sustained significant and adverse impacts, it has "conceded" that the TMT Project will itself have substantial adverse impacts, KAHEA misconstrues the University's position. HO COL 188. The University has never made such an admission, and, as set forth in the Hearing Officer's FOF/COL, the TMT Project will not cause substantial adverse impacts. In addition, as

discussed previously, HAR § 13-5-30(c)(4) does not require an analysis as to whether (and how) **existing** cumulative impacts will be mitigated. HO COL 192. KAHEA's argument regarding the impacts of **existing** astronomy facilities on visual elements is irrelevant for purposes of the TMT Project and must be rejected.

Fourth, KAHEA argues that the CDUA failed to assess the impacts of the TMT Project on the MKSRHD as a whole as required under the historic preservation laws. Exceptions at 12. This argument is unsupported by and, in fact, directly contradicted by the record evidence. The FEIS for the TMT Project, and the related AISs, which are part of the CDUA, do in fact analyze such impacts. HO FOF 621. The historic preservation work that was done with respect to the TMT Project was done in compliance with Chapter 6E, the Historic Preservation Law, and was reviewed and accepted by the State Historic Preservation Division ("**SHPD**"). HO FOFs 639-640.

Fifth, KAHEA argues that the CDUA does not properly represent the archaeological survey information necessary to evaluate significant impacts to natural resources. Exceptions at 12. Specifically, KAHEA argues that Statewide Inventory Historic Properties ("**SIHP**") Numbers 16169 and 21447 were omitted. Id. This argument misrepresents the record evidence. During the contested case proceeding, KAHEA's witness, Professor Peter Mills, testified that the CDUA omits SIHP Numbers 16169 and 21447. HO FOF 618. However, Prof. Mills admitted that he had not read the CDUA and the FEIS in their entirety. HO FOF 619. Importantly, on cross-examination, Prof. Mills acknowledged that – contrary to his understanding – SIHP Numbers 16169 and 21447 are in fact referenced in the CDUA. Id.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a significant adverse impact on archaeological and historic resources. HO FOF 670. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not have a significant adverse impact on archaeological and historic resources. Id.; HO COLs 199, 200.

c. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Adverse Impact on Cultural Resources and Practices

As reflected in the Hearing Officer's findings and conclusions, the evidence establishes that the TMT Project will not have a significant adverse impact on cultural resources and practices in satisfaction of HAR § 13-5-30(c)(4). As a matter of law, religious "practices" receive constitutional protection against unreasonable interference, whereas religious "beliefs" do not receive constitutional protection against unreasonable interference. Dedman, 69 Haw. at 260-61, 740 P.2d at 31-32 (noting that analysis focuses on unconstitutional infringement of religious **practices** even where the legitimacy and sincerity of religious **beliefs** is undisputed). In order to demonstrate that a project will result in an unconstitutional infringement of rights, a petitioner must show a "substantial burden" on his or her religious practices. Id., at 261, 740 P.2d at 33.

First, KAHEA objects and/or takes exception to the Hearing Officer's COLs 361-423 to the extent such conclusions recognize the distinction between "practices" and "beliefs," because such a distinction is in KAHEA's opinion, "dissonant with the very notion of Hawaiian spirituality." Exceptions at 2-3. KAHEA's objection/exception to the Hearing Officer's FOF/COL must be viewed in the context of the applicable law, which requires the distinction between "practices," which are entitled to constitutional protection against *unreasonable*

interference, and "beliefs," which are not. With respect, therefore, KAHEA's objection/exception must be rejected as a matter of law.

Second, KAHEA argues that because the TMT Observatory would "drastically alter" the environment and cause "visual and alignment obstructions," the TMT Project will adversely impact constitutionally protected traditional and customary practices. Exceptions at 9. KAHEA's argument that the TMT Observatory will cause "visual and alignment obstructions" to cultural or religious practices is unfounded. As an initial matter, notwithstanding the University's position that cultural practices do not appear to be encompassed by the definition of "Natural resource" contained in HAR § 13-5-2, both the University and the DLNR identified and assessed such practices as resources to be considered under the criterion of HAR § 13-5-30(c)(4). HO FOF 679. Despite the numerous research studies, plans, and impact assessments performed, there is no reliable, probative, substantial and credible evidence or testimony sufficient to establish that any cultural or religious *practices* – whether characterized as contemporary, or customary and traditional – were conducted at the five-acre site on which the TMT Observatory is proposed to be built. See HO FOFs 681, 683, and 684.

KAHEA did not provide any evidence of any customary and traditional *practices* within the specific Area E location that is proposed for the TMT Observatory.[5] HO COL 204, 205. Indeed, there is no credible proof that any viewplane will be substantially or adversely impacted by construction at the proposed TMT Project site. The TMT FEIS considered and analyzed the viewplanes from the perspective of a Hawai'i religious practitioner. HO FOF 845. The TMT Observatory will not obstruct any viewplanes from Pu'u Wēkiu, and will not interfere with any

[5] Traditional and customary cultural practices have been defined as those customs and practices of a living community of people that have been passed down through generations, usually orally or through practice. Traditional and customary cultural practices are those practices that fall within the purview of Article XII, Section 7 of the Hawai'i State Constitution. HO FOF 671.

practices involving viewplanes to or from Pu'u Wēkiu. HO FOFs 733, 830. The TMT Observatory will not be visible from Lake Waiau or Pu'u Līlīnoe, HO FOF 839, and will not block views of Haleakalā, the setting sun, the shadow of Mauna Kea, or the Southern Cross constellation from the northern ridge of Kūkahau'ula. HO FOF 844. Although the TMT Observatory will not obstruct practices involving viewplanes, the TMT Observatory will reduce operations to minimize daytime activities on up to four (4) days a year in observance of Native Hawaiian cultural practices, as a mitigation measure. HO FOF 743.

KAHEA's argument that the TMT Observatory will cause visual and alignment obstructions, is not only factually and legally unsupported, it is clearly disingenuous. Certain Petitioners and Opposing Intervenors testified that they have been conducting cultural practices on Mauna Kea since at least 2000. HO FOF 752. These practices have occurred within the presence of thirteen (13) observatories at the summit and were not prevented or curtailed by the observatories. HO FOFs 752, 758, 806, 828, 849. These practices would not be altered by the TMT Observatory not only because they occur at areas away from the TMT Project site, but also because these practices have occurred in the presence of existing observatories.

Third, KAHEA argues that Hearing Officer's FOFs 684, 686, and 696, improperly considers the Northern Plateau's cultural and historic significance separate from the entire Mauna Kea summit region, and argues that this approach is or has been rejected by SHPD. Exceptions at 13. This argument misrepresents the record evidence. SHPD of DLNR was involved in this process from its inception. SHPD was consulted on which groups and individuals should be contacted for consultation on the Cultural Impact Assessment for the TMT FEIS. HO FOF 226. Approximately 64 individuals and organizations were contacted for consultation on the CIA for the TMT FEIS, including KAHEA. Id.

SHPD's recommendations have been adopted into various aspects of the TMT Project. For example, the option for the placement of the TMT Access Way was the one recommended by SHPD of the DLNR to minimize adverse effects on the Kūkahau'ula summit, and away from known historic and cultural properties and resources. HO FOF 325.

All relevant surveys and documents, specifically included the CDUA, were provided to SHPD for its review and comments. HO FOF 621. SHPD found no incompleteness in those submissions. Id. In addition, a burial treatment plan was prepared by PCSI for the entire MKSR and Mauna Kea Access Road Corridor, including the TMT Project site. HO FOF 631. The burial treatment plan was approved by the Hawai'i Island Burial Counsel ("**HIBC**") and SHPD.

All historic preservation work that the University's witness, Nees, and his employer prepared with respect to the TMT Project to identify historic sites within the MKSR was done in compliance with Chapter 6E, the Historic Preservation Law. HO FOF 639. The work was reviewed by SHPD, and the results of these reports were fully approved and accepted by SHPD. Id. All of the AISs done for the summit area of Mauna Kea have been reviewed by SHPD. Id. **SHPD has determined that the TMT Project would have no significant adverse impact on historic properties**. Id. SHPD recognized that the proposed mitigation measures to address impacts to cultural practices and visual impacts in the TMT Project's application documents (including the CDUA and EIS) address the project-specific and cumulative impacts to the MKSRHD and traditional cultural properties. HO FOF 640.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a significant impact on cultural resources and practices. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not cause substantial adverse impacts to cultural resources and practices. HO FOF 833; HO COL 208.

d. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Adverse Impact on Visual and Aesthetic Resources

As reflected in the Hearing Officer's findings and conclusions, the evidence establishes that the TMT Project will not cause substantial adverse impacts to visual and aesthetic resources in satisfaction of HAR § 13-5-30(c)(4). KAHEA argues that the Hearing Officer's FOF 834 is inaccurate, irrelevant, and/or misleading because it is "obvious" that the TMT Project's visual impact would have "a significant effect" on visual resources under HAR § 11-200-12. Exceptions at 18. KAHEA's argument must be rejected because it misstates the applicable legal standard and is unsupported by the record evidence.

The applicable legal standard in the context of evaluating the CDUA is HAR § 13-5-30(c)(4). HAR § 13-5-1 *et seq.* are the applicable rules, the purpose of which is to regulate land use in the Conservation District. Compare HAR § 13-5-1 and HRS § 183C-1, with HAR § 11-200-1. KAHEA's reliance on HAR § 11-200-12 is misplaced because Chapter 11-200 governs Environmental Impact Statements. These two (2) chapters "serve different purposes and are not in *pari materia*." State v. Mata, 71 Haw. 319, 330, 789 P.2d 1122, 1128 (Haw. 1990); see Villon v. Marriott Hotel Servs., 2011 WL 4047373, at *15 (D. Haw. Sept. 8, 2011) ("absent clear indication that the Legislature intended them to be read together," different regulatory schemes should not be read together).

Notwithstanding the foregoing, KAHEA asserts that the BLNR should apply the wrong standard, *i.e.*, the "significant effects" standard under HAR § 11-200-12, governing Environmental Impact Statements. However, HAR § 11-5-1 *et seq.* are the applicable rules regulating land use in the Conservation District. HAR § 11-200-12, which governs Environmental Impact Statements, does not apply here. As a result, KAHEA's assertion that the

TMT Project would have a "significant effect" must be rejected because it applies the wrong legal standard and is for the same reason irrelevant to the TMT Project.

Putting aside KAHEA's reliance on the wrong legal standard, KAHEA's argument should also be rejected because no challenges were raised as to the FEIS for the TMT Project and the applicable time period to challenge the FEIS, which ended on August 7, 2010, has long since passed. HO FOF 213. As a matter of law, absent intervening changed environmental circumstances, no one is allowed a "second chance at administrative and judicial review when they failed to timely appeal the original" EIS. See Oregon Natural Res. Council v. U.S. Forest Serv., 834 F.2d 842, 847 (9th Cir. 1987).

The TMT Project's FEIS, which was prepared following the review of comments during the DEIS review period, was issued on May 8, 2010. HO FOF 210. The FEIS was accepted by the Governor of the State of Hawai'i on May 19, 2010. HO FOF 211. It is undisputed that KAHEA received a copy of the FEIS. HO FOF 225. Despite receiving a copy of the FEIS, KAHEA never challenged the approval of the FEIS. HO FOF 213. In fact, there were no challenges to the TMT Project's FEIS ever filed (by KAHEA or anyone else). Id.

Under HRS § 343-7, the time to legally challenge the acceptance of the FEIS has long since passed. KAHEA is not entitled to a second chance at administrative and judicial review of the FEIS where it failed to timely appeal the original FEIS. HO FOFs 213, 225. Petitioners and Opposing Intervenors, including KAHEA, have not credibly shown any intervening changed environmental circumstances here, and there are no facts in the record suggesting any such materially changed circumstances exist. Under the circumstances, any argument under HAR § 11-200-12 would be untimely and cannot be raised now.

Putting aside KAHEA's reliance on the wrong legal standard and its waiver of any challenge to the FEIS, KAHEA's arguments regarding the FEIS' consideration of viewplanes must also be rejected on the merits. Contrary to KAHEA's conclusory assertion, from the inception of the TMT Project, viewplanes from the perspective of a Hawai'i religious practitioner were properly considered. HO FOF 318, 759, 834, 845. Consultation on viewplanes with religious practitioners was taken in part from the CIA and also contained in comment letters and responses. HO FOF 845.

In addition, as discussed previously, one of the principal reasons the 13N site was chosen for the TMT Observatory is to mitigate impacts on cultural and historic resources, viewplanes, and biological resources. HO FOF 318. The TMT Observatory will not be visible from Pu'u Wēkiu. HO FOF 830. It will not obstruct any viewplanes from Pu'u Wēkiu, and will not interfere with any practices involving viewplanes to or from Pu'u Wēkiu. Id.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a significant impact on visual and aesthetic resources. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not have a substantial adverse impact on the visual and aesthetic resources of Mauna Kea. HO FOF 854; HO COL 205.

e. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Adverse Impact on Hydrology and Water Resources

As reflected in the Hearing Officer's findings and conclusions, the reliable, probative, substantial, and credible evidence establishes that the TMT Project will not cause substantial adverse impacts to hydrology and water resources in satisfaction of HAR § 13-5-30(c)(4). Notwithstanding the foregoing, KAHEA argues that the TMT Project would increase the risk of water pollution, and that the CDUA is incomplete because it fails to consider the potential

detrimental impacts upon the water aquifers associated with Mauna Kea. Exceptions at 8, 36, 37. These arguments must be rejected because they are unsupported and are, in fact, directly contradicted by the record evidence.

