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Attorneys for  
TMT INTERNATIONAL OBSERVATORY, LLC

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'ohē Mauka, Hāmākua,  
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  
DEBORAH J WARD'S NARRATIVE  
EXCEPTIONS TO HEARING OFFICER'S

RECEIVED  
OFFICE OF CONSERVATION  
AND COASTAL LANDS

2017 SEP 11 A 11:29

DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

**THE UNIVERSITY OF HAWAI‘I AT HILO AND TMT INTERNATIONAL  
OBSERVATORY, LLC’S JOINT BRIEF IN RESPONSE TO PETITIONER DEBORAH J  
WARD’S NARRATIVE EXCEPTIONS TO HEARING OFFICER’S PROPOSED  
FINDINGS OF FACT, CONCLUSIONS OF LAW, DECISION AND ORDER,  
FILED AUGUST 21, 2017 [DOC. 810]**

The University of Hawai‘i at Hilo (“**UH Hilo**”) and Intervenor TMT International Observatory, LLC (“**TIO**”), through their respective counsel, jointly submit the following brief in response to Petitioner Deborah J Ward’s (“**Ward**”) *Exceptions to Hearing Officer’s Findings of Fact, Conclusions of Law, Decision and Order*, filed August 21, 2017 [Doc. 810] (“**Exceptions**”) pursuant to Hawai‘i Administrative Rules (“**HAR**”) § 13-1-43.

**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

Ward and 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<sup>1</sup>] containing a 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

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<sup>1</sup> 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 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 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 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 evidence in the record 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 WARD'S EXCEPTIONS**

UH Hilo and TIO generally object to Ward's Exceptions to the extent that they do not comply with Minute Order No. 103 [Doc. 784] and HAR § 13-1-42(b). In many instances, Ward's Exceptions do not cite to specific findings or conclusions in the HO FOF/COL, and instead cite to findings or conclusions proposed by UH Hilo and TIO, and/or cite to findings or conclusions proposed by Ward herself.

UH Hilo and TIO object to each of the points in Ward's 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 evidence in the record. UH Hilo and TIO also object to Ward's 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 Ward's 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 Ward's 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; Ward's ability to make such a challenge expired long ago, and she cannot reopen the FEIS approval process through improper arguments of sufficiency under the statutes and rules governing the EIS 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 Ward's 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 Ward 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 Ward. That position is not supported by the law.

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



In addition to the general objections in Appendix A, UH Hilo and TIO have prepared a table of specific responses and objections to Ward's Exceptions, which is attached hereto as **Appendix B**. 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 Ward's Exceptions, and BLNR should disregard all such unsupported assertions.

The FOF/COL and page numbers referenced herein follow those as provided in Ward's 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. 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

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Hilo's and TIO's other filings, and the HO FOF/COL, UH Hilo and TIO respectfully jointly request that the Board adopt the HO FOF/COL (as revised to reflect UH Hilo's and TIO's respective proposed exceptions filed on August 21, 2017), and reject Ward's Exceptions.

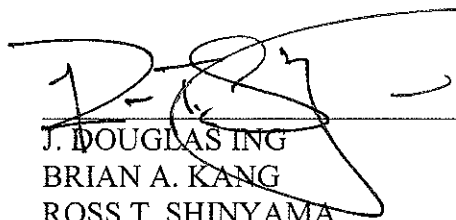
DATED: Honolulu, Hawai'i, September 11, 2017.



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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. <i>See</i> 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.

General Responses to Petitioners'/Opposing Intervenors' Exceptions

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.

**Appendix B**

**Summary Table of Responses to D. Ward's Exception to the Hearing Officer's Proposed FOF/COL**

<b>Exception #</b>	<b>Page</b>	<b>Exception to FOF/COL</b>	<b>Response</b>
A	5-6	<p>Petitioner Ward notes that the Applicant FOF 749 and the HO FOF 809 both opine that a witness without eight specific advanced degrees cannot provide credible opinions regarding whether the CDUA does or does not meet the eight criteria. Ward suggests that the Applicant's witness Mr White, on whose opinion the HO relies, provided no evidence that he had expertise in legal, hydrological, entomological, cultural, archaeological, biological, botanical or medical areas, yet his testimony is cited in HO FOFs 443, 445, 446, 449, 451, 454, 455, 462, 497, 542, 899, 940, and 958 to support the CDUA's compliance with the eight criteria. In fact, The Applicant's witnesses, including planners White and Hayes, and project manager Sanders (who have limited, if any, educational background in law, medicine, entomology, botany, biology, archaeology, or Hawaiian culture) and witnesses Nees, Nance, Rechman, (whose specific knowledge and testimony regarding the TMT site were extremely limited) and could not provide probative, reliable, substantial, and credible evidence and relevant exhibits to demonstrate that the TMT project would not, in fact, cause and expand the substantial cumulative impact to existing plants, cultural, historic, recreational sites, geologic sites, scenic areas, watersheds and ecologically significant areas.</p>	<p>HO FOF 809 provides, in relevant part, that "Ward offered various legal, hydrological, entomological, cultural, archaeological, biological, botanical and medical arguments to support her view that the CDUA does not meet the eight criteria in HAR § 13-5-30(c). Ward did not offer any credible evidence or citations to the record to support that she has any expertise or is otherwise qualified to provide expert or scientific opinions relating to these subjects. Ex. B.17a (WDT Ward); Ex. B.17b (CV Ward)." Nowhere in this finding is it opined that "a witness without eight specific advanced degrees cannot provide credible opinions regarding whether the CDUA does or does not meet the eight criteria." Ward's assertion to the contrary is unfounded.</p> <p>Ward also asserts that Mr. White, Hayes, Sanders, Nees, Nance, and Rechman lack the background and knowledge to provide probative, reliable, substantial, and credible evidence. Ward's fails to support this argument with any evidence, other</p>

Exception #	Page	Exception to FOF/COL	Response
			<p>than her own opinion. Ward's conclusory statements regarding the credibility of witnesses are not evidence and cannot serve as the basis for discrediting their testimony. UH Hilo and TIO established the credentials of the aforementioned witnesses, and the Hearing Officer found such witnesses to be credible. See WDT White, Ex. A-30 (CV White) WDT Hayes, Ex. A-35 (CV White), WDT Nees, Ex. A-119 (CV Nees); WDT Nance, Ex. A-43 (CV Nance); C-2 (WDT Sanders), C-11 (WDT Rechtman); HO FOF 881, COL 194. Not only was it proper for the Hearing Officer to make such a determination of credibility, it was her duty as the finder of fact in this proceeding.</p>
1	1	<p>A plain reading of the entire relevant statute and regulation makes clear that conservation of natural resources is the purpose of conservation districts. It is for this reason that the Petitioners object to HO FOFs 426-427, 430, 432-447, 449-459, 462 and 464, and COLs 133-141 on the ground they are inaccurate, irrelevant, and/or misleading.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>The Conservation District is the most restrictive of the four land use classifications authorized under Hawai'i's Land Use Law, Chapter 205. The Conservation District is defined to include: areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish, and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.</p> <p>Haw. Rev. Stat. § 205-2(e).</p> <p>The law provides for distinct districts, such as urban, agriculture, and conservation, because these land areas have characteristics suited to each district designation; the activities allowed in each district are consistent with characteristics of those land areas. Conservation districts are designated to provide for public uses and purposes (i.e. protecting watershed zones, conservation, public parks, open spaces, protection of endangered indigenous and endemic species, and protection of historic resources etc.). Haw. Rev. Stat. § 205-2(e),(f). No land use is allowed in the Conservation District without a permit. Indeed, the conservation district rules specifically state that "land uses shall not be undertaken in the conservation district." HAR 13-5- 30(b). The rules allow only those land uses that comply with all eight criteria -- that is to say, land uses that do not have a "substantial adverse impact" -- to be undertaken in the conservation district. HAR 13-5-30(c)(4).</p>	<p>This is merely a recitation of various statutes, administrative rules, and provisions of the Constitution of the State of Hawai'i. The cited authorities speak for themselves, and do not provide a basis to object to the identified HO FOF/COL.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>The Board manages the Conservation District consistent with Article XI, Section 1 of the Hawai'i Constitution and Chapter 183C. Article XI, Section 1 provides:</p> <p>For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.</p> <p>The Board and the Department of Land and Natural Resources administer lands within the Conservation District pursuant to Haw. Rev. Stat. 183C as further outlined in HAR §13-5-1 as noted below in Subchapter 1: (emphasis added)</p> <p>The purpose of this chapter is to regulate land-use in the conservation district for the purpose of conserving, protecting, and preserving 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.</p>	