During the contested case proceeding, the University offered the testimony of Tom Nance ("**Nance**"), a hydrologist who, among other things, has specifically studied the hydrology of Mauna Kea, including but not limited to Lake Waiau. HO FOF 855. Nance has substantial education and experience in the field of hydrology and water resources. Id. The University also offered the testimony of James Hayes ("**Hayes**") who prepared the EIS and CDUA. WDT James T. Hayes (as amended by Notice of Errata filed Oc. 24, 2016). According to the testimony of Nance and Hayes, the TMT Project will not release any wastewater into the surrounding environment; instead, it will collect and transport all wastewater off the mountain for proper disposal. HO FOFs 451, 861, 983.

Although construction of the TMT Project will create some new impermeable surfaces at the five-acre TMT Project site, due to the high permeability of the surrounding area, surface rainwater will percolate into the ground whether or not the TMT Project is built. HO FOF 500. The TMT Project itself will cause minimal surface runoff, and the impacts of such runoff will not be significant because it will dissipate via percolation into surrounding highly permeable areas. HO FOFs 856, 857.

KAHEA called witness Ku'ulei Kanahele to testify regarding hydrology. HO FOFs 361, 866. Kanahele is educated in the field of Hawaiian Studies, and her background and experience is in matters relating to Hawaiian culture and traditions – not hydrology. HO FOF 866. Kanahele testified as to Native Hawaiian knowledge of the water resources on Mauna Kea, as demonstrated though chants that have been passed down through the generations. HO FOF 866.

Importantly, however, Kanahele's testimony is based on her personal beliefs and interpretation of traditional Hawaiian chants, which, she admits are subject to different interpretations. HO FOF 867. Her anecdotal evidence is not supported by any scientific data or research. Id.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a substantial adverse impact on the water resources and hydrology of Mauna Kea, including Lake Waiau and the groundwater underlying Mauna Kea. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not have a substantial adverse impact on the water resources and hydrology of Mauna Kea, including Lake Waiau and the groundwater underlying Mauna Kea. HO FOF 882; HO COL 194.

f. As the Hearing Officer Correctly Found and Concluded, the TMT Project Will Not Have a Significant Adverse Impact on Hazardous Waste, Solid Waste, and Wastewater

The TMT Project is designed so that it will not release any wastewater into the surrounding environment; rather, it will collect and transport all wastewater off the mountain for proper treatment and disposal. HO FOFs 329, 890. Mandatory compliance with existing regulations and requirements will ensure that the TMT Project will not result in a significant impact to the environment due to its solid and hazardous waste management. HO FOF 893. Further, the implementation of the identified mitigation measures, such as the Waste Minimization Plan, id., and training for proper waste handling and disposal, HO FOF 890, will further reduce the TMT Project's potential impacts.

Notwithstanding the foregoing, KAHEA argues that although the TMT Observatory plans to have a zero-discharge wastewater, accidents cannot be completely avoided as demonstrated by previous spills and run-off from existing astronomy facilities. Exceptions at 37. KAHEA's argument intentionally ignores the fact that the TMT Project will implement plans for

storage and waste management, including a Spill Prevention and Response Plan, which will greatly reduce the risk of discharge of hazardous materials. HO FOFs 335, 505. To the extent KAHEA's argument relies on the 2009 oil leak at The Caltech Submillimeter Observatory ("**CSO**"), this incident is irrelevant to the instant CDUA for the TMT Project. Exceptions at 37. Additionally, the 2009 oil leak was properly remedied and there is no evidence of any resulting impact to the water resources on Mauna Kea. HO FOF 874.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not cause substantial adverse impacts to hazardous waste, solid waste, and wastewater. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not cause substantial adverse impacts to hazardous waste, solid waste, and wastewater. HO FOF 893; HO COLs 175, 194.

g. KAHEA's Exceptions Regarding Geological Resources Are Unsupported

KAHEA argues that the Hearing Officer's Report omits the alleged impacts of the TMT Project on geological resources. Exceptions at 17. First, KAHEA argues that the Hearing Officer's COL 196 implies that *existing* astronomy facilities were constructed on pāhoehoe foundation similar to the proposed site of the TMT Observatory, when in fact, *existing* astronomy facilities were constructed on the summit ridge cinder cone. This argument must be rejected because it mischaracterizes the contents of the record and is irrelevant.

The Hearing Officer's COL 196 clearly and unambiguously states "The surrounding pāhoehoe lava rock **upon which the structure will be constructed** is a common lava foundation feature for the surrounding areas upon which existing astronomy facilities have been constructed." HO COL 196 (emphasis added). This conclusion refers to the site upon which the TMT Observatory will be constructed – it does not refer to the sites upon which existing

astronomy facilities were constructed because such information is entirely irrelevant for purposes of the TMT Project.

KAHEA's *ad nauseam* reliance on the impacts of *existing* astronomy observatories is once again misplaced. As discussed previously, if the "substantial adverse impact" was caused by *previous* land uses, it cannot be caused by the "*proposed* land use." HAR § 13-5-30(c)(4) does not require an analysis as to whether (and how) **existing** cumulative impacts should be mitigated. The CDUA and supporting documents provide sufficient information for the BLNR to consider whether the "proposed land use" itself – and not other existing uses and/or conditions – will cause "substantial adverse impact to existing natural resources within the surrounding area, community, or region[.]" HAR § 13-5-30(c)(4); HO COL 193. This argument should once again be rejected because it is irrelevant and mischaracterizes the applicable legal standard.

Second, KAHEA argues that the TMT Project will involve significant grading and excavation and suggests that as a result, even after the TMT Project is decommissioned, "the restoration of the site is unlikely to be perfect and back to a pristine state." Exceptions at 18. KAHEA's suggestion that the site of the TMT Project will not be adequately restored is unsupported by the record evidence.

To the extent KAHEA claims that the quoted language is an excerpt from the testimony of TMT Project Manager, Gary Sanders, KAHEA does not provide a cite to any evidence in the record to support this proposition as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). The cited testimony is an incomplete and misleading partial quote of a transcript from the prior contested case proceeding, which is not in evidence. See Minute Order No. 44 (Documentary Evidence). Consideration of the cited document is prohibited by HRS § 91-9(g). In any event, to the extent KAHEA is suggesting that the summit area is pristine and that the law

requires the TMT Project to return a pristine condition, KAHEA's argument must be rejected because it is unsupported by the record evidence and applicable law.

The site of the TMT Observatory is in relatively close proximity to the eleven (11) other previously developed facilities for astronomy within the Astronomy Precinct, which is the only area now designated for astronomical facilities on Mauna Kea. HO FOF 901. In addition, to the extent KAHEA argues that the Northern Plateau is undeveloped open space with no telescope structures on it, this argument is directly contradicted by the record evidence. Exceptions at 24. SMA roads and facilities are already on the Northern Plateau. HO FOF 842.

With regard to decommissioning, the BLNR has approved the Decommissioning Plan for the Mauna Kea Observatories, one of the sub-plans to the CMP. HO FOF 150. The Decommissioning Plan is consistent with Governor Ige's directive that the TMT Project site should be the last new site developed on the mountain and that any future development occur on already existing sites. HO FOF 164. The University confirmed that the TMT Project site is the last new area on the mountain where a telescope will be built. Id. In addition, the University plans to decommission three (3) telescopes before the TMT Project is operational. HO FOF 171.

TIO has committed to performing under the Decommissioning Plan, HO FOF 169, which includes, among other things, restoring the site at the end of the useful life of the proposed TMT Observatory, or in the event the General Lease between the University and BLNR is not extended or renewed. HO FOF 220. In compliance with the Decommissioning Plan, TMT Project staff will develop a Site Restoration Plan ("**SRP**") that will present specific targets for site restoration and describe the methodology for restoring disturbed areas after the demolition/construction activities described in the Site Deconstruction and Removal Plan ("**SDRP**") for the TMT Project are completed. HO FOF 348.

Under the Decommissioning Plan, two (2) primary objectives of site restoration are: (1) restoring the look and feel of the summit prior to construction of the observatories; and (2) providing habitat for the Aeolian arthropod fauna. Id. The level of restoration to be performed and the potential impact of the restoration activities on natural and cultural resources will be carefully evaluated in the SRP and in consultation with OMKM and DLNR. HO FOF 349. Notably, TMT employees took approximately 960 photographs of the site, over 600 photographs of the Batch Plant area, and aerial photographs to a resolution of 2-3 inches to document the original conditions so that the site may be restored as close to its original condition as possible upon decommissioning. HO FOF 349.

Third, KAHEA cites select portions of Exhibit A-4, FEIS Vol. II p. 4 of 531, referenced in Petitioner Ward's Proposed FOF 109, for the proposition that the TMT Project will result in substantial adverse impacts to geological resources.

> The National Park Service contends that the permanent destruction of any surface geologic structures within the Mauna Kea National Natural Landmark is significant and it denigrates from its overall status as a national natural landmark.
> . . . .
> [T]he review of the DEIS has brought to our attention the incremental addition with resultant impacts of ten observatories to Mauna Kea NNL since its establishment as a national natural landmark in 1972. Realizing that additional observatories may be a consideration in the future, the NPS intends to review the current NNL designation and at the very least may consider removal of the 525

Exceptions at 18.

As an initial matter, KAHEA's citation does not support the proposition. To the extent KAHEA intended to refer to pages 5 and 6 of 531 (not page 4), KAHEA's reliance on the above language is still misplaced. With regard to the first comment by the National Park Service, KAHEA's quote is intentionally misleading and incomplete. KAHEA cites the National Park Service's comment regarding geologic structures, but omits the National Park Service's

recommendation in order to support KAHEA's assertion that the TMT Project should not be built at all. Importantly, to address its concern regarding geologic structures:

> The National Park Service recommends the TMT applicant to actually implement additional interpretation and educational opportunities within the Mauna Kea Science Reserve focused on the visiting public. In fact, as an additional mitigation measure, the National Park Service recommends retrofitting the Visitor Information Station with state of the art exhibits that reflect both the nationally recognized natural, cultural, and historical resources of Mauna Kea National Landmark commensurate with the state of the art astronomical investigations and research being conducted there.

Exhibit A-4, FEIS Vol. II, p. 5 of 531. Therefore, the National Park Service recommended implementing educational opportunities – it did not, as KAHEA attempts to suggest, recommend that the TMT Project should not be built.

Importantly, the FEIS addressed the National Park Service's recommendation by expanding the mitigation measures outlined in Section 3.6.4 of the Draft EIS to include developing exhibits with OMKM and 'Imiloa that reflect the nationally-recognized natural resources of the Mauna Kea NNL. Id. Indeed, as the Hearing Officer found, the TMT Project will work with OMKM and 'Imiloa to develop exhibits for the VIS and 'Imiloa regarding cultural and archaeological resources as well as to develop a TMT outreach office that will work with 'Imiloa and Native Hawaiian groups to support and fund programs specific to Hawaiian culture and archaeological resources. HO FOF 650.

With regard to the second comment by the National Park Service, KAHEA's reliance on the same is misplaced. The FEIS acknowledged the National Park Service's statement and forwarded the same to OMKM, which oversees the University's management areas on Mauna Kea. Exhibit A-4, FEIS Vol. II, p. 6 of 531.

KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a significant adverse impact on geological resources. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not have a significant adverse impact on geologic resources. HO FOF 862; HO COL 194.

h. KAHEA's Exceptions Misstate the Law and the Facts Related to Mitigation

KAHEA asserts that the Hearing Officer's COLs 179-221 are clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 19. In support of its assertion, KAHEA makes several arguments, all of which must be rejected. First, Kahea argues that the TMT Project must reduce **existing** cumulative impacts of prior telescope projects to a level that is less than significant and adverse, and that because the TMT Project will add a limited increment to the current level of cumulative impact (as opposed to reducing it), the CDUA should be denied. Exceptions at 19-20. That is not the legal standard. As discussed previously, HAR § 13-5-30(c)(4) does not require an analysis as to whether (and how) **existing** cumulative impacts should be mitigated.

Second, KAHEA argues that the University's proposed mitigation measures are too "indirect and insufficient" to reduce the substantial adverse impacts under the standard adopted by the Hawai'i Supreme Court in Morimoto v. BLNR, 107 Hawai'i 296, 113 P.3d 172 (2005). Exceptions at 20. KAHEA claims that Morimoto stands for the proposition that HAR § 13-5-30(c)(4) can only be satisfied by mitigation actions that **directly** ameliorate the specific harmful impact at issue. Id. KAHEA"s argument misrepresents the legal standard and the Court's holding in Morimoto. Under HAR § 13-5-30(c)(4), mitigation measures for the TMT Project have been considered even though "mitigation" is not expressly stated as a requirement. Morimoto, 107 Hawai`i at 303-304, 113 P.3d at 179-180. HO FOF 515.

In Morimoto, the State Department of Transportation and the Federal Highways Administration sought a CDUP to upgrade the Saddle Road across the Big Island. The EIS for the project contained a biological assessment noting potential impacts to seven (7) endangered or threatened species, and called for a variety of mitigation measures. The mitigation measures, included imposing lighting restrictions, minimizing fire hazards, having an ornithologist perform "nest searches" in advance of construction, and acquiring and managing land for Palila habitat restoration. Morimoto, 107 Hawai'i at 297-300, 113 P.3d at 173-176.

After a contested case, through which the BLNR concluded that the mitigation measures contained in the EIS satisfied HAR §13-5-30(c)(4), the petitioners filed an appeal, arguing that the BLNR was not permitted to consider the EIS's mitigation measures in assessing the fourth criterion. Id. at 300-303, 113 P.3d at 176-179. The Hawai'i Supreme Court rejected the petitioners' argument, observing that HAR § 13-5-42(a)(9) **requires** that mitigation measures set forth in an EIS be made part of the conditions of the CDUP. Id. at 303, 113 P.3d at 179. Specifically, the Hawai'i Supreme Court held:

> [W]hen an applicant submits its application for a CDUP, the public and interested parties know that BLNR will evaluate the application in accordance with the eight criteria in HAR § 13-5-30(c), that BLNR will look to any draft EIS or EA that must be submitted as part of the application, and that BLNR will incorporate any representations in the EIS or EA (relevant to mitigation) as a condition of the CDUP. These rules provide sufficient guidance to CDUP applicants and the public, offsetting the threat of "Unbridled discretion."

Morimoto, 107 Hawai'i at 304, 113 P.3d at 180 (citation omitted).

Morimoto does not support KAHEA's argument that the University's proposed mitigation measures, which are set forth in the unchallenged and approved FEIS, are somehow "indirect and insufficient." Moreover, to the extent KAHEA (or anyone else for that matter)

never challenged the FEIS, KAHEA's attack against the mitigation measures therein and now being made a part of the CDUP is untimely and should be rejected.[6]

Grasping at straws, KAHEA rattles off a laundry list of mitigation measures it contends are insufficient for one reason or another, none of which apply. Regarding the **location** of the TMT Project, KAHEA raises two (2) arguments. Relying on another popular "myth" asserted throughout the contested case proceeding, KAHEA argues that the location of the TMT Project is not a mitigation measure because locating the TMT on the ridge was not desirable or possible. Exceptions at 21; HO FOF 319, 321. This "myth" was successfully debunked during the contested case proceeding. Indeed, Hayes testified that the TMT Project could have been considered for the summit. HO FOF 322. However, the Master Plan specified Area E as a preferred location for a next generation large telescope because of the minimum impact on existing facilities, wēkiu bug habitat, archaeological sites, and viewplanes while providing suitable observation viewing conditions. HO FOF 322.

In addition, KAHEA argues that the TMT Project location could have and, therefore, should have been located on a recycled site. Exceptions at 21. However, testimony during the contested case proceeding indicated that it was unlikely that the CSO site could be recycled as the site for the TMT Project. HO FOF 176. The TMT Project would not be better suited on the UKIRT site because UKIRT is on the summit ridge, a more sensitive cultural area, and subject to height restrictions. Id. For these same reasons, although it could theoretically be built at these locations with extensive grading, the TMT Project is not proposed to be built on any existing site

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[6] The time limit for making challenges to an FEIS is set out in HRS § 343-7. HO COL 393. It is undisputed that the time for challenges to the Governor's acceptance of the FEIS for the TMT Project ended on August 7, 2010, and that neither Petitioners and Opposing Intervenors nor anyone else made a timely challenge – or, indeed, any challenge at all – to the TMT Project's FEIS. HO COL 394.

on the Kūkahau'ula Ridge, in order to mitigate impacts on cultural and historic resources, viewplanes, and biological resources. Id.

Regarding the **size** of the TMT Project, KAHEA argues that not building a larger observatory is in and of itself not a mitigation measure. Exceptions at 21. KAHEA's argument is pure hyperbole to the point of absurdity. The TMT Observatory was specially designed to mitigate its visual impact – not simply with regard to its size. Instead, the TMT Observatory was specially designed by:

(1) reducing the size of the dome through the use of a Calotte-type dome;

(2) designing the telescope to be much shorter than usual given its mirror size;

(3) designing the dome to fit very tightly around the telescope;

(4) finishing the dome with a reflective aluminum-like surface, which during the day reflects the sky and reduces the visibility of the structure; and

(5) finishing the support building and fixed structure exterior with a lava color.

HO FOF 326.

Regarding the **economic contribution** of the TMT Project, KAHEA argues that the significant economic contributions of the TMT Project, including the payment of substantial rent, educational services, workforce development, among other benefits, should not be considered mitigation measures. Exceptions at 21-22. KAHEA's argument is directly contradicted by the applicable legal authority and misrepresents the record evidence regarding the TMT Project's economic contributions. See HO FOFs 447, 520.

Under Kilakila, the Hearing Officer may take into consideration the scientific, economic and educational benefits of the TMT Project in determining that the project meets the criteria of

HAR § 13-5-30(c)(4). HO COL 214 (citing Kilakila, 138 Hawai'i at 405-06, 382 P.3d at 217-18 (noting that consideration of relevant scientific, economic and educational benefits of project does not conflict with the BLNR's duty to protect natural and cultural resources through "appropriate management and use to promote their long-term sustainability and the public health, safety and welfare")).

KAHEA attempts to distinguish Kilakila from the facts of the instant case, but only succeeds in sealing the fate of its own logical fallacies. For example, KAHEA contends that the ATST Telescope is being built on a recycled site, whereas the TMT Observatory is being built on the "pristine" northern plateau. Exceptions at 23. This argument is inaccurate/false, unsupported/unsubstantiated, mischaracterization, incomplete, and misleading (presented out of context). As an initial matter, the Court's decision in Kilakila did not determine that the ATST Telescope is being built on a recycled site. See generally Kilakila, 138 Hawai'i at 405-06, 382 P.3d at 217-18. In addition, there is no evidence in the record of this contested case proceeding that the ATST Telescope is being built on a recycled site. Finally, this argument is disingenuous where, paradoxically, KAHEA characterizes the northern plateau as "pristine," yet also argues that the area is overbuilt and that the TMT Project couldn't possibly mitigate the impact to the area. Compare Exceptions at 23 ("pristine"), with 20 ("[t]he threshold of significance has already been surpassed on Mauna Kea"). As discussed previously, the TMT Observatory is in relatively close proximity to the eleven (11) other previously developed facilities for astronomy within the Astronomy Precinct. HO FOF 901.

In addition, the TMT Project has and will continue to provide significant scientific, economic, and educational benefits. In the extensive scoping process for the TMT Project, one of the most frequently raised issues was the local community's desire to have the TMT Project

positively affect the socioeconomic landscape of Hawai'i Island and increase the potential for residents to work for the TMT Project during its construction and operation. The TMT Project has committed to a Community Benefits Package ("**CBP**"). HO FOF 309. A portion of the CBP funding commenced in 2014 upon the start of the TMT Project construction and was committed to continue throughout the TMT Observatory's presence, so long as the original CDUP was not invalidated or construction was not stayed by court order. Id. However, even though the original CDUP has been invalidated, TIO has continued the CBP. Id.

As part of the CBP, TIO has provided $1 million annually during such period to the THINK Fund; the dollar amount is adjusted annually using an appropriate inflation index. Id. The funding is divided; $750,000 is distributed through the Hawai'i Community Foundation and $250,000 through the Pauahi Foundation. Id. To date, TIO has remitted $630,000 to the Pauahi Foundation, and $1.8 million to the Hawai'i Community Foundation, a total of approximately $2.5 million. Id. In addition, the Workforce Pipeline Program ("**WPP**") was also developed and shaped in large part to respond to the community input and suggestions. HO FOF 447.

Third, KAHEA argues that the proposed mitigation measures in the CMP are not legally binding and are therefore insufficient. See Exceptions at 20-21. This is simply not true. The CMP and its sub-plans were approved by the BLNR. FOFs 145, 148. As a condition of the BLNR's approval of the CMP, it designated the Board of Regents, the highest authority within the University, with the responsibility of implementing the CMP and sub-plans. HO FOF 190. The BLNR requires the University to provide annual reports in writing and in person on the status of implementation of the CMP management actions. Id. Every year since the BLNR approved the CMP in 2009, OMKM has prepared and submitted annual reports, beginning in 2010, on the status of the implementation of the CMP. Id.

The use of mitigation measures is a universally recognized and widely adopted means of lessening otherwise adverse impacts in land use projects. HO FOF 317. Mitigation of impacts has been a fundamental component of the TMT Project from its inception and at all times thereafter. HO FOF 316. KAHEA's arguments reveal its own personal bias insofar as KAHEA ignores the evidence regarding the mitigation measures – clearly, no amount of consultation or mitigation would be satisfactory to KAHEA. Under the circumstances, KAHEA's arguments, which misstate the law and facts related to mitigation, must be rejected.

5. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT IS COMPATIBLE WITH THE LOCALITY AND SURROUNDING AREA

The fifth criterion, set forth in HAR § 13-5-30(c)(5), requires that "[t]he proposed land use, including buildings, structures, and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels[.]" HAR § 13-5-30(c)(5); HO COLs 88, 118, 222. KAHEA asserts that the Hearing Officer's FOFs 898-912, 918-920 and COLs 223-230 are inaccurate, irrelevant, and misleading, clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 24. In support of its assertion, KAHEA makes several arguments, all of which must be rejected.

First, KAHEA argues that the appropriate locality is the entire 11, 288 acre MKSR within the conservation district, as opposed to the Astronomy Precinct within the MKSR. Exceptions at 24. KAHEA's argument must be rejected because it misstates the applicable legal standard. With respect to HAR § 13-5-30(c)(5), the Hawai'i Supreme Court in Kilakila held that under this criterion, the BLNR may focus its analysis on the permitted land use within the context of a specific area within a Conservation District designated for similar uses. Kilakila at

406-07, 382 P.3d at 218-19. Under Kilakila, therefore, the appropriate locality to be considered is the summit area of Mauna Kea within the MKSR, and more specifically, the Astronomy Precinct of the MKSR. Astronomy facilities in the locality of the TMT Project are expressly permitted uses under HAR § 13-5-24. The Astronomy Precinct is the site of many existing astronomical observatories so the TMT Project will be compatible with existing land uses. HO FOF 899.

Second, KAHEA argues that the TMT Project is incompatible with the locality and surrounding area because the proposed site is undeveloped. Exceptions at 24. This argument must be rejected because HAR § 13-5-30(c)(5) requires that the TMT Project be viewed in the context of the Astronomy Precinct, as discussed previously. The site of the TMT Observatory is in relatively close proximity to the eleven (11) other previously developed facilities for astronomy within the Astronomy Precinct, which is the only area now designated for astronomical facilities on Mauna Kea. HO FOF 901. In addition, to the extent KAHEA argues that the Northern Plateau is undeveloped open space with no telescope structures on it, this argument is directly contradicted by the record evidence. Exceptions at 24. SMA roads and facilities are already on the Northern Plateau. HO FOF 842.

The TMT Project should also be viewed in the context of the historical physical disturbance of the summit area by Native Hawaiians. HO FOF 909. Directly adjacent to the Astronomy Precinct is the NAR, which contains most of the Mauna Kea Adze Quarry Complex, "the largest ancient quarry of its type, anywhere." Id. The presence of the Mauna Kea adze quarry, the largest in the world, serves as conclusive evidence that Native Hawaiian ancestors recognized the importance of Mauna Kea's rich resources and its ability to serve the community by producing the tools to sustain daily life. Id.

Third, KAHEA argues that the "immense size and height" of the TMT observatory is a "significant reason" why the TMT Project is incompatible for the locality. Exceptions at 24. KAHEA's argument is a *red herring* insofar as KAHEA's arguments indicate that it is categorically opposed to the construction of any additional astronomy observatories on Mauna Kea, regardless of the size or height of such observatories. More importantly, KAHEA's argument fails as a matter of law. For purposes of the criteria in HAR § 13-5-30(c)(1) and (c)(2), the rules do not specify limits as to the size, appearance or other characteristics of an astronomy facility within the Resource subzone. HO FOF 471. While the applicable rules do not specify such limits, the TMT Project has nonetheless carefully designed the TMT Observatory in order to mitigate its visual, cultural, and environmental impact. HO FOF 517.

Fourth, KAHEA argues that the TMT Project is incompatible with the locality and surrounding area because it would introduce a new visual element into a viewplane that is currently intact, interrupting cultural and religious practices. Exceptions at 25. KAHEA's argument is unsupported by the record evidence. From most vantage points within the Astronomy Precinct where the TMT Project will be visible, other astronomy facilities are already visible. HO FOF 902. The TMT Project will not be visible from the culturally sensitive areas of the summit of Kūkahau'ula, Lake Waiau, Pu'u Līlīnoe, and Pu'u Wēkiu. HO FOF 903.

Although certain petitioners argued that the TMT Project will obstruct the viewplanes used in Polohiwa ceremonies and those connected to the path of the sun, solstice, and equinox, this testimony is contradicted by previous testimony and statements that petitioners have engaged in such practices in the presence of existing telescopes. See HO FOFs 828-829, 832. No known customary or traditional uses or practices occur within the Area E location site of the TMT Observatory. HO FOF 684.

Fifth, KAHEA argues that the Cultural Impact Assessment ("**CIA**") recommended that "the TMT Observatory be built on a recycled telescope site, instead of breaking new ground and allowing the industrialization of the mountain to spread to a wider area, and obstructing an otherwise intact viewplane." Exceptions at 25 (citing Exhibit A004). As an initial matter, the citation provided by KAHEA does not support the proposition. Exhibit A-004 does not include the CIA. To the extent KAHEA intended to refer to Exhibit A-005, which does include the CIA, KAHEA's argument broadly mischaracterizes the content of the CIA.

The CIA listed numerous mitigation measures "offered as a way to remediate and address present and future adverse impacts." Exhibit A-005, FEIS Appendix D, CIA, at 247 of 1079. Based solely on the views "expressed by one participant" in the current study and "several participants" in past cultural studies, one of the mitigation measures "offered" in the CIA was the recommendation that the TMT observatory be built on a recycled site. Id. The CIA did not, as KAHEA suggests, decry the "industrialization" of the mountain or opine as to the impact on viewplanes as a result of the TMT Project.