Exception #	Page	Exception to FOF/COL	Response
		<p>Moreover, the HO's report relies heavily on the University's multiple management plans to justify compliance with this first criterion, while ignoring the inadequacy of these plans. This finding is supported by the Intermediate Court of Appeals ruling on the "Comprehensive Management Plan." The ICA held in January 2012 that the University's Comprehensive Management Plan is essentially a plan to plan that does not in and of itself accomplish anything of consequence. <i>Mauna Kea Anaina Hou v. Bd. of Land &amp; Natural Resources</i>, 126 Hawaii 265, 272 (2012, unpublished).</p>	<p>Ward argues that the HO FOF/COL relies heavily on UH Hilo's multiple management plans to justify compliance with the first CDUA criterion, but fails to cite any authority for this proposition. Ward argues that UH Hilo's management plans are inadequate, again, failing to cite any evidence in the record to support this argument. Ward also cites the <i>Mauna Kea Anaina Hou v. BLNR</i> case for the proposition that UH Hilo's CMP itself does not accomplish anything of consequence. 126 Hawaii'i 265, 272 (2012). Ward mischaracterizes the <i>Mauna Kea Anaina Hou v. BLNR</i> case, which stated that the CMP's management actions are "considerations for the future" in the context of determining whether the petitioners were entitled to a contested case hearing on the CMP. The ICA in that case did not make any determinations on the adequacy of the CMP, as Ward implies, and in fact affirmed the denial of the petitioners' request for a contested case hearing on the CMP. Moreover, Ward's argument ignores the fact that the CMP is further implemented by its various subplans, which were not considered by the ICA in <i>Mauna Kea Anaina Hou v. BLNR</i>. See HO FOF 146-168.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>The Legislative Auditor's reports 1998-2017 clearly provide a summary of failures to comply even with the Board approved plans that are in place. Exhibits B.17e, B.17j, B.17k.</p>	<p>Ward references the "Legislative Auditor's reports 1998-2017" generally to assert that UH Hilo has failed to comply with the various management plans. Ward fails to clarify which report is being referenced, or what portion of the reports is being cited. Instead, Ward generically references the reports as one, ignoring the fact that each report is different, and</p>

Exception #	Page	Exception to FOF/COL	Response
			<p>contains entirely different findings. Upon review of the various reports (the 1998, 2005, and 2014 audits are part of the record in this proceeding), it is evident that, although the auditor found many shortcomings in UH Hilo's management of Mauna Kea in 1998, the 2005 and 2014 reports show drastic improvement in management, and indicate that many of the auditor's concerns have been addressed. For example, the 2014 Legislative Auditor's report states: "we found that [the University] and DLNR have addressed many of our recommendations, including developing and implementing management plans for Mauna Kea's natural, cultural, and historic resources. The result an improved and more comprehensive framework that coordinates the agencies' efforts manage and protect Mauna Kea while balancing the competing interests of culture, conservation, scientific research, and recreation." Ex. A-34 at 36; see also WDT Hasinger at 6. Ward's unfounded attempt to mischaracterize the various Legislative Auditor's reports is not a basis to undermine the Hearing Officer's reliance on the various management plans adopted and implemented by UH Hilo.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>For these reasons, HO FOF 426-7, 430-464 and HO COLs 128-141 must be rejected on the grounds that in sum, they are inaccurate, irrelevant, and/or misleading.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p>
2	1	<p>The proper interpretation of HAR 13-5-30(c)(2) provides that where a proposed land use is not consistent with the subzone of the conservation district in which it is proposed, then it cannot be granted a permit. Contrary to the HO's findings and conclusions, identifying astronomy facilities as one of many possible land uses does not exempt the Applicant from demonstrating it complies with all eight criteria. It is for this reason that the Petitioners object to HO FOFs 466, 470, 472-473, 476, 478, 481-489, 492 and COLs 143-144, 146-150, 153-154, 156, 159-165 on the grounds that they are inaccurate, irrelevant, and/or misleading.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>Ward argues that the referenced HO FOF/COL state that astronomy facilities are exempt from demonstrating compliance with the eight criteria under HAR § 13-5-30(c). Ward does not provide any support for this proposition, and nowhere in the HO FOF/COL does it state, or even imply this. The HO FOF/COL contains a complete and thorough analysis of whether the TMT Project complies with the eight criteria, directly refuting Ward's assertion.</p>

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		<p>According to HAR § 13-5-13(a), “[t]he objective of this [Resource] subzone is to develop, with proper management, areas to ensure sustainable use of the natural resources of those areas.” Id. (emphasis added). Ensuring sustainable use of Mauna Kea’s natural resources necessarily means ensuring that the “plants, aquatic life and wildlife, cultural, historic, recreational, geologic and archeological sites, scenic areas, ecologically significant areas, watersheds and minerals” are actually conserved, maintained, or enhanced; not degraded. HAR § 13-5-2, (definition of “natural resources”). Note that the definition does not include “altitude, stable atmospheric clarity and absence of light pollution” as impugned in HO COL 139. For this reason, HO COL 139 is inaccurate, irrelevant, and/or misleading. Likewise, HO FOF 180 incorrectly states that the amended definition includes “sociologically significant areas”.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>Ward’s argument here is incomprehensible. Ward appears to argue that atmospheric clarity is not a “natural resource” that is protected under the Conservation District rules (for example, protection from light pollution). The evidence in the record demonstrates that atmospheric clarity and the absence of light pollution is one of the characteristics that make Mauna Kea uniquely suitable for astronomy. See WDT Dr. Hasinger at 1; Ex. A-9 at A4-13 to A4-15.</p> <p>UH Hilo and TIO have no objection to correcting the typographical error in HO COL 180 (and HO FOF 508) to replace the phrase, “sociologically significant areas” with the phrase “ecologically significant areas” in the reference to the amended definition of “natural resource” in HAR § 13-5-2. The typographical error has no substantive effect upon the HO FOF/COL, as the Hearing Officer found that OCCL had determined that the TMT</p>

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			<p>Project “had done everything possible to absolutely mitigate or ameliorate cultural, ecological, recreational effects” of the telescope (See HO FOF 359.a.), and the Hearing Officer further properly concluded that the TMT Project will not cause substantial adverse impact to, among other things, “ecologically significant areas.” See HO COL 194-195.</p>
		<p>When the original version of the conservation district rules was adopted in 1993, DLNR published a report entitled “Conservation District Review Project: The Discussion Draft” to explain the purpose and function of the hierarchical permitting requirements in these rules (in descending order of appropriateness to the conservation district: Allowable Uses, Administrative Permits, BLNR Permits). Atwater Report, Exhibit B-34 at 16. DLNR’s Report stated that astronomy facilities as an identified use in the Resource Subzone requiring a BLNR Permit, meaning they must meet BLNR criteria for a CDUP (or apply for a variance). Id. at 19, 26. Astronomy facilities may be constructed in the conservation district only if it meets, amongst other criteria, the requirement that it will not entail substantial adverse impacts on conservation district natural resources. See HAR 13-5-2(c)(4). Because the TMT Project cannot mitigate the substantial adverse impact of existing telescope development to a less than substantial level, TMT project-specific adverse impacts will thus be “substantial.” and in violation of another CDUP criterion. TMT- EIS, Exhibit A-3 at 3-34.</p>	<p>Ward reiterates the requirement that, for a CDUP to be issued, the TMT Project cannot entail substantial adverse impacts on natural resources. However, Ward fails to provide any evidence to support her argument that such adverse impacts will occur. Ward cites the TMT FEIS to support the argument that the TMT Project “cannot mitigate the substantial adverse impact of existing telescope development to a less than substantial level, TMT project-specific adverse impacts will thus be ‘substantial[.]’” However, the cited portion of the TMT FEIS (Ex. A-003, page 3-34) does not support this proposition. The cited section pertains only to cultural resources, not “natural resources,” which, as Ward has</p>