In any event, testimony during the contested case proceeding indicated that it was unlikely that the CSO site could be recycled as the site for the TMT Project. HO FOF 176. The TMT Project would not be better suited on the UKIRT site because UKIRT is on the summit ridge, a more sensitive cultural area, and subject to height restrictions. Id. For these same reasons, although it could theoretically be built at these locations with extensive grading, the TMT Project is not proposed to be built on any existing site on the Kūkahau'ula Ridge, in order to mitigate impacts on cultural and historic resources, viewplanes, and biological resources. Id.

Sixth, KAHEA argues that the CDUA is incomplete because (a) the location of the TMT Observatory is a function of available space, not mitigation, and (b) the proposed aluminum-like coating of the dome would actually be more visible due to the reflective nature of the dome shape. Exceptions at 28-29. As discussed previously, the argument that the location of the TMT Observatory is not a mitigation measure because locating the TMT on the summit ridge was not desirable or possible is simply not true. HO FOF 319. Hayes testified that the TMT Project could have been considered for the summit, HO FOF 322, but, the Master Plan specified Area E as a preferred location for a next generation large telescope because of the minimum impact on existing facilities, wēkiu bug habitat, archaeological sites, and viewplanes while providing suitable observation viewing conditions. Id.

With regard to the aluminum-like coating of the dome, KAHEA fails to cite any evidence to support its personal opinion that the aluminum-like coating of the dome would actually be more visible. Exceptions at 29. Contrary to KAHEA's conclusory assertion, the aluminum-like coating was specifically chosen to minimize the visual impacts of the dome. HO FOF 252.

Seventh, KAHEA argues that the viewshed analysis was deficient and inaccurate, claiming, among other things that the visitors in the resort areas were not considered in the viewshed analysis. Exceptions at 29-30. This argument is unsupported by the record evidence. Visitors and island residents were considered in the viewshed analysis. HO FOF 837. The viewshed analysis was performed pursuant to HRS Chapter 343 and took into account census data and input from the community. Id.; HO FOF 838. Certain individuals and groups who are petitioners in this contested case received those documents and/or attended the meetings, yet, they failed to provide any input suggesting other/additional methods to evaluate the visual impact of the TMT Project. HO FOF 838.

Pointing to purported inconsistencies between the Visual Impact Assessment Technical Report ("VIATR") and the CDUA, KAHEA attempts to manufacture issues where none exist. KAHEA claims that upon comparison, Table 7.5 in the CDUA inaccurately stated "*No*" to the question whether the TMT Observatory was "*Visible from silhouette?*" from viewpoint #18 the north ridge of the summit, but the same question was answered as "*Full*" in Table 4-4 of the VIATR. Table 4-4 of the VIATR. To the extent KAHEA is arguing that the CDUA does not disclose that the TMT Observatory could be visible from viewpoint #18, this argument is directly contradicted by the plain language of the CDUA. Section 7.2.2 of the VDUA states that the TMT Observatory could be visible from viewpoint #18, the north ridge of the summit. Exhibit A-001, CDUA, at 7-6. There is no conspiracy to "downplay" potential impacts to viewplanes as KAHEA suggests.

Eighth, KAHEA argues that the TMT Project is incompatible with recreational and other public uses in the surrounding areas of the Mauna Kea conservation district. Exceptions at 31. Feigning concern for the ability of tourists and commercial tours to sightsee, hike, to engage in amateur astronomy, and other activities, KAHEA suggests that the TMT Project will interrupt these activities. Id. KAHEA fails to point to record evidence that the TMT Project would interrupt these activities aside from minimal temporary impact to recreational visitors who expect to traverse near the construction site during construction. HO FOF 998.

Based on the record evidence and notwithstanding KAHEA's unsupported arguments, the Hearing Officer properly found and concluded that the proposed TMT Project is compatible with the locality and surrounding areas and is appropriate to the physical conditions and capabilities of the area.

6. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT PRESERVES OR IMPROVES UPON THE EXISTING PHYSICAL AND ENVIRONMENTAL ASPECTS OF THE LAND

The sixth criterion, set forth in HAR § 13-5-30(c)(6), requires that "[t]he existing physical and environmental aspects of the land, such as natural beauty and open space characteristics will be preserved or improved upon, whichever is applicable[.]" HAR § 13-5-30(c)(6); HO COLs 88, 119, and 231. KAHEA argues that the Hearing Officer's FOFs 921-955 and COL 232-260 are clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 32. In support of its argument, KAHEA asserts in conclusory fashion that because the TMT Observatory is "an industrial massive man-made structure that unequivocally impacts the existing physical and environmental aspects of Mauna Kea," it could not possibly preserve or improve upon the existing physical and environmental aspects required under the sixth criterion. Exceptions at 32. KAHEA's reliance on its own biased opinion is insufficient.

KAHEA's argument ignores that this criterion must be analyzed in the context of the purpose and goals of the resource subzone of the Conservation District. HO FOF 922. Visual or other impacts of a proposed project are site specific. HO FOF 922; HO COL 234. As Petitioners and Opposing Intervenors have repeatedly emphasized, the visual landscape in the summit area of Mauna Kea has already been substantially altered and impacted. HO FOF 923; HO COL 237. It will remain so with or without the TMT Project. HO FOF 923; HO COL 237. Placed in context with existing observatories and the minimal or nonexistent obstruction of existing views from the summit ridge region, the visual impact of the TMT Observatory will be less than significant. HO FOF 954. Adding the TMT to the existing physical context will not result in a substantial adverse impact. HO FOF 237.

When viewed from the perspective of the summit region, which already includes astronomy facilities, the physical and environmental aspects of Mauna Kea will be preserved by the TMT Project, and, in some respects, will be improved upon. HO FOF 954. Nevertheless, the mitigation measures, including the location of the telescope, reduction of the dome to the smallest size physically possible, the finishing of the dome and supporting structure to reduce the visibility of the structures, and other measures, reduce the visual impacts for the TMT Project to the greatest extent feasible. HO FOF 928; HO COL 244. The "mitigation" of impacts does not require that impacts be eliminated altogether, HO COLs 241-242; however, the TMT Project mitigation does appropriately consider measures designed to diminish and not eliminate altogether the impact of the TMT Project visually and in its effect on practices through its chosen location in Area E and its design. HO FOFs 326, 646, 843.

KAHEA's argument relies on a literal reading of the sixth criterion, *i.e.*, that the TMT Project "improve on the natural beauty or open space of the Northern Plateau." Exceptions at 32. Such an absolute and restrictive reading would result in an absurd result – an absolute exclusion of any construction of astronomy facilities that are an explicitly permissible use in the Resource subzone. HO COL 251. Based on KAHEA's interpretation of HAR § 13-5-30(c)(6), no telescope could ever have been built on Mauna Kea, and nothing could be permissibly built on Conservation District land in the State of Hawai'i. HO FOF 933; HO COL 252. Such a reading would render "Astronomy facilities" in the Resource subzone meaningless. HO FOF 934; HO COL 253.

Contrary to KAHEA's interpretation, Kilakila confirms that HAR § 13-5-30(c)(6) should be interpreted and applied in the context of Astronomy Precinct within the MKSR and in light of the mitigation measures proposed in connection with the TMT Project. See Kilakila, 138

Hawai'i at 407, 382 P.3d at 219 (affirming BLNR's findings and conclusions that the solar telescope project met the sixth criterion because the project "will be consistent with and will preserve the existing physical and environmental aspects of the land (the Haleakalā High Altitude Observatory site, which housed other existing observatories), and further noting that BLNR properly considered the numerous mitigation commitments for the project with respect to this criterion); HO COL 258. Therefore, HAR § 13-5-30(c)(6) can only make sense by interpreting it as requiring that the TMT Project, and specifically its visual impacts, be assessed in the manner set forth above, in the context of its surrounding environment – including the uses and development that has already occurred. HO COL 259.

Viewed in the proper context, the TMT Project will be consistent with and will preserve, with proper management, the existing physical and environmental aspects of the land directly and through the numerous mitigation commitments. HO FOF 935. Based on the record evidence and notwithstanding KAHEA's arguments, the TMT Project is consistent with existing uses and preserve or improves upon the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, thereby satisfying the sixth criterion. HO FOF 955; HO COL 260.

7. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT WILL NOT UTILIZE A SUBDIVISION OF LAND TO INCREASE THE INTENSITY OF LAND USES IN THE CONSERVATION DISTRICT

The seventh criterion, set forth in HAR § 13-5-30(c)(7), requires that "[s]ubdivision of the land will not be utilized to increase the intensity of land uses in the conservation district[.]" HAR § 13-5-30(c)(7); HO FOF 956; HO COL 261. KAHEA argues that the TMT Project would result in *de facto* subdivision of land for the purpose of increasing the intensity of land uses in the conservation district. Exceptions at 34. This argument must be rejected.

First, it is undisputed that the University has not requested, and has not been granted, any subdivision of land for purposes of the TMT Project. HO FOF 963. Although KAHEA argues that a subdivision of land can occur regardless whether the University applies for one or not, this argument is contrary to applicable law. Exceptions at 34- 35. To develop subdivided land requires an application to subdivide a parcel pursuant to Hawai'i law, as defined in HRS § 484-1(2008) and the Hawai'i County Code 23-2 (1983). HO FOF 957. No such process is being employed here for this project and none is required for the planned uses on the subject land parcel. HO FOFs 958-959.

Second, HAR § 13-5-2 clearly and unambiguously defines a "subdivision" as a "division of a parcel of land into more than one parcel." KAHEA fails to provide applicable legal authority to support its argument that a sublease within MKSR legally constitutes a "division of a parcel of land into more than one parcel." within the meaning of HAR §13-5-2. KAHEA's reliance on the definition of "subdivision" found in Black's Law Dictionary is misplaced. The definition of "subdivision" under HAR § 13-5-2 is applicable and controlling here, not Black's. Third, construing every sublease as creating a subdivided parcel subject to the county subdivision code would subject every such sublease to ordinances designed to regulate residential developments and lead to absurd results. HO COL 269.

Fourth, no evidence exists of an increase in the intensity of land use in the astronomical precinct area. HO FOF 964. The parcel where the TMT Project site is located is already used for astronomical observatories and will continue to be used for astronomy as provided for by statute. Id. Moreover, the decommissioning measures associated with the TMT Project would offset any purported intensification of land use. Id.

Fifth, the Astronomy Precinct is an area identified and described by the MKSR Master Plan as a management and planning designation to reduce the area within the MKSR available for astronomy development. HO COL 273. The Master Plan identified specific and discrete sites for future development on Mauna Kea, including an appropriate site for a Next Generation Large Telescope (Area E). HO COL 266. The sublease of a parcel within the Astronomy Precinct of the MKSR that was previously planned and specifically identified as an appropriate location for a Next Generation Large Telescope, such as the TMT Project, does not constitute a division of a parcel into more than one parcel for the purpose of increasing the intensity of land use within the conservation district as contemplated by HAR § 13-5-30(c)(7). HO COL 267. KAHEA's proposed interpretation would mean nothing could ever be built in a Conservation District, because adding anything would always increase, in some measure, the intensity of land use. That interpretation would lead to an absurd result, and must be rejected. HO COL 269.

Sixth, to the extent KAHEA argues that the University improperly relies on an exemption from HAR § 13-5-30(c)(7) applicable to government agencies under Hawai'i 's Uniform Land Sales Practices Act, this argument misrepresents the record. Exceptions at 35. The University does not claim that it is exempt from HAR § 13-5-30(c)(7) based on a government exemption or otherwise.

Based on the record evidence and notwithstanding KAHEA's unsupported arguments, the Hearing Officer properly found and concluded that the TMT Project will not utilize subdivision of land to increase the intensity of land uses in the Conservation District, and therefore satisfies the seventh criterion, HAR § 13-5-30(c)(7).

8. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT WILL NOT BE MATERIALLY DETRIMENTAL TO THE PUBLIC HEALTH, SAFETY, AND WELFARE

The eighth criterion, set forth in HAR § 13-5-30(c)(8), requires that "[t]he proposed land use will not be materially detrimental to the public health, safety, and welfare." HAR § 13-5-30(c)(8); HO FOF 966; HO COL 88, 277. KAHEA argues that the Hearing Officer's FOFs 957-965 and COLs 278-297 are clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 2, 36, 39-40. First, KAHEA argues that the Hearing Officer's COL 292 adopted a "materialistic" definition of "welfare" from Merriam-Webster's online dictionary , "the state of doing well especially in respect to good fortune, happiness, well-being, or prosperity"), rather than Black's Law Dictionary's definition of "welfare," "a society's well-being in matters of health, safety, order, morality, economics and politics." Exceptions at 2. This argument relies on a distinction without a difference. KAHEA fails to establish how the use of the definition of "welfare" from Merriam-Webster's online dictionary, as opposed to Black's Law Dictionary, is prejudicial. In addition, KAHEA's Proposed Findings of Fact and Conclusions of Law dated May 30, 2017 did not offer a proposed definition of "welfare." As such, KAHEA's argument is untimely and/or waived.

Second, KAHEA argues that the applicable rules do not authorize the BLNR to "destroy" conservation district resources in exchange for economic benefits. Exceptions at 36. KAHEA's suggestion that the BLNR's approval of the TMT Project would produce such a result is baseless and absurd.

Third, KAHEA argues that the Hearing Officer failed to take into account (1) the "potential" detrimental impacts on the water aquifers, (2) the increased noise and dust levels, (3) the "multi-generational trauma" resulting from the desecration of the land due to the existing

and planned development on Mauna Kea, and (4) desecration of Mauna Kea. Exceptions at 36-37. The TMT Project will not negatively impact the water aquifers, as discussed previously in Section IV.A.4. Because the TMT Observatory will use a zero-discharge wastewater system, wastewater will not be released from the TMT Project so no percolation of wastewater will reach the aquifer. HO FOF 506. KAHEA's arguments regarding previous spills at existing observatories are irrelevant.

The noise generated by the TMT Observatory will be minimal. Specifically, the noise level generated by the TMT Observatory will be below the daytime Class A allowable limits (55 dBA) at a distance of 270 feet from heating, ventilation, and air conditioning ("**HVAC**") systems, and below the nighttime Class A allowable limits (45 dBA) at a distance of 850 feet from HVAC systems. HO FOF 994, 995. Identified noise-sensitive areas in the summit region, including the trailhead and summit of Pu'u Wēkiu/Kūkahau'ula, Lake Waiau, and Pu'u Līlīnoe, are more than 850 feet from the TMT Observatory HVAC systems, which means that anyone standing at those sites will not be exposed to noise levels exceeding the Class A daytime or nighttime standards. HO FOF 996.

Contrary to KAHEA's argument, operation of the TMT Project will not contribute to a noticeable increase in noise levels at the identified recreational sites in the surrounding area recognized as sensitive to noise. HO FOF 997. Nevertheless, the TMT Project will implement mitigation measures with regard to noise, including, for example: (1) placing HVAC equipment indoors; and (2) furnishing the openings between the interior and exterior of the TMT Observatory with noise reducing acoustical louvres, and other measures. HO FOF 997. In addition, TIO will implement a mandatory Ride-Sharing Program for TMT observatory employees that will reduce the number of vehicle trips to the summit and, in turn, reduce the

amount of noise and dust generated by vehicles. HO FOF 336, 748.

While there may be temporary adverse impacts due to noise and dust during construction and decommissioning of the TMT Project, such impacts are **temporary** and will be mitigated to the extent possible. HO FOF 352. Noise impacts from construction will be mitigated through compliance with conditions in Noise Permits and the Noise Variance. Ex. A-3/R-3 at 3-203. Overall, the TMT Project will not detrimentally affect the ambient noise levels or result in a substantial degradation of environmental quality in noise-sensitive areas, and therefore, any noise impact from the TMT Project will be less than significant. HO FOF 999.

The TMT Project will not have a materially detrimental impact on the health of Native Hawaiians or the general public. HO FOF 970. KAHEA's reliance on the testimony of Dr. Taualii is misplaced because it is insufficient. Dr. Taualii's opinion is based on an unproven theory set forth in her unpublished research. Id. Dr. Taualii's research was limited in scope, *e.g.*, did not address the welfare of the general public, did not account for impacts on the health of Native Hawaiians who support the TMT Project, and did not consider the impacts on the general public beyond the Native Hawaiian community. Id. Putting aside the clear personal bias that tainted the outcome of Dr. Taulii's research and opinion, even if Dr. Taualii's research is accepted as true, the TMT Project would be one of many factors that ostensibly impacts cultural identity, and therefore, health. Id.

Lastly, KAHEA's argument that the TMT Project would constitute a violation of HRS § 711-1107, Hawaii's desecration statute, fails as a matter of law. HO COLs 399, 402. Hawai'i law is very clear that administrative agencies have only those powers expressly granted by statute, and the BLNR does not have jurisdiction to adjudicate violations of the Hawai'i Penal Code under which desecration claims arise. HO COL 401. Even if the BLNR could consider

KAHEA's desecration claim, there is simply no evidence of a violation, and the claim fails as a matter of law. HO COL 402.

Under HRS § 711-1107, activities constituting desecration include "defacing, damaging, polluting, *or otherwise physically mistreating*" a site. HRS § 711-1107; HO FOF 403. Under the statutory rule of construction *ejusdem generis*, where words of general description follow the enumeration of certain things, those words are restricted in their meaning to objects of like kind and character with those specified. Richardson v. City & Cnty. of Honolulu, 76 Haw. 46, 74, 868 P.2d 1193, 1221 (1994) (Klein J. dissenting) (quotation omitted); HO COL 404. Thus, the general clause in HRS § 711-1107(2) that desecration requires conduct of "otherwise physically **mistreating**" a site makes it clear that the more specific listed conduct of "defacing, damaging, [and] polluting" must be motivated by the ill-intent of "mistreatment" and/or be unauthorized. HO COL 405 (emphasis added). The ill-intent of mistreatment requires "conscious object to engage in certain conduct or cause a certain result." Commentary to HRS § 702-206(1); HO COL 406. Accordingly, the *mens rea* for the crime of desecration necessarily requires a specific intent to mistreat a protected site. HRS § 711-1107(2); HO COL 407.

There is no evidence in this proceeding that anyone involved in this proceeding has the specific ill-intent to mistreat Mauna Kea within the meaning of HRS § 711-1107(2). HO COL 409. The University and TIO cannot be found to have the requisite specific intent to "mistreat" Mauna Kea by the development of the TMT Project, where it is undisputed that the TMT Project has been proposed for the Astronomy Precinct within the Resource subzone of the Conservation District, in which by law, "astronomy facilities" are expressly permitted – and in fact currently exist. HO COL 410. To hold that HRS § 711-1107 applies to a land use expressly contemplated by law, and to a legal proceeding to consider the merits of that land use, would effectively

eviscerate all land use controls and regulations, including HAR § 13-5-30(c). HO COL 412.

This decade long process relating to the CDUA for the development of the TMT Project has involved numerous and extensive studies, the preparation of the application, numerous consultations, review and analysis by the DLNR staff, feedback and input from the community, and the thorough consideration of evidence through this contested case proceeding. HO COL 411. The University and TIO have demonstrated an intent and commitment to participate in a legal process designed to carefully consider the merits of the development of the TMT Project consistent with the eight (8) criteria set forth in HAR § 13-5-30(c). Id. KAHEA's unsupported claims of desecration are outside the BLNR's jurisdiction, and are unsupported by any evidence, and therefore, were properly rejected by the Hearing Officer.

Based on the record evidence and notwithstanding KAHEA's unsupported exceptions to the contrary, the TMT Project is not materially detrimental to the public health, safety, and welfare. Thus, the TMT Project satisfies HAR § 13-5-30(c)(8).

B. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT SATISFIES THE PUBLIC TRUST DOCTRINE

KAHEA advances a number of arguments in an attempt to refute the Hearing Officer's findings and conclusions regarding the applicability and satisfaction of the public trust doctrine. As discussed below, these arguments are without merit, are not supported by the law or record evidence, and therefore must be denied.

First, KAHEA argues that the Hearing Officer's COL 304 erroneously implies that the public trust doctrine is limited to water resources, contrary to the concurring opinion in Mauna Kea Anaina Hou v. BLNR, 136 Hawai'i 376, 403-408, 363 P.3d 224, 251-256 (2015) ("**Hou II**") and Article XI, Section 1 of the State Constitution. Exceptions at 42. KAHEA's argument

misstates the applicable law. Respectfully, the *concurring* opinion in Hou II is not binding case law – it is a *concurring* opinion. The scope of the public trust doctrine has traditionally been limited to water resources, and the Hearing Officer correctly concluded that the reliable, credible and substantial evidence establishes that the TMT Project will not restrict or otherwise impair any water resource. In re Water Use Permit Applications, 94 Haw. 97, 133, 9 P.3d 409, 445 (2000) ("**Waiahole**"); HO COL 304; HO FOF 1039 (testimony by TIO's witness, Professor David Callies that the eight criteria set forth in HAR §13-5-30(c) already incorporate the considerations of the public trust doctrine).

Professor David Callies, a witness for TIO, is one of the foremost recognized experts in planning and land use in Hawai'i. HO FOF 1034. Prof. Callies reviewed numerous documents related to the CDUA for the TMT Project, including the appellate court pleadings and opinions in this matter. HO FOF 1035. Prof. Callies testified that in his opinion the public trust doctrine does not apply to the TMT Project because the TMT Project is not located on land impressed with or subject to the Public Trust Doctrine nor does it restrict or impair any water resources. HO FOF 1040. He noted that the public trust doctrine has traditionally been exclusively connected to water, and stated that the Hawai'i Supreme Court has interpreted the scope of the public trust doctrine as applying to water resources. Id. Prof. Callies also stated that the applicable literature has almost never extended the public trust doctrine beyond water resources. HO FOF 1040.

Second, KAHEA argues that the public trust doctrine invariably applies to land, including the land sited for the TMT Project. Exceptions at 42-43. Even assuming *arguendo* that the public trust doctrine applies to land, the use of the summit area of Mauna Kea for the TMT Project is consistent with the public trust doctrine. HO COL 306. The public trust doctrine has

been adopted in Hawai'i as a "fundamental principle of constitutional law." HO COL 299; HO FOF 1042 (regarding testimony by Prof. Callies); Waiahole, 94 Haw. at 132, 9 P.3d at 444. As explained in Waiahole, under the public trust doctrine, the State acting through its agencies has a duty to "'protect' natural resources and to promote their 'use and development.'" 94 Hawai'i at 138-39, 9 P.3d at 450-51; HO COL 301. This duty prevents public trust resources from being irrevocably transferred to private parties. Id.

The public trust doctrine also requires the "reasonable and beneficial use" of public trust resources "to maximize their social and economic benefit." Id. Thus, the public trust doctrine does not require absolute preservation of natural resources, but rather requires a balancing between "1) protection and 2) maximum reasonable and beneficial use." Id.; HO COL 302. The State must apply a rule of reasonableness in which environmental costs and benefits are balanced against economic, social, and other factors. See Id. at 140-43, 9 P.3d at 453-55; HO COL 302.

The Hawai'i Supreme Court has made it clear that the public trust doctrine's mandate with respect to "conservation" does not prohibit development; rather, the doctrine requires that protection of a resource must also be consonant with assuring the "highest economic and social benefits" of the resource. HO COL 303. The use of the summit area of Mauna Kea for the TMT Project promotes the "maximum reasonable and beneficial use" of the combination of natural resources that is unique to that location. HO COL 307. The use of the combination of natural resources that is unique to the summit area of Mauna Kea for the scientific study and investigation and the advancement of knowledge that will result from the TMT Project is consistent with the public trust doctrine. HO COL 308.

UH Hilo is not a private commercial user, and its proposed use of the land in question is not a private commercial use. HO COL 309. On the contrary, the TMT Project will advance knowledge, foster educational opportunities in Hawai'i's public institutions of higher learning, and maintain Hawai'i's place as a world leader in scientific research. Id. These are public or quasi-public land uses, and valid public trust uses. Id. Moreover, the TMT Project will be constructed and operated under a sublease from UH Hilo to a non-profit consortium of educational and research institutions for research and educational use (and not by a for-profit entity for private use), which further supports the conclusion that the proposed use of the land for the TMT Project is a public, or at a very minimum, a quasi-public, use of the land. HO COL 312.

The purposes of the TMT Project are valid public trust uses as confirmed by Section 5(f) of the Admission Act of 1959, which specifies public educational institutions as beneficiaries of public trust lands and their proceeds, and Article X, section 5 of the Hawai'i Constitution, which creates the University and gives it title to all real property conveyed to it, "which shall be held in public trust for its purposes, to be administered and disposed of as provided by law." HO COL 310.

Third, KAHEA argues that the University has in the past violated HRS §§ 171-17, -18 by not charging sufficient sublease rent for other observatories. Exceptions at 47. As an initial matter, this argument is irrelevant – whatever other observatories may have done in the past, has nothing to do with the TMT Project. It is undisputed that substantial sublease rent will be charged to and paid by TMT. In addition, HRS §§ 171-17, -18 do not even apply here. Under HRS § 171-95, "[n]otwithstanding any limitations to the contrary," the BLNR may lease state land to governments and government agencies at such rent and on such other terms and conditions as it may decide. Therefore, the BLNR is authorized to charge rent on its own terms.

Fourth, apparently, KAHEA misunderstands the Hearing Officer's conclusions with respect to the relationship between public trust principles and the conservation district statute and rules or, is attempting to create an issue where one does not exist. Exceptions at 47. The Supreme Court held in Waiahole, public trust principles, and an agency's public trust obligations, may already be incorporated into the statute or rules at issue. See Waiahole, 94 Hawai'i at 130-33, 9 P.3d at 442-45 (agency's public trust obligations were incorporated into Water Code); HO FOF 1039.

Here, the public trust principles have been incorporated into the Conservation District statute, whose stated purpose is "to conserve, protect, and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare." HRS § 183C-1; HO COL 320. Similarly, the purpose of the Conservation District rules is "to regulate land-use in the conservation district for the purpose of conserving, protecting, and preserving the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare." HAR § 13-5-1.

Because the criteria set out in HAR § 13-5-30(c) embody and implement the public trust doctrine, a thorough and diligent assessment of those criteria necessarily addresses the concerns that the public trust doctrine protects. See Morimoto, 107 Hawai'i at 308, 113 P .3d at 184. The Hearing Officer expressly held that the Conservation District rules do not supplant the protections of the public trust doctrine, but they do embody and implement them. HO COL 324. Petitioners still have not identified any public trust obligation that is not already reflected in the eight criteria of Section 13-5-30(c). Therefore, the conclusion that those criteria are satisfied – for the reasons set forth in detail above – is a compelling indication that the public trust obligations of both UHH and the BLNR are satisfied as well.

Fifth, KAHEA argues that the Hearing Officer's COLs 311-315 are clearly erroneous, wrong and against the reliable, probative and substantial evidence. Exceptions at 48. KAHEA admits that the public trust doctrine is satisfied if a transfer of public lands is not "irrevocable." Id. Once again grasping at straws, KAHEA argues that the TMT Project involves an irrevocable transfer, despite the undisputed facts that the TMT Project will be decommissioned at the earlier of the end of the General Lease term or the end of its useful life. HO COL 313. Tellingly, KAHEA fails to cite any legal authority for this nonsensical argument – because none exists. The TMT Project does not involve the irrevocable transfer of public trust land and resources to others. HO COL 314.