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		<p>Thus, the TMT does not comply with criterion two and the CDUA must be denied. HAR §13-5-30(c)(2).</p>	<p>emphasized, includes much more than simply cultural resources. Moreover, the TMT FEIS specifically found that the TMT Project “will add a limited increment to the level of cumulative impact [to Mauna Kea’s natural resources], but will not tip the balance of any specific cumulative impact from a less than significant level to a significant level.” Ex. A-3 at 3-243. Accordingly, the TMT FEIS does not support Ward’s assertion that the TMT Project will have substantial adverse impacts on natural resources, and in fact supports the opposite conclusion.</p>
3		<p>The conservation district rules require that the proposed land use be consistent with the provisions and guidelines of the Coastal Zone Management Act, regardless if the proposal triggers additional permitting through that Act. Moreover, the Coastal Zone Management Act requires compliance with its objectives and policies, regardless of the Special Management Area. Haw. Rev. Stat. §205A-4(b).</p> <p>Moreover, the statute states that:</p> <p>In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development. HRS § 204A-4(a).</p> <p>Thus, the question before the BLNR, under this criterion, is whether</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>Ward’s argument consists purely of conclusory allegations that are unsupported by legal authorities or evidence in the record. Ward merely recites HRS § 205A-4(b), and makes unsupported statements that the TMT project would have a substantial impact on viewplanes, historic areas, and increase</p>

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		<p>issuing a CDUP for the TMT would be consistent with the following relevant objectives:</p> <p>(2) Historic resources: Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture</p> <p>(3) Scenic and open space resources: Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.</p> <p>(6) Coastal hazards: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution. HRS §205A-2(a).</p> <p>The TMT would undermine important scenic viewplanes, destroy areas of historic importance, and increase the risk of water pollution. The issues of important viewplanes, scenic and open space resources, historic sites and risks to water quality are addressed in the analysis of criterion four, six, and eight respectively. The fact that the Applicant's proposal would have a substantial adverse impact on these important resources under those criteria, is grounds for also denying the request under this criterion. It is for this reason that the Petitioners object to HO FOFs 497-504, 506-507 and COLs 167, 170, 172-173, 175-177 on the grounds they are inaccurate, irrelevant, and/or misleading.</p>	<p>the risk of water pollution. Such unsupported conclusory statements are not a proper basis for objecting to the subject FOF/COL.</p> <p>Moreover, UH Hilo has established that the TMT Project complies with the Coastal Zone Management Act ("CZMA"), but is not part of the special management area under HRS § 205A-22. See HO FOF 493-507, COL 166-177. Ward's Exception does not dispute this, and fails to provide any evidence to contradict this finding. Ward's own personal opinions on the issue are not evidence.</p>
4		<p>From a recreational perspective, Criteria Four, Six and Eight are most material to the recreational use and enjoyment of the public land.</p> <p>Contrary to HO FOF 509, the TMT Project would cause substantial</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations</p>



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		<p>adverse impacts to existing natural resources on Mauna Kea. The additional increment of impact would be additive to the cumulative total, which has already had significant, adverse and substantial impact on natural and cultural resources due to astronomy development on the summit region. While the cumulative impacts of astronomical development to the summit area (App FOF#439) are undisputed, the cumulative impacts to the alpine ecosystem have yet to be determined (Ex.A-3 p. 3-219). The proposed mitigation does not address the physical impacts to existing natural resources, does not provide for lesser overall impacts than existing uses, and HO FOFs 940-941 decommissioning promises made or “envisioned” by the applicant are not part of the CDUA.</p> <p>It is for this reason that the Petitioner Ward objects to HO FOFs 509, 511-515, 518-524, COLs 179-192, 194-206, 208-210, 212-221 on the grounds that they are inaccurate, irrelevant, and/or misleading.</p> <p>The HO FOF 900-901, and HO COLs 181-186 do not relate to Criterion Four, but to Criterion Seven; the Applicant and HO perpetuate a legal fiction that the designation of an “Astronomy Precinct”, with no defined boundaries, never reviewed by the BLNR or approved by the Land Use commission, somehow justifies the increased intensity of land use in the “designated” area. While the summit ridge cinder cones and the saddle between Pu’u Hauoki and Puu’Poliahu have been impacted by a roads and facilities, there are no “existing uses” in the Northern Plateau, dubbed Area E, where the project is proposed. The geologic landscape, botanical and faunal habitat, the unique unobstructed view plane, the proximity of cultural and historic sites in the Historic District, and the high level groundwater are unaltered by development. By asserting that the development “must be assessed</p>	<p>therein. Ward’s arguments fail to establish otherwise.</p> <p>Ward’s arguments are conclusory and unsupported by evidence or citations to the record.</p> <p>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.</p>

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		<p>within the context of what is already there”, <i>when there is nothing built there</i>, does not justify HO FOF 897 and HO COLs 179, 220 that the TMT will not cause substantial impact to the existing natural resources in the area or region.</p>	
4a (botanical resources)		<p>Development of astronomy facilities, utility corridors, and roadways has caused substantial adverse impacts to the fragile floral ecosystems on Mauna Kea. It is for this reason, the Petitioners object to HO FOFs 298-311 on the grounds that these statements are misleading by attempting to downplay the actual adverse impacts to the lichen and moss habitat and communities described by the Applicant’s witness.</p> <p>The summit of Mauna Kea supports an interesting variety of species, many of which are found nowhere else in the world. Of the 25 different lichens found in a 1982 botany survey, half of the species were endemic to Hawaii, with two occurring only on Mauna Kea. Of the twelve mosses found in the summit area, less than a quarter were endemic. The fern <i>Cystopteris douglasii</i> was one of six vascular plants found at the summit, and the Mauna Kea Silversword, a sub-species unique to the mountain, was once reported in the summit region. Pet. Ward FOF 153, 154 p. 24.</p> <p>The HO FOF 536 is misleading as it pertains to Douglas’ bladderfern (<i>Cystopteris douglasii</i>), considered a Species of Concern by the USFWS, because the potential impacts were not adequately addressed in the CDUA even though it was found throughout Area E. Species of Concern are those species about which regulatory agencies have some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act. Pet</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>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.</p> <p>The TMT Project will not have a significant impact on botanical resources because species and habitat of these areas – including lichens – are not unique to the Project site and are found elsewhere on Mauna Kea and/or on other islands of Hawai’i. HO FOF 526-536.</p> <p>Dr. Clifford Smith, a botanist with 32 years of teaching experience, concluded that the TMT Project will not have a significant adverse impact on the flora on</p>

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		<p>Ward FOF 154, p. 24. The TMT Project site is habitat to Species of Concern and is been habitat for a species previously identified as a Candidate for protection as Federal and State Endangered Species. No mitigation measures have been described to address the vegetation or its habitat. Mitigation measures proposed are insufficient to conserve, protect or restore habitat in the Project area.</p> <p>According to the Applicant's expert witness, Dr. Smith, "The construction of observatories has had a permanent impact on the biological resources in the immediate area as well as batch plant areas, roads, and associated areas. No new lichens or mosses have become established in the area as a consequence of the construction... The long-term stability of the lichen and moss communities is dependent on minimizing the disturbance in the area... recovery of disturbed areas will be extremely low." Exhibit B-34 Appendix D Page APP-D-8-9. Dated 2012. See Pet Ward FOF 105-121.</p> <p>This fact alone would be considered a substantial adverse impact to the biological resources resulting from the proposed TMT Project. Even though this FOF is considered relevant to this contested case and was previously submitted as evidence by the Petitioners, it is one of numerous Petitioners' FOFs including Pet. Ward FOF 151-159 p. 24 that were omitted from the Report without any apparent justification. According to HO FOF 534, potential impacts will be "mitigated by measures described herein", but no such measures are described in the document.</p>	<p>Mauna Kea, and the reliable, probative, substantial and credible evidence supports Dr. Smith's opinions. HO FOF 526-534.</p> <p>There are no species of flora unique to the TMT Project site. HO FOF 534.</p> <p>Although Douglas' Bladderferns are found at Area E, Area E is not considered critical habitat for the Douglas' Bladderfern. Additionally, the Douglas' Bladderfern is widespread, occurring on all main Hawaiian Islands. See HO FOF 536.</p> <p>The Mauna Kea Silversword are not found within the TMT Project areas. See HO FOF 536. This is confirmed by Ward's admission that the Mauna Kea Silversword were "once reported" in the summit region, meaning that they are no longer found in this area.</p> <p>Ward's citation to "Exhibit B-34 Appendix D Page APP-D-8-9. Dated 2012" does not support the stated proposition. Additionally, this statement pertains to impacts of prior observatories, not the TMT Project, and provides only that there has been an impact to biological resources, but does not state that such</p>