Sixth KAHEA argues that an independent cause of action exists for violation of the public trust doctrine. Exceptions at 50. KAHEA has not sued the BLNR. There is no cause of action pending before the Hearing Officer or the Board to address.

Seventh, to the extent KAHEA argues that the public trust doctrine requires pristine and absolute preservation, that argument must be rejected. Notably, Prof. Callies testified that "the public trust doctrine does not require pristine and absolute preservation." HO FOF 1035 (emphasis added). "Instead, the public trust doctrine requires a balancing process between protection and conservation of public resources, on the one hand, and the development and utilization of these resources, on the other." Id.

Based on the record evidence and notwithstanding KAHEA's unsupported arguments, the TMT Project satisfies all public trust legal obligations as it is "the most equitable, reasonable, and beneficial allocation of state [trust] resources." Waiahole, 94 Hawai'i at 140, 9 P.3d at 452. HO COL 327.

C. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE TMT PROJECT SATISFIES THE REQUIREMENTS OF HAR § 13-5-24

KAHEA argues that the University did not prove by a preponderance of the evidence that it met all eight (8) criteria under HAR § 13-5-30 for the granting of the CDUP for the TMT Project. Exceptions at 51. For the reasons discussed above in Section IV.A, the Hearing Officer properly found and concluded that the TMT Project satisfies all eight (8) criteria. Therefore, this argument must be rejected. HO COL 127.

Notwithstanding the foregoing, KAHEA argues that the University does not have an approved management plan. Exceptions at 51. KAHEA's arguments, addressed in turn below, must be rejected. First, KAHEA's argument is irrelevant and unsupported because the requirement of a management plan has been satisfied under both the previous and the current versions of HAR § 13-5-24. HO COL 162. The version of HAR § 13-5-24(c) in effect when the CDUA was submitted to the BLNR, clearly provided that "Astronomy facilities under an approved management plan"" are permitted activities in the Resource subzone. HO FOF 474. The version of HAR § 13-5-2 in effect when the CDUA was submitted to the BLNR, provided that a "'Management plan' means a comprehensive plan for carrying out multiple land uses." HO FOF 475. By comparison, the current amended version of HAR § 13-5-24(c), provides that "Astronomy facilities under a management plan approved simultaneously with the permit" are permitted in the Resource subzone. HO FOF 479. The current amended version of HAR § 13-5-2, provides that "'Management plan' means a project or site based plan to protect and conserve natural and cultural resources." HO FOF 480.

The TMT Management Plan is a project or site-based plan to protect and conserve natural and cultural resources, and was appended to and incorporated into the CDUA. HO FOF 481; HO COL 159. The TMT Management Plan provides a general description of the proposed TMT Project, the existing conditions on the parcel, proposed land uses on the parcel, and reporting schedule. HO FOF 445. The TMT Management Plan is consistent with the CMP and sub-plans, and provides for implementation of all relevant action items and plans of the CMP and sub-plans on a site specific basis. HO FOF 444; COL 160. This ensures that the management actions called for in the CMP and sub-plans are effectively and responsibly implemented in the TMT Project areas. The TMT Management Plan is the management plan required under both versions of HAR § 13-5-24. HO FOF 445; HO COL 162. By following the applicable provisions of the Master Plan, CMP, sub-plans, and TMT Management Plan, the University and TIO will fulfill the purpose of the Conservation District concerning the TMT Project. HO FOF 446.

Second, to the extent KAHEA relies on Judge Hara's decision in Mauna Kea Anaina Hou v. BLNR, Civ. No. 04-1-397, such reliance is misplaced. As an initial matter, Judge Hara's decision is a document that the Hearing Officer declined to receive into evidence. Minute Order No. 44 (Documentary Evidence). Consideration of the cited document is prohibited by HRS § 91-9(g). In addition, KAHEA's argument must also be rejected because it misrepresents Judge Hara's ruling. Judge Hara did *not* require a management plan to encompass the entire conservation district. On the contrary, he held that, "as a matter of law, [HAR] § 13-5-24, for the R-3 Resource Subzone requires a management plan which covers multiple land uses **within the larger overall area that UHIF A controls at the top of Mauna Kea in the conservation district**. Ex. B-17 at 12, ¶ 18 (emphasis added). Judge Hara confirmed: The resource that needs to be conserved, protected and preserved is **the summit area of Mauna Kea, not** just the area of the Outrigger Telescopes Project." Ex. B-18 at 13, ¶ 23 (emphasis of "not" in original, additional emphasis added). Thus, to be

"comprehensive," the CMP must manage the summit area of Mauna Kea, which it does. See HO FOFs 146, 436, 442, 443.

Third, KAHEA reliance on Judge Hara's decision in Mauna Kea Anaina Hou v. BLNR, Civ. No. 04-1-397 for the proposition that the CMP imposes numerical limits on telescope construction is also misplaced. As discussed previously, Judge Hara's decision is a document that the Hearing Officer declined to receive into evidence, and as such, consideration of the cited document is prohibited by HRS § 91-9(g). In addition, KAHEA's argument must also be rejected because it misrepresents Judge Hara's ruling. Judge Hara did not discuss, or even mention, carrying capacity or a numerical limit on telescopes. Judge Hara's decision determined that the BLNR's 1995 Revised Management Plan for the UH Management Areas on Mauna Kea would not support and did not approve or authorize the Outrigger Telescopes Project because the 1995 Revised Management Plan is virtually silent on the matter of future development of astronomy facilities on Mauna Kea. Ex. B-17 at 4, ¶ 9.

A plain reading of the decision shows Judge Hara was not requiring an "upward limit on the size and number [of] telescopes," as KAHEA argues. Exceptions at 53. Rather, because Section 13-5-24 only permits astronomy facilities "under an approved management plan," and Section 13-5-2 defines 'Management plan" as a "comprehensive plan for carrying out multiple land uses," Judge Hara was observing that the 1995 plan did not address future development of astronomy facilities, and so, the Keck Outrigger project did not fall under that plan. In contrast to the 1995 plan at-issue in Mauna Kea Anaina Hou v. BLNR, Civ. No. 04-1-397, the CMP and its sub-plans provide a comprehensive plan for carrying out multiple land uses in the Resource subzone. HO FOF 476.

Notwithstanding the arguments raised by KAHEA, the Hearing Officer correctly found and concluded that the University has proven by a preponderance of the evidence that it met all eight (8) criteria under HAR § 13-5-24 for the granting of the CDUP for the TMT Project.

D. THE HEARING OFFICER'S FOF/COL CORRECTLY REQUIRES THAT A CDUP SHOULD BE ISSUED BY THE BLNR, SUBJECT TO STATED CONDITIONS

KAHEA asserts that the CDUP is subject to the standard conditions of HAR § 13-5-42. Exceptions at 55. That is undisputed. Although it is unclear, to the extent KAHEA is suggesting that the CDUP does not require compliance with the applicable standard conditions of HAR § 13-5-42, KAHEA is wrong. The proposed CDUP includes the standard conditions set forth in HAR § 13-5-42, subject to modifications. HO COL 462.

Notwithstanding the foregoing, KAHEA argues in conclusory fashion that the application included "false, incomplete, and inaccurate information and data." Exceptions at 55-56. Tellingly, KAHEA's blanket assertion is unsupported by a single citation to the Hearing Officer's proposed findings and conclusions that is purportedly predicated on such false, incomplete, and inaccurate information and data. This argument should be rejected because it fails to comply with Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b), requiring exceptions to: (1) set forth specifically the questions of procedure, fact, law, or policy to which exceptions are taken; (2) identify that part of the recommendations to which objections are made; and (3) state all grounds for exceptions to a ruling, finding, conclusion or recommendation.

Putting aside KAHEA's failure to comply with Minute Order No. 103 and HAR § 13-1-42(b), KAHEA's argument must also be rejected on the merits. KAHEA's arguments regarding the eight (8) criteria, the public trust doctrine, and other things, were appropriately rejected by the Hearing Officer's proposed findings of fact and conclusions of law, and addressed herein.

E. THE HEARING OFFICER CORRECTLY FOUND AND CONCLUDED THAT THE PROJECT DOES NOT VIOLATE NATIVE HAWAIIAN TRADITIONAL AND CUSTOMARY PRACTICES

KAHEA objects to the Hearing Officer's COLs 191, 194, 196-203 on the basis that they are inaccurate, incomplete, irrelevant, and/or misleading with regard to the distinction between contemporary versus traditional and customary practices, and to the extent the Hearing Officer found that Petitioners and Opposing Intervenors did not satisfy the Hanapi factors. Exceptions at 56 (referring to State v. Hanapi, 89 Hawai'i 177, 970 P.2d 485 (1998)).

KAHEA's argument about "contemporary practices" is premised on their assertion that the Hearing Officer failed to give their contemporary practices due protection. This argument is legally and factually unsupported. As a matter of law, KAHEA's argument that the Hearing Officer improperly distinguished between "contemporary practices" and traditional and customary practices, fails. To fulfill its duty to preserve and protect customary and traditional Native Hawaiian rights to the extent feasible under Ka Pa'akai, an agency must examine and make specific findings and conclusions as to:

> (1) the identity and scope of "valued cultural, historical, or natural resources in the [application] area, including the extent to which **traditional and customary** Native Hawaiian rights are exercised in the [application] area; (2) the extent to which those resources – including traditional and customary Native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the [agency] to reasonably protect Native Hawaiian rights if they are found to exist.

Ka Pa'akai, 94 Hawai'i at 47, 7 P.3d at 1084 (footnotes omitted) (emphasis added); HO COL 330. Therefore, Ka Pa'akai is concerned with the preservation and protection of customary and traditional Native Hawaiian rights, not with contemporary cultural practices. HO COL 388.

Notwithstanding the fact that Ka Pa'akai is concerned with the preservation and protection of customary and traditional Native Hawaiian rights, not with contemporary cultural practices, the University's extensive efforts to identify cultural practices, potential impacts on or

impairment of those practices, and feasible actions to be taken to reasonably protect the Native Hawaiian rights that exist, encompass both constitutionally protected customary and traditional Native Hawaiian rights, and contemporary practices as well. HO COL 388.

KAHEA's argument is contradicted by the Hearing Officer's FOFs and COLs which squarely address contemporary practices, even though not required to do so under applicable legal authority. HO FOF 457. Consideration of traditional and customary practices, as well as contemporary cultural and religious practices, and the impacts thereto, were specifically included in the CIA for the FEIS. HO FOF 236. Likewise, the Cultural Resources Management Plan ("**CRMP**") also considered both traditional and customary practices and contemporary cultural practices. HO FOF 682. The reliable, probative, substantial, and credible evidence demonstrates that the TMT Project itself, and in conjunction with its mitigation efforts, will not cause substantial adverse impact to recognized historic traditional and cultural practices. HO COL 208.

The Hearing Officer properly found and concluded that Petitioners satisfied the Hanapi standards and KAHEA's arguments to the contrary must be rejected. Under Hanapi, Petitioners and Opposing Intervenors, including KAHEA, had the burden to establish "an adequate foundation in the record connecting a claimed right to a **firmly rooted** traditional or customary Native Hawaiian practice." HO COLs 103-104 (citing Hanapi, 89 Hawai'i at 187, 970 P.2d at 495 (emphasis added)). Thus, distinguishing between traditional and customary practices and contemporary practices is important, because while the Hawai'i Constitution affords special protection to traditional and customary practices by Native Hawaiians, Article XII, section 7 does not protect contemporary cultural practices. HO COL 103 (citing Hanapi, 89 Hawai'i at 187, 970 P.2d at 495).

As discussed previously, KAHEA did not provide any evidence of any customary and traditional practices within the specific Area E location that is proposed for the TMT Observatory.[7] HO COLs 204-205. Although Petitioners and Opposing Intervenors identified various areas in the summit region of Mauna Kea in which they engage in contemporary Native Hawaiian cultural practices, they did not offer reliable, probative, substantial and credible evidence or testimony sufficient to establish that any of their cultural or religious practices – whether characterized as contemporary, or customary and traditional – were conducted at the five-acre site on which the TMT Project is proposed to be located until after the TMT Project was proposed, and in many instances, not until after the first contested case hearing in this matter. HO COL 343.

Under the circumstances, KAHEA's objections to Hearing Officer's COLs 191, 194, 196-203 must be rejected.

F. THE HEARING OFFICER PROPERLY REJECTED KAHEA'S CONTENTIONS THAT THERE HAS BEEN AN IMPROPER DELEGATION OF AUTHORITY

Relying on Ka Pa'akai, KAHEA argues that the BLNR has and continues to improperly delegate its oversight and management responsibilities for the Mauna Kea Conservation District to the University. Exceptions at 61. Contrary to KAHEA's argument, there has been no such improper delegation. The Hearing Officer was appointed by the BLNR. HO FOFs 42, 43. The BLNR retained, and is now exercising, its power to review and decide the correctness of the Hearing Officer's proposed findings, conclusions, decision and order. HO FOF 43. The BLNR may accept, reject, or modify those as it sees fit. The BLNR will be the issuing authority of any final permit, the

[7] Traditional and customary cultural practices have been defined as those customs and practices of a living community of people that have been passed down through generations, usually orally or through practice. Traditional and customary cultural practices are those practices that fall within the purview of Article XII, Section 7 of the Hawai'i State Constitution. HO FOF 671.

BLNR will be the one imposing conditions on any permit to ensure compliance with its demands, and the BLNR will retain the authority to enforce any such permit.

In Ka Pa'akai cultural practitioners challenged an approval by the State Land Use Commission ("**LUC**") of a developer's petition to reclassify 1,000 acres of Conservation District land situated within the ahupua'a of Ka'upulehu in West Hawai'i. Ka Pa'akai, 94 Hawai'i at 34, 7 P.3d at 1071. One of the conditions of the LUC approval called for the developer, at a future date, to prepare and implement a resource management plan that would manage traditional cultural practices within the conceptual framework developed by the landowner. Id. at 36-37, 7 P.3d at 1073-74.

The Court held that the LUC had an obligation to independently assess the impact of the proposed reclassification on Native Hawaiian traditional and customary practices. See id. at 44, 7 P .3d at 1081. The LUC could not delegate its responsibility for the preservation and protection of Native Hawaiian rights to a private entity. The Court concluded that "[t]he power and responsibility to determine the effects on customary and traditional Native Hawaiian practices and the means to protect such practices may not validly be delegated by [the agency] to a private petitioner who, unlike a public body, is not subject to public accountability." Id. at 52, 7 P.3d at 1089.

The facts of Ka Pa'akai are clearly and readily distinguished from the facts of the instant case. Nevertheless, KAHEA argues that in this case, by granting the CDUP, the BLNR would be allowing the University to proceed with the TMT Project without specifically identifying the valued resources and related rights, the extent to which they may be harmed, and feasible actions necessary to protect them. Exceptions at 64. This argument is directly contradicted by the record evidence supporting the Hearing Officer's findings that such resources and related rights have been identified and considered. See e.g., HO FOFs 671-833.

In addition, the facts of Ka Pa'akai and this case are further distinguished because in Ka Pa'akai, the Land Use Commission voted to allow the developer to proceed with its project without the LUC itself having first made specific findings and conclusions as to the valued resources and rights, the extent of impairment, and feasible protective measures. Ka Pa'akai, 94 Hawai'i at 47-50, 7 P.3d at 1084-87. Unlike in Ka Pa'akai, in this contested case proceeding, the BLNR has not voted to allow the TMT Project to proceed without having first made specific findings and conclusions. This distinction is dispositive.

Contrary to KAHEA's unsupported arguments, there has been no improper delegation of the BLNR's oversight and management responsibilities for the Mauna Kea Conservation District to the University.

G. THE HEARING OFFICER PROPERLY FOUND AND CONCLUDED THAT THE TMT PROJECT DOES NOT AND WILL NOT UNREASONABLY INTERFERE WITH PETITIONERS' AND OPPOSING INTERVENORS' EXERCISE OF RELIGIOUS FREEDOMS

KAHEA advances a number of arguments challenging the Hearing Officer's findings and conclusions regarding the TMT Project's purported interference with Petitioners' and Opposing Intervenors' exercise of their religious freedoms. As discussed below, these arguments are without merit, are not supported by the law or record evidence, and therefore must be denied.

First, KAHEA argues that the TMT Project violates Petitioners' religious freedoms. Exceptions at 65-68. Paradoxically, KAHEA raises the issue of constitutionally protected religious freedoms, yet argues that the Hearing Officer's COL 360 and 362, setting forth the requisite standard to determine if there is an unconstitutional infringement of religious rights, are irrelevant. In support of its argument, KAHEA asserts that the relevant legal standard applicable to the CDUA is whether the TMT Project complies with the eight (8) criteria. Exceptions at 65-68. While the TMT Project does in fact comply with the eight (8) criteria, the protection of

religious freedoms is specifically governed under State and federal law. As such, the Hearing Officer's COL 360 and 362 are not irrelevant.

Under State and federal law, it is well established that belief in an area's religious sacredness does not make development of that area an unconstitutional infringement of religion, and does not give the believer a legal right to stop the development. HO COL 360; see Dedman v. BLNR, 69 Haw. 255, 261-62, 740 P.2d 28, 32-33 (1987); Lyng v. Northwest Cemetery Protective Ass'n, 485 U.S. 439 (1988); see also Public Access Shoreline Hawai'i v. Hawai'i County Planning Comm'n, 79 Haw. 425, 447 n.38, 903 P.2d 1246, 1268 n.38 (1995) ("*PASH*") (citing Lyng for this proposition).

Constitutional protection means protection against **unreasonable interference** with religious practices; such protection does *not* prevent interference with religious **beliefs**. HO COL 361; see Dedman, 69 Haw. at 260-61, 740 P.2d at 31-32 (noting that analysis focuses on unconstitutional infringement of religious **practices** even where the legitimacy and sincerity of religious **beliefs** is undisputed). Indeed, "the United States Supreme Court has 'long recognized a distinction between the freedom of individual belief, which is absolute, and the freedom of individual conduct, which is not absolute.'" HO COL 362; Dedman at 260, 740 P.2d at 32 (citations omitted).

Under the requisite legal standard, a person claiming a violation of the constitutional right to free exercise of religion must "show the coercive effect of the [law] as it operates against him in the **practice** of his religion." HO COL 363 (quoting Dedman, at 260, 740 P.2d at 32) (brackets in original, emphasis added, citations omitted). To demonstrate that a project will result in an unconstitutional infringement of rights, a petitioner must show a "substantial burden" on his or her religious practices. Id.; Dedman, at 261, 740 P.2d at 33.

Moreover, even if proposed governmental action would adversely affect claimants' religious practices, the right of free exercise of religion is not violated unless the affected individuals would "be coerced by the Government's action into violating their religious beliefs" or the governmental action would "penalize religious activity by denying any person an equal share of the rights, benefits, and privileges enjoyed by other citizens." HO COL 364; Lyng, 485 U.S. at 449.

The Hawai'i Supreme Court's decision in Dedman is instructive. In Dedman, the petitioners claimed that construction of geothermal plants would interfere with their ritual practices, and would disable them from training young Hawaiians in traditional beliefs and practices, such as chant and hula. 69 Haw. at 260, 740 P.2d at 32. Where the petitioners had not conducted or participated in religious ceremonies on the specific site of the proposed project, and the BLNR's approval of the geothermal project did not threaten petitioners, by threat of sanctions, to refrain from religiously motivated conduct, the petitioners failed to show "the kind of objective danger to the free exercise of religion that the First Amendment was designed to prevent." Id. at 261-262, 740 P.2d at 33 (citation omitted).

In Dedman, the court rejected petitioners' unsubstantiated claims that approval of the geothermal project would have unconstitutionally infringed on their religious practices, emphasizing that "[t]o invalidate the Board's actions based on the mere **assertion** of harm to religious practices would contravene the fundamental purpose of preventing the state from fostering support of one religion over another." Dedman, 69 Haw. at 262, 740 P.2d at 33 (emphasis added). Likewise, here, Petitioners and Opposing Intervenors, including KAHEA, fail to show that the TMT Project would result in a "substantial burden" to their religious practices.

Second, KAHEA argues that the Hearing Officer's COL 365, concluding that Petitioners and Opposing Intervenors' cited testimony therein "claims broadly that their beliefs should give them veto power over any proposed land use on Mauna Kea," is a mischaracterization insofar as Petitioners are simply asserting their rights to protect public trust resources from harm. Exceptions at 66-67. Tellingly, KAHEA does not dispute that the testimony cited in Hearing Officer's COL 365 does not support the conclusion, only that the conclusion is not supported by "other" testimony cited in KAHEA's Exceptions. This argument is a *red herring* that should be rejected.

Indeed, certain Petitioners and Opposing Intervenors testified that they should be able to control who accesses the summit, according to their beliefs. Tr. 1/23/17 at 233:4-21 and 234:7-9 (Harry Fergerstrom). In addition, Petitioners and Opposing Intervenors testified that the TMT Project should not be placed in any part of the summit area of Mauna Kea or the Astronomy Precinct because it is a sacred site according to their beliefs. HO COL 381 (citations omitted). Accordingly, the Hearing Officer's COL 365 is supported by the record evidence.

Third, KAHEA argues that the Hearing Officer's COL 368 is unsubstantiated by the record evidence and that, if built, the TMT Project will hinder, obstruct, and even prevent religious practices performed at cultural sites located on the northern plateau, the surrounding pu'u, and around the Mauna Kea summit region. Exceptions at 65, 67. KAHEA cites "Petitioners' FOF/COL 468" in support of its argument that Petitioners have made the requisite showing of a "substantial burden" to their religious practices. This argument should be rejected to the extent it is based on Petitioners' Findings of Fact and Conclusions of Law, Proposed Decision and Order in connection with the prior contested case, which is a document that is not in evidence. Minute Order No. 44 (Documentary Evidence), at 18 (declining to receive into

evidence). Consideration of the cited document is prohibited by HRS § 91-9(g). KAHEA's argument must also be rejected because it lacks merit.

In support of its argument, KAHEA points to a number of practices that the CMP states cannot be burdened. Exceptions at 66. However, KAHEA did not provide any evidence of any customary and traditional practices within the specific Area E location that is proposed for the TMT Observatory. HO COLs 204, 205. Except for actual construction areas while the TMT Project is being built (and, once it is completed, the TMT Observatory site), Petitioners, Opposing Intervenors, and everyone else will have continued access to the summit area of Mauna Kea, for religious practices and for any other permitted activity. HO COL 368. In addition, the record evidence demonstrates that for all of the Petitioners and Opposing Intervenors, telescopes and related infrastructure have existed on Mauna Kea for the entirety of their adult lives – if not the entirety of their lives – and the Petitioners and Opposing Intervenors have continued to exercise their religious practices in the presence of these facilities. HO COL 369.

The evidence presented also supports the conclusion that at least some of these religious and traditional and customary practices would not be practiced but for the observatories being built and the construction and maintenance of the Mauna Kea Observatory Access Road. HO COL 369 (citing e.g., Tr. 12/05/16 at 63:5-15 (K. Ching testifying that kūpuna his age would rather have the road continue as it is so that they can drive up to the top of Pu'u Poli'ahu because they cannot walk up there)).

The fact that some individuals may hold and/or express such religious beliefs is not in dispute; however, it cannot be generalized as true for all Hawaiian people. Petitioners offered evidence that building the TMT Project on Mauna Kea offends, and is contrary to the beliefs of

some members of the community, including some Native Hawaiians. HO FOF 698. However, Petitioners also acknowledge that Native Hawaiian cultural and religious practices are not codified, but rather are individual and personal in nature and vary from practitioner to practitioner. Id.

KAHEA has failed to show "the kind of objective danger to the free exercise of religion that the First Amendment was designed to prevent." Dedman, 69 Haw. at 261-62, 740 P.2d at 33 (citation omitted). Under the circumstances, the Hearing Officer properly found and concluded that the BLNR's approval of the TMT Project does not and will not unreasonably interfere with Petitioners' and Opposing Intervenors' exercise of religious freedoms.

H. THE MISCELLANEOUS EXCEPTIONS AND OBJECTIONS IDENTIFIED IN KAHEA'S SUPPLEMENTAL EXCEPTIONS MUST BE REJECTED

Throwing in the kitchen sink, KAHEA's untimely Supplemental Exceptions consist of three (3) pages of string citations to the Hearing Officer's proposed findings and conclusions that KAHEA purportedly takes exception or objects to for one reason or another. Not surprisingly, however, KAHEA's Supplemental Exceptions are unsupported, misleading, and for the most part, directly contradicted by the record evidence. To the extent KAHEA takes exception and objects to the following proposed findings and conclusions by the Hearing Officer, such exceptions and objections should be rejected.

HO FOF 48 finds in relevant part that "[n]o objections to the pre-hearing conference or timeliness of notice were raised." HO FOF 48 (citing Vol. I, Tr. 5/16/16). Although KAHEA asserts that Petitioners' did object to the timeliness of notice and scheduling, Supplemental Exceptions at 2, KAHEA fails to cite to any record evidence in support of its assertion as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b).

HO FOFs 56 and 62 find in relevant part that TIO and PUEO had standing to participate in this contested case proceeding. Although KAHEA argues that the Hearing Officer reversibly erred, KAHEA fails to provide a single reason as to why TIO or PUEO did not have standing as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b) . KAHEA's argument fails as a matter of law. Pursuant to HAR § 13-1-31(c), the BLNR may, in its discretion, admit as parties:

> Other persons who can show a substantial interest in the matter. . . . The board may approve such requests if it finds that the requestor's participation will substantially assist the board in its decision making. . . .

HAR § 13-1-31(c). The Hearing Officer, "[a]fter full consideration of the record, arguments, representations, motions, [and] applications," granted TIO's motion to intervene as a party "due to TIO's substantial interest in the subject matter and because TIO's participation will substantially assist the Hearing Officer in her decision making." Minute Order No. 13 [Doc. 115] at 4; see also HO COL 25. Similarly, the Hearing Officer,"[a]fter full consideration of the record, arguments, representations, motions, [and] applications," granted PUEO's motion to intervene as a party "because PUEO's participation will substantially assist the Hearing Officer in her decision making." Minute Order No. 13 [Doc. 115] at 4.

HO FOFs 74-75 and COL 1 refer to the Hearing Officer's determination of the issues to be addressed in the contested case hearing. KAHEA asserts in conclusory fashion that the Hearing Officer committed reversible error and evidenced possible bias by excluding issues to be covered which were offered by Petitioners. Supplemental Exceptions at 2. KAHEA fails to articulate which proposed issues were improperly rejected, as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). Petitioners, including KAHEA, filed a joint Position Statement [Doc. 164] on August 1, 2016, arguing that the CDUA must meet all of the eight (8) criteria under HAR §13-5-30(c), disputing that TIO and PUEO have standing, and objecting to

the refusal to allow discovery. See Appendix A to the Hearing Officer's FOF/COL; see also Position Statement [Doc. 164]. As discussed herein, the CDUA meets all of the eight (8) criteria. In addition, TIO and PUEO have standing. With regard to the refusal to allow discovery, KAHEA fails to establish that the Hearing Officer erred in that regard – the administrative rules simply do not provide or allow for discovery.