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			<p>impact is significant and adverse.</p> <p>Ward asserts that HO FOF 534 references mitigation measures that are not described in the document. To the contrary, the HO FOF/COL is replete with descriptions of mitigation efforts that will be implemented. See, e.g., HO FOFs 316-345.</p>
4a (faunal resources)		<p>Development of astronomy facilities, utility corridors, and roadways has caused substantial adverse impacts to the fragile faunal ecosystems on Mauna Kea. Moreover, mitigation actions proposed by the Applicant do not appropriately address the adverse impact to the habitat of the wekiu bug or other arthropods in the area of the proposed Project nor do they restore arthropod habitat damaged by the Applicant's actions. It is for this reason, the Petitioners object to HO FOFs 543, 550, 552, 555- 557, 559, 561, 562 on the grounds that these statements are misleading by attempting to downplay the actual adverse impacts to the Wekiu bug habitat.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>Ward's argument is conclusory and not supported by evidence or citations to the record.</p> <p>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.</p> <p>The record reflects that the TMT Project will not be built in a critical habitat for the wekiu bug or any species of concern. HO</p>

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			<p>FOF 359. The wēkiu bug was removed as a candidate from the Federal Endangered Species Act, but in any case, OMKM has an overarching plan to restore the wēkiu bug habitat, which is currently being implemented. HO FOF 541-543.</p> <p>The record reflects that the TMT Project will not have a significant adverse impact on the wēkiu bug population. HO FOF 541-562.</p>
		<p>Furthermore, the Petitioners are reiterating the following significant and relevant information that was omitted from the Report. Overall, the entire TMT project area including the Observatory site and Access Way would destroy and/or disturb over 8.7 acres of Wēkiu bug habitat that is comprised of Type 3, 4, 5, and 6 habitats. The primary loss, degradation, and reduction of Wēkiu bug habitat on the summit ridges of Mauna Kea was the result of astronomy development of telescope facilities and associated roads. Exhibit A-10 NRMP at 2.2-43-44.</p>	<p>Citation does not support proposition. Exhibit A-10 NRMP at 2.2-43 to 44 does not discuss the potential impacts of the TMT Project on wēkiu bug habitat. The cited sections do not indicate that 8.7 acres of wēkiu bug habitat would be destroyed by the TMT Project construction, and does not even mention the different types/classes of wēkiu bug habitat. See HO FOF 544.</p> <p>The record reflects that the TMT Project will not be built in a critical habitat for the wēkiu bug or any species of concern. HO FOF 359. The wēkiu bug was removed as a candidate from the Federal Endangered Species Act, but in any case, OMKM has an overarching plan to restore the wēkiu bug habitat, which is currently being</p>

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			<p>implemented. HO FOF 541-543.</p> <p>The record reflects that the majority of the area disturbed by the TMT Project are Type 4, 5, and 5 habitats, which are not ideal for wēkiu bugs. HO FOF 544-545. The TMT Project will not disturb any Type 1 and 2 wēkiu bug habitat (which are prime habitats for the bug) and only .2 acres of Type 3 habitat (where wēkiu bugs are found in low abundance) will be disturbed. HO FOF 544-548.</p> <p>The record reflects that the TMT Project will not have a significant adverse impact on the wēkiu bug population. HO FOF 541-562.</p>
		<p>Contrary to HO FOF 543, copied identically from the Applicant's erroneous citation (including an error in the witness's name) which stated that restoration is currently being implemented, the proposal recommended by the Applicant's experts to restore Wēkiu bug habitat were withdrawn from the TMT FEIS, and no restoration is underway. Exhibit A-309, Vol II; Exhibit A-313.</p>	<p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>Ward's argument is not supported by evidence or citations to the record. Exhibits A-309 and A-313 do not exist and are not a part of the record in this proceeding.</p> <p>Ward failed to cite any evidence that refutes Fritz Klassner's statement that</p>

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			<p>wēkiu bug habitat restoration efforts are currently being implemented.</p> <p>Moreover, the fact that the TMT FEIS does not specifically call for wēkiu habitat restoration efforts does not refute Mr. Klassner's statements that such efforts are in fact underway.</p> <p>Finally, Ward implies that the Hearing Officer copied UH-TIO FOF 483, including an error in the witness's last name (Klasen). However, UH-TIO FOF 483 does not reference the witness's last name, and Ward's comment is therefore unfounded. That being said, reference to "Klasen" in HO FOF 543 should instead read "Klassner".</p>
		<p>Contrary to HO FOF 561, copied identically from the Applicant's erroneous citation, a number non-native species have been introduced to the summit region, (See Bishop Museum Exhibit B.17(l) ), and although the ant <i>Ochetellus glaber</i> was introduced to the Hale Pohaku area recently, <i>Ochetellus</i> is not the invasive fire ant as described by the applicant. The Applicant has misread its own exhibit. The opposite is the case; <i>Ochetellus glaber</i>, known as a black ant, displaces fire ants and termites. Exhibit A.135 p3. See Pet Ward' response to Appl FOF 501.</p>	<p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>UH Hilo and TIO acknowledge that the colloquial name for the <i>Ochetellus glaber</i> appears to be the "black ant" rather than the "fire ant." That being said, the main thrust of HO FOF 561 remains unchanged: the invasive <i>Ochetellus glaber</i> was introduced to Mauna Kea only in</p>

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			<p>recent years.</p> <p>UH Hilo and TIO note that Ward's citation to Exhibit A-135 (page 3) does not support the proposition that the Ochtellus glaber displaces fire ants and termites.</p>
4b		<p>Petitioner Ward objects to the omission of references in the Report to the impacts of the TMT Project upon the geological resources. HO COL 196 intimates that existing astronomy facilities have been constructed on pahoehoe foundation, when in fact, they have been constructed on the summit ridge cinder cones, a substrate entirely unlike the pahoehoe substrate of Area E. The development of the existing observatories significantly modified the preexisting terrain. The tops of certain pu'u or cinder cones were flattened to accommodate the foundations for observatory facilities. Consequently, the existing level of cumulative impact on geology, soils, and slope stability is considered to be substantial, significant, and adverse, according to the Applicant's EIS. The TMT project would cause additional impact to the geological resources of the particular lava flow morphology and glacial features on the northern plateau, which is separate, distinct, and different from the geology of the summit ridge. Moreover, there will be substantial grading and excavation involved with the construction of the TMT Project. Over 100,000 cubic yards of landscape would be excavated and over 8.7 acres would be disturbed during construction. In addition, Applicant's witness and TMT Project Manager, Mr. Sanders, has testified that even if the TMT was</p>	<p>The referenced HO COL is accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>Ward's assertions regarding the TMT Project's alleged impacts to geologic resources are conclusory and unsupported by evidence or citations to the record.</p> <p>The omission of specific references to impacts of the TMT Project upon geologic resources was the result of the Hearing Officer's determination that the record did not support a finding of such impacts. The Hearing Officer found that the evidence presented regarding the TMT Projects alleged impacts upon geologic resources was not credible. See HO COL 195. Conversely, the Hearing Officer</p>



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		<p>decommissioned, “the restoration of the site is unlikely to be perfect and back to a pristine state.”</p>	<p>found credible the evidence presented demonstrating that the TMT Project would not have a substantial adverse impact on geologic resources. See HO COL 194.</p> <p>As the finder of fact, it is the Hearing Officer’s duty to hear all evidence and to make such determinations regarding the credibility of the evidence presented.</p>
		<p>According to Rory Westberg, NPS Acting Regional Director, “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.” It was also stated, “[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 acre Astronomy Precinct from the current MK NNL designation.” FEIS Vol II p 4 of 531. Pet. Ward FOF 109 p. 18</p>	<p>The cited statements of Rory Westberg have no bearing on the TMT Project’s anticipated impacts to geologic resources on Mauna Kea. The statement itself pertains to the impact of past observatories on Mauna Kea, and did not speak to the anticipated impacts of the TMT Project to the natural resources on Mauna Kea.</p>
4c		<p>HO FOFs 834, 838, 839, 841, 842, 844-851, 854 and HO COL 205, 208 are inaccurate by downplaying the substantial adverse impacts to visual resources and by asserting in the CDUA review process that the TMT Project’s visual impact will be “less than significant”. It is obvious that the TMT Project’s visual impact would have a significant effect on the</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative and substantial evidence in the record and the citations therein. Ward’s arguments fail to</p>

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		<p>natural and visual resources both if assessed individually or cumulatively per HAR § 11-200-12. It is for this reason that the Petitioner Ward objects to HO FOFs 834, 838, 839, 841, 842, 844-851, 854 and HO COLs 205 and 208 on the grounds that they are inaccurate, irrelevant, and/or misleading. Several critical errors in the Report as well as the CDUA regarding the assessment of the TMT Project's visual impacts are discussed further in detail in Criteria 5.</p>	<p>establish otherwise.</p> <p>Ward's argument is conclusory and unsupported by evidence or citations to the record. Ward merely states that it is "obvious" that the TMT Project will have a visual impact. This conclusory statement is not a proper basis to object to the referenced HO FOF/COL.</p>
5		<p>Proposing the TMT Project to be constructed in the Astronomy Precinct along with other existing observatories does not automatically make this new development appropriate and compatible with the locality and surrounding areas of Mauna Kea. It is important to remember that that the locality and surrounding areas being considered for this new observatory development are within the conservation district of the Mauna Kea Science Reserve that is also encompassed by the Mauna Kea Summit Region Historic District. It is for this reason that the Petitioners object to HO FOFs 898-920 and HO COLs 223-230 on the grounds they are inaccurate, irrelevant, and/or misleading.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p>
		<p>This project is incompatible with the surrounding area, which is 11,288 Acre MKSR within the conservation district, which extends from 6,000 feet to the summit. The proposed location of the TMT – the northern plateau – is undeveloped land, wide open space important to cultural practices and recreational uses on Mauna Kea. See Exhibit A-3, TMT EIS at 3-100, fig. 3-23.</p>	<p>The cited exhibit does not support the proposition that the TMT Project site is undeveloped land.</p> <p>Evidence was presented, including from Petitioners and Opposing Interveners themselves, demonstrating that the astronomy precinct is substantially or fully developed. See e.g., HO FOF 812, 905-917, COL 348-349, 352.</p>

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		<p>The immense size and height of the TMT observatory is a significant reason why this project is inappropriate and incompatible for this conservation district. Due to the TMT observatory's enormous size of 216 feet in diameter and its extreme height of over 180 feet, it would be the LARGEST observatory on Mauna Kea as well as the TALLEST building on Hawai'i Island surpassing the maximum height limits of 90 feet (120 feet for Hilo) for any commercial or resort buildings on this island based upon Hawai'i County zoning codes. Hawai'i County restricts the height of buildings to protect the cherished island landscape from obtrusive development. Yet, the Applicant proposes a man-made structure in the conservation district that would be at least twice as high as most existing commercial and resort buildings on the island and over 60 feet high of a select few buildings in Hilo. Hence, the TMT Project is not only inappropriate and incompatible for Mauna Kea, but it is also inappropriate and incompatible for the entire Hawai'i County.</p>	<p>Additionally, witnesses for the Petitioners and Opposing Interveners, <b>including Ward herself</b>, admitted that the summit area is already substantially developed for astronomy use. HO FOF 812, 912-917, 859-866, 985, COL 349.</p> <p>Ward asserts that the TMT Project is "incompatible with the surrounding area, which is 11,288 Acre MKSR" while at the same time comparing the project to various buildings on Hawai'i island which are outside of the MKSR, in an effort to establish that the project is incompatible with the surrounding area. Ward's arguments are inherently contradictory. Buildings in Hilo and other areas outside of the MKSR are irrelevant to the determination of compatibility under HAR § 13-5-30(c)(5).</p> <p>Moreover, Ward's references to the Hawai'i County zoning codes are irrelevant, as land uses in the Conservation District are not subject to county land use laws. See HO COL 268.</p>

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		<p>Contrary to HO FOF 903 and 920 locating the TMT Project in Area E does not result in its impacts being less than significant upon culturally sensitive areas, historic properties, cultural resources, and customary and traditional cultural practices, as well as on viewplanes, species habitat, and existing facilities. The University conceded that the past construction of these observatories had cumulative impacts on the cultural, archaeological, and historic resources that are substantial, significant, and adverse. The TMT FEIS also affirms that, “From a cumulative perspective, the impact of past and present actions on cultural, archaeological, and historic resources is substantial, significant, and adverse; the impacts would continue to be substantial, significant and adverse with the consideration of the Project and other reasonably foreseeable future actions.” (emphasis in bold). The TMT Project would not reduce or diminish these impacts. Instead, it would contribute further to these cumulative impacts that will be substantial, significant, and adverse. If the existing observatory developed on Mauna Kea (at least three of which were retroactively permitted after construction) resulted in such cumulative impacts, then these projects were never in fact appropriate and compatible for this conservation district. The proposed TMT Project cannot be considered appropriate and compatible at this time.</p>	<p>The referenced HO FOF are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>Ward mischaracterizes the substance of HO FOF 903 and 920, which provides only that the TMT Project will not be visible from culturally sensitive areas of the summit of Kūkakau‘ula, Lake Waiau, Pu‘u Līlinoe, and Pu‘u Wēkiu, and that the record demonstrates that the TMT Project is compatible with the locality and surrounding areas and is appropriate to the physical conditions and capabilities of the area.</p> <p>Despite the fact that FOF 903 and 920 pertain to Criterion Two, Ward objects to these FOFs, raising arguments of cumulative impacts, which fall under the Criterion Four analysis. Therefore, Ward’s arguments are irrelevant to FOFs 903 and 920.</p>
		<p>Contrary to HO FOF 902, the intrusion of a giant new facility into a viewplane that is currently natural and intact would seriously impact the recreational experience for residents and visitors now able to see an unobstructed view of Pu‘u Makanaka in the east all the way to Haleakala on Maui. The view from the northern ridge of Kukahau‘ula towards Haleakala is one of the last intact natural viewplanes from the summit</p>	<p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p>

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		<p>region. There are currently no telescope structures visible on the northern plateau, and when standing on the northeastern side of Kukahauala, one can avoid seeing the other facilities. Exhibit A-3 at 3-100. The northern plateau of Mauna Kea is relatively untouched by modern astronomy. Therefore, building the TMT on the northern plateau would not be compatible with the surrounding locality of that area. Indeed, the Cultural Impact Assessment (CIA) to the TMT EIS recommended that the TMT 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. Exhibit A-4, TMT EIS Vol. 2, CIA. The TMT observatory would be situated amongst the 'ring of shrines' consisting of several hundred historic properties and cultural resources that contribute to the significance of the Mauna Kea Summit Region Historic District. In addition, the northern plateau is not a built environment, it is still in a natural state with an open vista, notable for its breathtaking views, and one of the last open space areas with unhindered views from the summit region down to the sea, along the coasts, and across the island chain.</p>	<p>No credible evidence was presented which proved that the TMT site is one of the last remaining unobstructed view plane facing Haleakalā. There are multiple view planes west, north, and east of the TMT site that afford unobstructed view planes facing Haleakalā. Ex. C-18, C-19.</p> <p>Despite the CIA's recommendation that the TMT Project be built on a recycled telescope site, the EIS, which incorporated and considered the recommendation of the CIA, recommended that the TMT Project be located at Area E. See HO FOF 179, 318. The reason for this recommendation is that the Area E site reduced the TMT Project's impacts to visual, cultural, historical, and biological resources. <i>Id.</i></p> <p><u>Note:</u> Ward's citation to Exhibit A-4 should instead reference Exhibit A-5, which contains the CIA. UH Hilo and TIO also note that Ward did not provide a pincite to the portion of the CIA that supports her proposition.</p>

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		<p>When residents and visitors go to the summit region, there are very few areas where one can stand and peer into the horizon without having the existing man-made observatories, associated facilities, and infrastructure obstructing one's view plane. There are no unobstructed 360-degree views on the summit region. Open view planes are limited to where and however one can get around the existing observatories to find an open space. Also, one is restricted to positioning oneself on the summit roadway looking east or at the northern edge of the observatories looking north in order to avoid the existing adverse visual impacts. Should the TMT Observatory be built on the northern plateau, the only unobstructed view plane from the summit region remaining would be on the eastern side of Kukahau'ula. Therefore, eliminating one of last two unobstructed views from the summit region is a prime example of why the TMT Project's visual impacts would be substantial, significant, and adverse and not compatible with this particular locality.</p>	<p>Ward's argument is based off of her own personal views, which do not cite to and are unsupported by any evidence, including her own testimony. Ward's representations regarding the experience of unidentified "residents and visitors" are not admissible evidence here, and are not a proper basis for objecting to the HO FOF/COL.</p>
		<p>Consequently, the proposed land use with the construction of the TMT observatory, structures, paved access way, and associated development are incompatible and inappropriate for this cultural and recreational landscape of the northern plateau and the surrounding sacred areas within the conservation district that encompasses the Mauna Kea Summit Region Historic District.</p>	<p>Ward's arguments noted above do not support this proposition.</p>
6		<p>The TMT Project, as proposed, neither preserves nor improves upon Mauna Kea's existing physical and environmental aspects, such as its natural beauty and open space. The Applicant has not and cannot meet the requirement under the sixth criterion. Likewise, the information inserted by the Applicant into the CDUA (2.6 Preservation of Environment) Exhibit A-1 at 2-27 - 2-28 is inaccurate and exceedingly irrelevant to this criterion. It is for this same reason that the Petitioners object to HO FOFs 429-446 and HO COLs 232-260 on the grounds that</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>Ward's attempts to discredit the</p>