HO FOFs 80-82 refers to the conduct of the site visit. KAHEA argues that the Hearing Officer denied "substantial requests" by Petitioners on the site visit. Supplemental Exceptions at 2. KAHEA fails to articulate what purported "substantial requests" were improperly rejected, as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). The parties had the opportunity to submit proposals regarding the site visit, *i.e.*, the locations to be visited, who will attend, and the procedures to be followed. See Minute Order No. 16 [Doc. 238]; see also Minute Order No. 18 [Doc. 274].

HO FOF 83 states that on October 14, 2016, the Board issued Minute Order No. 36, formally voiding the previously issued CDUP. Although it is unclear, to the extent KAHEA asserts that the CDUP was voided by the Third Circuit in its order of remand, this is not disputed. Supplemental Exceptions at 2. In fact, the Hearing Officer's FOF/COL specifically discusses the prior contested case and remand. See HO FOFs 29-45.

HO FOFs 84, 85-86, and 90 relate to the scheduling of the evidentiary hearing. To the extent KAHEA is suggesting that it was not given adequate input or consideration in the scheduling of the evidentiary hearing, nothing could be further from the truth. Petitioners, including KAHEA, represented by Richard Wurdeman at that time, demonstrated concerted effort to disrupt and delay the contested case proceedings and to delay the orderly progression of the proceedings while flooding the record with unsubstantiated charges of "unfairness." The

reliable, probative, and significant record evidence demonstrates that the Hearing Officer made every reasonable accommodation to KAHEA and all parties to accommodate **legitimate** conflicts or issues. The Hearing Officer gave sufficient notice and accommodated Mr. Wurdeman's scheduling demands, to the extent practicable.

What Mr. Wurdeman wanted, and rightfully, did not get, is special treatment from the Hearing Officer to the detriment of the other parties. Since at least the July 21, 2016 minute order, the parties knew that the evidentiary proceeding would take place in October. See Minute Order No. 13 at 8 [Doc. 115]. The Hearing Officer reiterated the October timing during two (2) separate hearings in August 2016, at which Mr. Wurdeman, counsel for Petitioners (including KAHEA) was present. Nevertheless, not once in July or August did Mr. Wurdeman seek a continuance. Instead, Mr. Wurdeman sat in silence until September 8, 2016 in order to finally request a postponement of the October hearing date, stating only that he has "scheduling conflicts." Even after it was revealed that Mr. Wurdman's conflict was to attend a conference in Las Vegas, the Hearing Officer postponed the hearing for one (1) week so that Mr. Wurdeman could accompany his clients to Las Vegas.

Despite the foregoing significant accommodations, Mr. Wurdeman filed a Renewed Motion and Notice of Withdrawal the day before the deadline for the parties to submit their pretrial materials and just eight (8) days before the hearing was set to begin. The fact that Mr. Wurdeman would seek and accept the extra time to accommodate his personal schedule only to suddenly withdraw as counsel is further evidence of Mr. Wurdeman's intention to delay these proceedings, likely in the calculated effort to attempt to manufacture grounds for an appeal. Under the circumstances, KAHEA's exceptions and objections regarding the scheduling of the contested case proceeding are completely inappropriate, and its accusation that Hearing Officer

demonstrated favorable bias toward TIO or the University – and not Petitioners – in regards to scheduling accommodations, is laughable.

HO COL 11 concludes that the BLNR has authority and jurisdiction to conduct this contested case hearing pursuant to HRS Chapter 183C, HRS § 91-9, and HAR § 13-1-28. To the extent KAHEA asserts that the contested case hearing did not follow the Hawai'i Supreme Court's decision in Mauna Kea Anaina Hou v. Bd. of Land & Natural Res., 136 Haw. 376, 363 P.3d 224 (2015) on remand, this argument fails as a matter of law. The conduct of this contested case hearing was conducted in compliance with HRS Chapter 183C, HRS § 91-9, and HAR § 13-1-28.

HO COLs 14-15 conclude that the State of Hawai'i is the lawful government of the Hawaiian Islands, that the State's title to ceded lands is unclouded, and that by extension, the BLNR has jurisdiction over the land. KAHEA objects to these COLs without explaining why and improperly attempts to incorporate by reference all of its arguments raised during the contested case hearing, KAHEA's objection fails to comply with Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). To the extent KAHEA objects to these conclusions based on alleged overthrow or sovereignty claims, such arguments were considered and properly rejected by the Hearing Officer. Minute Order No. 19 [Doc. 281] at 5.

As a matter of law, the BLNR lacks subject matter jurisdiction to consider issues relating to the overthrow of the Kingdom of Hawai'i and the legality of the annexation of the Hawaiian Islands by the United States, as those issues are nonjusticiable political questions. See Baker v. Carr, 369 U.S. 186, 212 (1962); Sai v. Clinton, 778 F.Supp.2d 1, 6 (D.D.C. 2011), aff'd sub nom; Sai v. Obama, No. 11-5142, 2011 WL 4917030 (D.C. Cir. Sept. 26, 2011). Even if these issues were justiciable, the BLNR has no statutory authority to adjudicate these issues. See HRS

§ 183C-3 (Powers and duties of the board and department). KAHEA's objections to the contrary must be rejected as a matter of law.

To the extent KAHEA objects to HO COLs 43-45 and 46-65 because the Hearing Officer demonstrated bias based on her adverse rulings against KAHEA, such an argument must be rejected. Adverse rulings, without more, are insufficient to establish bias or prejudice of an administrative officer. See Peters v. Jamieson, 48 Hawai'i 247, 264, 397 P.2d 575, 586 (1964) ("We adhere to the rule that mere erroneous or adverse rulings by the trial judge do not spell bias or prejudice and cannot be made the basis for disqualification.").

HO COLs 81 and 85 address the burden of proof for establishing Native Hawaiian rights. KAHEA argues that these COLs improperly shift the burden from the University to the Petitioners, including KAHEA. However, this argument must be rejected based on the record evidence. As discussed previously herein, KAHEA has not refuted the University's *prima facie* showing that the TMT Project will not have a significant impact on cultural resources and practices. Accordingly, the Hearing Officer properly found and concluded that the TMT Project will not cause substantial adverse impact on cultural resources and practices. HO FOF 684; HO COLs 208.

To the extent KAHEA argues that the Hearing Officer committed reversible error when ruling on the pre-hearing motions, including the denial of any pre-hearing motions and objections filed and/or raised by Petitioners, Supplemental Exceptions at 3, this argument is completely unsupported by citations to specific evidence as required under Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). This argument should be rejected on this basis alone.

The significant, reliable, and probative evidence demonstrates that all pre-hearing motions, including all objections and arguments regarding the same, were properly considered.

Again, to the extent KAHEA is simply upset that its motions or objections were denied, adverse rulings alone are insufficient to establish bias or prejudice of an administrative officer. Peters, 48 Hawai'i at 264, 397 P.2d at 586. KAHEA fails to provide any support for its conclusory argument regarding all pre-hearing motions.

The BLNR's administrative rules grant hearing officers various powers incident to administering a contested case hearing, including the power to "dispose of other matters that normally and properly arise in the course of a hearing authorized by law that are necessary for the orderly and just conduct of a hearing." HAR § 13-1-32(c). Thus, the Hearing Officer had discretion to implement procedures that she believed were necessary to maintain order and ensure fairness in the course of the proceeding. The Hearing Officer properly ruled on the pre-hearing motions on the merits and in a procedural fashion that she believed was necessary to maintain order and to ensure fairness, as the Hearing Officer was expressly permitted to do under the BLNR's administrative rules.

I. KAHEA'S JOINDERS FAIL TO RAISE ANY NEW ARGUMENTS OR EXCEPTIONS

On August 22, 2017, KAHEA filed the following simple, non-substantive joinders:

1. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN CINDY FREITAS' EXCEPTIONS TO THE HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 820],

2. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN CLARENCE KUKAUAKAHI CHING'S EXCEPTIONS TO HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER FILED AS DOCUMENT 783 ON JULY 26, 2017, FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 821],

3. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN FLORES-CASE OHANA'S EXCEPTIONS TO HEARING OFFICER'S RECOMMENDATIONS; EXHIBIT "A"-" K" FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 822],

4. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN TIFFNIE KAKALIA'S' RESPONSE TO HEARING OFFICER RIKI MAE AMANO'S FINDING OF FACT, CONCLUSION OF LAW, DECISION AND ORDER FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 823],

5. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN MEHANA KIHOI'S EXCEPTIONS TO HEARING OFFICER'S FINDINGS OF FACT, CONCLUSIONS OF LAW FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 824],

6. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN PETITIONERS MAUNA KEA ANAINA HOU, KEALOHA PISCIOTTA, PAUL K. NEVES, KALIKOLEHUA KANAELE BRANDON KAMAHANA KEALOHA AND JOSEPH KUALI'I CAMARA'S' RESPONSE TO HEARING OFFICER RIKI MAE AMANO'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, DECISION AND ORDER FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 825],

7. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN J. LEINA'ALA SLEIGHTHOLM'S EXCEPTIONS AND RESPONSES TO HEARING OFFICER, HON. RIKI MAY AMANO'S FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER (HEARING OFFICER'S REPORT) FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 826],

8. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN TEMPLE OF LONO'S EXCEPTIONS TO HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER FILED AUGUST 16, 2017, FILED AUGUST 22, 2017 [DOC. 827],

9. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN WILLIAM FREITAS' EXCEPTIONS TO HEARING OFFICER AMANO'S FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION ORDER FILED AUGUST 21, 2017, AUGUST 22, 2017 [DOC. 828], and

10. KAHEA: THE HAWAIIAN ENVIRONMENTAL ALLIANCE'S JOINDER IN DEBORAH J. WARD'S NARRATIVE EXCEPTIONS TO HEARING OFFICER'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, DECISION AND ORDER FILED AUGUST 21, 2017, FILED AUGUST 22, 2017 [DOC. 829].

KAHEA's joinders did not include any new arguments or authorities. The joinders must be rejected for the reasons set forth in UH Hilo and TIO's responses to the exceptions in which KAHEA joins.

V. CONCLUSION

For the reasons set forth herein and in the UH Hilo Pre-Hearing Statement, TIO's Pre-Hearing Statement, the testimony of UH Hilo's and TIO's witnesses, UH Hilo's and TIO's evidence, the examination of the Petitioners' and Opposing Intervenors' witnesses, and in UH Hilo's and TIO's other filings, and the HO FOF/COL, UH Hilo and TIO respectfully jointly request that the BLNR reject KAHEA's Exceptions (including its Supplemental Exceptions and those Exceptions in which KAHEA joins), and adopt the HO FOF/COL as revised to reflect UH Hilo's and TIO's respective proposed exceptions filed on August 21, 2017 [Docs. 816 & 813, respectively].

DATED: Honolulu, Hawai'i, September 11, 2017.

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Appendix A

General Responses to Petitioners'/Opposing Intervenors' Exceptions	
Fails to comply with Minute Order No. 103 and HAR § 13-1-42(b)	The Exception should be disregarded because it fails to (1) set forth specifically the questions of procedure, fact, law, or policy, to which exceptions are taken; (2) identify that part of the hearing officer's report and recommended order to which objections are made; or (3) state all grounds for exceptions to a ruling, finding, conclusion, or recommendations. The grounds not cited or specifically urged are waived.
Citation does not support the proposition.	The citation offered by Petitioners/Opposing Intervenors does not support the Exception.
Estoppel/Improper Reconsideration	The Exception or a portion thereof is improper to the extent it is barred by estoppel or waiver, or improperly seeks reconsideration of the Hearing Officer's or the BLNR's prior ruling,
Inaccurate/False	The Exception or a portion thereof is inaccurate or false.
Incomplete.	The Exception is materially incomplete.
Irrelevant/Inapplicable.	The information in the Exception is irrelevant or inapplicable in this contested case proceeding. *See* Minute Order No. 19 [Doc. 281].
Lack of Jurisdiction	The Exception exceeds the scope of the Hearing Officer's jurisdiction and/or delegated authority
Mischaracterization.	The Exception mischaracterizes legal authority or the contents of the record.
Misleading. Partial quotation.	The Exception contains a partial quote from legal authority or a document in the record, and the incompleteness of the quotation is likely to mislead the reader.
Misleading. Presented out of context.	The Exception presents law or information in the record out of context and/or in a way that is likely to mislead the reader.
Misrepresentation	The Exception affirmatively misrepresents legal authority or the contents of the record.

Not credible.	The Exception is not credible based on the totality of the evidence contained in the record and/or the demonstrated biases of the witness whose testimony is cited in support of the Exception.
Not in dispute.	Either (1) the Exception is not at issue in this proceeding, or (2) standing alone, the Exception is not objectionable. The designation of any individual Exception as "not in dispute" does not and should not be construed as an admission of said Exception or a concession that said Exception should be incorporated into the final FOFs and COLs. It also does not and should not be construed as assent to any inferences suggested or that may be suggested by Petitioners/Opposing Intervenors from, e.g., their misleading grouping or ordering of otherwise unrelated facts.
Not in evidence.	The Exception asserts "facts" and/or cites documents that are not in evidence.
Unsupported/Unsubstantiated	The Exception is not supported by information in the record or was not substantiated by the Petitioners/Opposing Intervenors through the contested case process.

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAI'I

Contested Case Hearing Re Conservation District Use Application (CDUA) HA-3568 for the Thirty Meter Telescope at the Mauna Kea Science Reserve, Ka'ohe Mauka, Hāmakua, Hawai'i, TMK (3) 4-4-015:009	BLNR Contested Case HA-16-002 **CERTIFICATE OF SERVICE**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the attached document was served upon the following parties by the means indicated:

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