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		<p>they are just as inaccurate, irrelevant, and/or misleading. The vast majority of these particular FOFs are irrelevant to this criterion.</p>	<p>referenced FOF/COL are conclusory and not supported by evidence or citations to the record.</p>
		<p>The TMT Observatory is an industrial massive man-made structure that unequivocally impacts the existing physical and environmental aspects of Mauna Kea. As such, no evidence was presented to demonstrate the TMT Project would preserve or improve upon the existing physical and environmental aspects as required in the sixth criterion of the CDUA. This project would intrude upon the open space and degrade the natural beauty cherished by residents, visitors, and recreational users.</p>	<p>Ward's argument is conclusory and is not supported by evidence or citations to the record. Ward failed to establish how the TMT Project "unequivocally impacts the existing physical and environmental aspects of Mauna Kea." Such conclusory statements are an improper basis for challenging the HO FOF/COL.</p>
		<p>HO FOF 840 acknowledges that "The TMT Observatory will add a substantial new visual element in the landscape that will be visible from viewpoints along the northern ridge of Kukahau'ula and by people as they travel within the portion of the summit region." HO FOF 854 claims that "the incremental increase in cumulative visual impact due to the TMT project will be less than significant." The TMT as proposed would be among the world's largest astronomy facilities, dwarfing all the others in the MKSR, and would be constructed in an undeveloped landscape ¾ mile from other roads and infrastructure. To claim that the 18 story facility covering 5 acres would be a less than significant incremental increase is absurd on its face.</p>	<p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>This is a conclusory argument that is not based on any evidence. Instead, Ward relies on her own personal opinion that the world's largest astronomy will surely have an impact on views/viewplanes. The Hearing Officer has determined that Ward's opinion on these matters are not credible, and it is improper to challenge this determination with further assertions of Ward's personal opinion. HO COL</p>

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		<p>The presence of the Project in the currently undeveloped northern plateau would introduce new elements, including the observatory, a new road, vehicle traffic, noise, dust, and an increased number of visitors, 24 TMT employees on average, UH management personnel, and tourists, in addition to cultural practitioners. The TMT employees and visitors would be accessing a portion of the Historic District that is not usually visited. The increase of employee and visitor traffic in the vicinity of the north plateau may result in some potential impacts to individual historic properties. It may also result in the alteration of existing historic properties by non-TMT employees. Exhibit A-4 Vol 1 at 3-28, 3-45, 3-50, 3-51.</p>	<p>195.</p>
		<p>Witnesses for the Petitioners and Opposing Intervenor, <i>including Ward herself</i>, admitted that the summit area is already substantially developed for astronomy use. HO FOF 812, 912-917, 859-866, 985, COL 349.</p> <p>Substantial and credible evidence was presented, including from Petitioners and Opposing Intervenor themselves, demonstrating that the astronomy precinct is substantially or fully developed. See e.g., HO FOF ¶¶ 812, 905-917, COL 348-349, 352</p>	



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		<p>The natural beauty of Mauna Kea embraces the vast pristine landscape, the scenic views and visual resources, the geologic terrain, the circle of shrines, the silent interaction of light and shadow, the interplay of mist and snow on the plateau -- a conservation resource treasured by the world. The loss of this resource would be irrevocable, is unacceptable, and is counter to the laws that protect the conservation district.</p>	<p>This argument is conclusory and is not supported by any evidence or citations to the record.</p> <p>Moreover, this argument is hypothetical, and speaks to the consequences of losing Mauna Kea as a resource, and does not establish that the TMT Project will result in such a loss.</p>
7		<p>Because the massive TMT Observatory, Access Way, and associated facilities would not preserve or improve upon the existing physical and environmental aspects, such as its natural beauty and open space of the Mauna Kea conservation district, the sixth criterion is not satisfied and the TMT CDUA must be denied.</p> <p>The HO COLs 181-186 relate to Criterion Seven; the Applicant and HO perpetuate a legal fiction that the designation of an "Astronomy Precinct", with no defined boundaries, never reviewed by the BLNR or approved by the Land Use commission, somehow justifies the increased intensity of land use in the area. There are no "existing uses" in the Northern Plateau, dubbed Area E, where the project is proposed. For this reason the HO COL 262, 265, 267-9 are inaccurate. HO COL 272 claims that BLNR has the authority to subdivide the land, and further HO COL 273 and 274 infers that the Applicant has the authority to make this designation to increase land use intensity with or without BLNR delegation.</p>	<p>This argument is conclusory and is not supported by any evidence or citations to the record.</p> <p>The referenced HO COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>The record establishes that the TMT Project satisfies Criterion Seven. See HO FOF 956-965, COL 261-276. Ward's Exception does not refute these findings.</p>

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	<p>The Applicant claims there is no subdivision at issue in the TMT CDUA because a formal subdivision was not requested (App. FOF #929-936, p. 145). This is a misstatement of the requirement of HAR 13-5-30(c)(7).</p> <p>To begin, “subdivision” is defined in the conservation district rules as “the division of a parcel of land into more than one parcel.” HAR §15-3-2. This definition is consistent with BLACK’S LAW DICTIONARY, where “subdivision” is defined as “1) The division of a thing into smaller parts, 2) A parcel of land in a larger development.” Such a division, in and of itself, is not prohibited by the rules. However, where such a division of land is undertaken in order to “intensify land uses” on the parcel, it is forbidden under HAR 13-5-30(c)(7).</p> <p>While it is true that the University has not officially requested permission to subdivide the Mauna Kea conservation district in this CDUA, the Applicant’s actions on Mauna Kea have resulted in the de facto subdivision of this land for the purpose of intensifying land uses undertaken there. This improper, de facto subdivision takes two forms: 1) Astronomy Precinct, 2) Subleases to telescope operators. The Astronomy Precinct was subdivided from the remainder of the “UH managed lands” in order to focus future telescope construction in a 500-acre area of the conservation district. In addition, the TMT would operate on a sublease, which as other similar subleases indicate, effectively result in the division of the Mauna Kea Science Reserve into many separate parcels under the control of different telescope operators.</p> <p>Despite these facts, the Applicant makes several attempts to claim compliance with the seventh criterion. First, the Applicant contends</p>	<p>Ward’s reliance on the dictionary definition of the term “subdivision” is improper. HAR § 13-5-2 unambiguously defines the term “subdivision.” As such, BLNR is bound to the plain terms of this definition, and outside sources such as dictionary definitions are therefore inapplicable. See <i>United Public Workers, AFSCME, Local 646, AFL-CIO v. Dawson Intern., Inc.</i>, 149 P.3d 495, 507, 113 Hawai‘i 127, 139 (2006). Accordingly, Ward’s arguments based on the Black’s Law Dictionary definition of “subdivision” are precluded.</p>

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		<p>that because it did not apply for a subdivision in its CDUA for the TMT, there is no subdivision of land. Not so. In the definition of "subdivision," BLACK'S LAW DICTIONARY offers a very useful example of an "illegal subdivision." "The division of a tract of land into smaller parcels in violation of local subdivision regulations, as when a developer begins laying out streets, installing sewer and utility lines, and constructing houses without the authorization of the local planning commission." BLACK'S LAW DICTIONARY, 7th ed, (2000) at 1155.</p> <p>BLACK'S makes clear that a subdivision of land can occur regardless if the applicant properly applies for permission or not. Land use in the summit region of the Mauna Kea conservation district has the hallmarks of a de facto subdivision: facilities and improvements cost sharing, planned development, and defined, independent property interests. As the site visit and the record indicate, the telescope subleases intensified land use by increasing the burden of vehicles, visitors, and long-term personnel that use access roads, sewage, electricity, utilities, and base-level and mid-level facilities. HAR §13-5-30(c)(7) specifically guards against the intensification of land use like that found on Mauna Kea that is usually associated with the subdivision of land.</p>	

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		<p>Second, the Applicant contends that a completely separate law exempts the University from the requirements of this law. The Applicant offers no reason to look outside the four corners of HAR 13-5 or HRS 183C for guidance in the interpretation of the conservation district rules. HAR 13-5-30(c)(7) is not ambiguous or unclear, as such there is no reason to refer to other statutes for interpretation, especially where that interpretation contradicts the plain meaning of the rule in question. Because there is no reason to reference Hawaii's Uniform Land Sales Practices Act, the Applicant's reliance on the government exception is misplaced. There is no exception to HAR 13-5-30(c)(7).</p>	<p>Ward asserts that UH Hilo and TIO attempted to look outside of the "four corners" of HAR Chapter 13-5 and HRS Chapter 183C by referring to the definition of the term "subdivision" under the Hawaii Uniform Land Sales Practices Act ("ULSPA"). However, UH Hilo and TIO referenced the ULSPA only to note the requirements thereunder, not as a means of supplementing the definition of the term "subdivision" under HAR § 13-5-2, or to argue that UH-TIO is exempt from HAR § 13-5-30(c)(7) under the USLPA. UH Hilo and TIO agree with Ward in that HAR § 13-5-2 unambiguously defines "subdivision," and therefore, BLNR is precluded from looking to other sources to interpret the term, including Black's Law Dictionary.</p> <p>Moreover, contrary to Ward's argument, UH Hilo and TIO do not argue that the TMT Project is exempt from HAR § 13-5-30(c)(7), but rather, assert that the TMT Project is not subject to county land use laws under HRS § 205-5. The provisions of HRS § 205-5 demonstrate that counties do not have jurisdiction of land within the State's Conservation District. The TMT Project, being proposed in the Conservation District, is therefore exempt</p>

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			from county land use laws. See HO COL 268.

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		<p>However, if even there were an exception, the University is not entitled to “government” status in this situation because the University is more akin to a developer than a government agency when it comes to development in the Mauna Kea conservation district. The University has undertaken sublease agreements to gain telescope resources, viewing time, and other benefits and thus demised Mauna Kea conservation district land parcels to other telescope vendors. The University continues to be the primary advocate for construction in the Mauna Kea conservation district. See, Ex. B-3 thru B-13. Indeed, the University is the ONLY applicant listed on the CDUA.</p>	<p>Ward argues that UH Hilo somehow lost its status as a government entity because it is more akin to a developer. Ward cites absolutely no authority in support of this argument. Moreover, contrary to Ward’s argument, the TMT Project’s exemption from county zoning laws is not dependent on UH Hilo’s status as a government agency. Instead, HRS § 205-5 hinges on whether the subject land is within the Conservation District. HRS § 205-5 (providing that counties shall “govern zoning within the districts, other than in conservation districts. Conservation districts shall be governed by the department of land and natural resources pursuant to chapter 183C”). Accordingly, the TMT Project would be exempt from county zoning requirements even if UH Hilo was a private entity.</p>

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		<p>Third, the Applicant contends that reading the plain meaning of HAR 13-5-30(c)(7) would lead to an absurd result and thus should not be followed. The plain reading of the rule is that a CDUA cannot be granted where subdivision is used to increase the intensity of land uses in the conservation district. This does not say, as the Applicant contends, that nothing could ever be built in a conservation district. Rather, it directs that when construction is proposed in the conservation district the land cannot be subdivided -- that is divided into smaller parcels -- in order to increase the intensity of the land uses in the district.</p> <p>Unfortunately, that is exactly what has happened on Mauna Kea in both regards. The University has "subdivided" the lands under its general lease to ensure more land use in the astronomy precinct AND it has facilitated subleases with individual telescope owners and operators as a basis for construction of many industrial structures in the Mauna Kea conservation district. Indeed, by the University's own requirement, the TMT could not be built without a sublease.</p>	<p>Contrary to Ward's beliefs, UH Hilo and TIO do not assert that applying the plain meaning of HAR § 13-5-30(c)(7) would mean that nothing could ever be built in a conservation district. HO COL 269 states that "construing every sublease within the conservation district as creating a subdivided parcel subject to the county subdivision code would be contrary to HAR § 13-5-30(c)(7) and HRS § 205-5, and subject every such sublease to county ordinances designed to regulate residential developments and lead to absurd results." Nowhere in this proposed COL does it state, or even imply, that the plain application of HAR § 13-5-30(c)(7) would mean that nothing could ever be built in a conservation district.</p> <p>The fact remains that the TMT Project will not utilize the subdivision of land, and Ward has presented no credible evidence to the contrary, other than her meritless arguments, which improperly rely on dictionary definitions of the term "subdivision."</p>



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		<p>It is for this reason that Petitioner Ward objects to HO FOFs 447-449, 450-458 and HO COLs 262, 265, 267-270, 272-276 on the grounds that they are inaccurate, irrelevant, and/or misleading.</p> <p>Because the proposed TMT project is premised on and would further the subdivision of land in the Mauna Kea conservation district, the CDUA is not consistent with criterion seven and cannot be approved.</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p>
8		<p>The TMT Project would exacerbate risks to water quality, contribute to the multi-generational trauma of desecration on Mauna Kea, and ruin a wilderness important for reprieve and rejuvenation. For this reason, Petitioner Ward finds HO FOFs 457, 966, 981, 982, 997, 999, 1016 inaccurate and/or misleading.</p>	<p>The referenced FOFs are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward states that the referenced FOFs are misleading, but does not provide any evidence to support this statement, or even indicate why or how the FOFs are misleading.</p> <p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p>

Exception #	Page	Exception to FOF/COOL	Response
		<p>The HO FOFs 458, 1008, 1009, 1010, 1011, 1014 are irrelevant to the CDUA and this criterion. In the context of BLNR's rules and responsibility, it is tasked with protecting the conservation district for the benefit of the public. BLNR's rules do not authorize the BLNR to degrade or destroy conservation district resources in exchange for economic benefits. The offers of money for educational services and workforce development are completely irrelevant to the BLNR's consideration of whether this CDUA complies with the eight requirements for a permit. No matter how many scholarships, jobs or classes the Applicant promises to provide in exchange for permission to build in the conservation district, the BLNR cannot based its decision on such factors for they are outside the confines of the eight criteria for a permit and the BLNR's jurisdiction over the conservation district.</p>	<p>HO FOF 458, 1008, 1009, 1010, 1011, 1014 pertain to the scientific, educational and economic benefits of the TMT Project. This is squarely relevant to the issue of the TMT Project's impact on public health, safety, and welfare. See HO COL 290-292. Moreover, the Hawaii Supreme Court has held that consideration of relevant scientific, economic, and educational benefits are proper considerations in the context of a CDUA. <i>Kilakila 'O Haleakala v. Bd. of Land and Natural Resources</i>, 138 Hawai'i 383, 405, 382 P.3d at 217 (2016). See also, HO COL 293.</p> <p>Ward provides no valid reason to depart from existing Hawai'i case law on this issue. Accordingly, it is proper for the BLNR to consider scientific, educational and economic benefits provided by the TMT Project will directly and indirectly enhance public welfare.</p>

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8a		<p>The Report, including HO FOF 856,857,862,863,865,871,874,881,882 and HO COLs 277-8, 281-2, 296-7 is incomplete because it fails to take into account the potential detrimental impacts upon the water aquifers located associated with Mauna Kea.</p> <p>The HO FOF/COL thoroughly assessed the potential impacts of the TMT Project to the water resources on Mauna Kea. See HO FOFs 855-897, COLs 194-195. This directly contradicts Ward's argument.</p> <p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p> <p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>The Hearing Officer determined that the evidence presented by Ward regarding the TMT Project's potential impacts to water resources is not credible. HO FOF 871. "[T]he competence, credibility and</p>	<p>The referenced HO FOF/COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>The HO FOF/COL thoroughly assessed the potential impacts of the TMT Project to the water resources on Mauna Kea. See HO FOFs 855-897, COLs 194-195. This directly contradicts Ward's argument.</p> <p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p> <p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward's arguments fail to establish otherwise.</p> <p>The Hearing Officer determined that the evidence presented by Ward regarding the TMT Project's potential impacts to water resources is not credible. HO FOF 871. "[T]he competence, credibility and</p>

Exception #	Page	Exception to FOF/COL	Response
		<p><u>B.17.w</u> USGS Ground Water in Hawaii</p> <p><u>B.17x</u> Analysis of hydrologic structures within Mauna Kea volcano using diamond wireline core drilling</p> <p><u>B.17y</u> Hawaii volcanic rock aquifer study</p> <p><u>B.17z</u> Ground Water Atlas of the United States, Alaska, Hawaii, Puerto Rico and the U. S. Virgin Islands</p> <p><u>B.17aa</u> Mauna Kea aquifers shallower than expected - West Hawaii Today article by Erin Miller</p> <p>This record indicates that groundwater resources could be impacted from telescope activities on Mauna Kea. The Applicant failed to present evidence to the contrary and moreover failed demonstrate the increased telescope activities from the TMT would not further jeopardize underground water resources on Mauna Kea.</p>	<p>weight” of the testimony of all witnesses (including witnesses who represent that they have expertise in one or more subject areas), “is exclusively in the province of the trier of fact.” See <i>Hawai’i Prince Hotel Waikiki Corp. v. City &amp; Cnty. of Honolulu</i>, 89 Hawai’i 381, 390, 974 P.2d 21, 30 (1999) (quoting <i>State v. Pioneer Mill Co.</i>, 64 Haw. 168, 179, 637 P.2d 1131, 1139 (1981)). As the presiding officer of the evidentiary hearing, it is the Hearing Officer’s duty to hear all evidence and to make determinations regarding the credibility of the evidence presented. This includes the duty to assign the weight and value of evidence, determine whether it is credible, not credible, or more or less credible than other evidence. It is undisputed that determinations of credibility are best made by the presiding judge or jury in a criminal or civil trial and will not be disturbed on appeal. See <i>State v. Buch</i>, 83 Hawai’i 308, 321, 926 P.2d 599, 612 (1996)( “[I]t is well-settled that an appellate court will not pass upon issues dependent upon the credibility of witnesses and the weight of the evidence; this is the province of the [trier of fact].”) The underlying principle being that “the fact finder is uniquely qualified</p>

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			<p>to evaluate the credibility of witnesses and to weigh the evidence.” <i>Wilton v. State</i>, 116 Hawai‘i 106, 119, 170 P.3d 357, 370 (2007) (citation omitted). Ward fails to provide any valid reason to overturn the Hearing Officer’s determination here.</p> <p>This Exception does not cite to anything in the record to show that the Hearing Officer’s credibility determinations are not supported by the reliable, probative, and substantial evidence in the whole record.</p> <p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p> <p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p>
		<p>The Mauna Kea Science Reserve is located above five State of Hawai‘i delineated aquifers. Exhibit A-9 at 5-32. The TMT project would increase telescope activities at the proposed project site Area E, as well as the Batch Plant, Access Way, the roadway, Hale Pohaku, and the electrical substation, thus potentially affecting more than just the one aquifer near Area E.</p>	

Exception #	Page	Exception to FOF/COL	Response
		<p>It is undisputed that beneath the summit is a “high level” aquifer comprised solely of fresh water. Four components of the hydrology of the Mauna Kea summit region remain unknown: 1) watershed calculations of snow-water distribution, 2) outcomes of leachate and liquid waste from septic and cesspool systems, 3) distribution and impacts of permafrost, and 4) groundwater maps of water levels, flow paths, and recharge rates. The Applicant’s evidence also indicates that surface runoff at the summit does not extend below an elevation of 6,000 feet, which means that “the majority of the water ultimately ends up percolating and <b>becoming groundwater recharge</b> with only a small amount lost to evaporation. Pet FOF 159, p.21. Exhibit A071, page 8 Summary of TMT Mitigation Measures says that the project will use storm-water dry wells and grading to maximize groundwater recharge.</p>	<p>Ward’s assertion is misleading and presented out of context. The reference to the majority of water becoming groundwater recharge pertains specifically to runoff from the Mauna Kea Access Road. See Ex. A-3 at 2-219. Additionally, the evidence has shown that precipitation on Mauna Kea above 9,000 feet is low and evaporation rates are high. The majority of water runoff at or near the TMT Project would be lost to evaporation and therefore does not become groundwater recharge. Ex. A-10, 2.1.34 – 2.1-35, 2.1-39; see also HO FOF 863-864.</p> <p>The reliable, probative, and credible evidence establishes that the TMT Project will cause minimal surface runoffs, and the impacts of such runoff will not be significant. See WDT Nance at 2; Tr. 12/13/16 at 98:5-4.</p> <p>Moreover, although a “high level” exists under Mauna Kea, the evidence demonstrated that this aquifer will not be impacted by the TMT Project. HO FOFs 855-897, COLs 194-195. Ward is unable to refute these facts.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>“The main activities that have potential to result in a release of contaminants include vehicle travel (on and off road) and accidents; release of hazardous material and petroleum product use by observatories and support operations; sewage generation; and transport of hazardous materials and sewage off-site,” citing Ex A-9 CMP, p. 6-14. Pet FOF 534. p.72.</p>	<p>The reliable, probative, substantial, and credible evidence demonstrates 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 855-882.</p> <p>Ward’s citation references activities with the <b>potential</b> to release contaminants. This does not establish that the TMT Project will result in the release of contaminants into the surrounding environment.</p> <p>The TMT Project will employ mitigation measures to minimize the potential for an accidental spill while waste materials are in transit down the mountain to a proper disposal site. HO FOF 502.</p> <p>Ward admitted that she was unaware of any previous spills on Mauna Kea resulting from vehicles overturning en route to the MKSR. HO FOF 894.</p> <p>The TMT Project will implement measures to mitigate the risk of an accident spill to the extent logically and reasonably practicable based on best means and methods available to mitigate</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>While the HO FOF 861 states the TMT Observatory facilities would have a zero- discharge wastewater system, the Applicant cannot claim to have a zero-accident spill system. As observatory operators have demonstrated, spills and run-off from telescopes, the Access Way, and a potential Mid-Level Facility have been allowed to “percolate into the ground[.]” Ex. A- 3, FEIS Vol.1, p. 3-120. In May 2009, as much as twelve gallons of spilled hydraulic fluid at Caltech Submillimeter Observatory flowed down a drain pipe that opened directly into a cinder cone of the summit, where evidence of a previous spills was unearthed as well. Exhibit B-15. In March 2008, as much as 1,000 gallons of sewage overflowed onto the ground and was “quickly absorbed” into highly porous ground beneath which also flows to aquifers. Ex. A-1, CMP, p. 6-10. The CMP further acknowledges the high probability of impact to natural resources from vehicle accidents, petroleum products, and human waste.</p>	<p>against such events. HO FOF 501-505.</p> <p>The TMT Project’s storage and waste management include a Spill Prevention and Response Plan and a Materials Storage/Waste Management Plan. HO FOF 505, 888-893.</p> <p>TIO will implement a Ride-Sharing Program that will reduce the number of vehicle trips per day to the summit. HO FOF 336, 552.</p> <p>The referenced HO FOF is accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>Moreover, any discharge on the summit would be naturally treated and filtered through thousands of feet of the porous lavas, thereby removing any contamination in that discharge by the time it reaches groundwater. HO FOF 863.</p> <p>Ward provides no evidence to support the assertion that “spills and run-off from telescopes, the Access Way, and a</p>



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		<p>Not only does the University lack a vehicle accident spill response plan to address the contamination that results from vehicle accidents, the University has no method of assessing the risk to water resources from transporting waste down the mountain. Ex. A-10, CMP NRMP.</p>	<p>potential Mid-Level Facility have been allowed to 'percolate into the ground[.]'"  Even if such events occurred, those spills are irrelevant here as they pertain to existing telescopes, not the TMT Project, which is at issue here. Similarly, references to the spill at the Caltech Submillimeter Observatory is irrelevant.</p> <p>The TMT Project will implement measures to mitigate the risk of an accident spill to the extent logically and reasonably practicable based on best means and methods available to mitigate against such events. HO FOF 501-505.</p> <p>The TMT Project's storage and waste management include a Spill Prevention and Response Plan and a Materials Storage/Waste Management Plan. HO FOF 505, 888-893.</p> <p>Ward fails to identify what page of Ex. A-10 is being referenced.</p> <p>The TMT Project will implement measures to mitigate the risk of an accident spill to the extent logically and reasonably practicable based on best means and methods available to mitigate against such events. HO FOF 505, 888-</p>

Exception #	Page	Exception to FOF/COL	Response
			<p>893.</p> <p>The chance of a spill entering the surrounding environment is negligible. HO FOF 883-897. The TMT Project will employ mitigation measures to minimize the potential for an accidental spill while waste materials are in transit down the mountain to a proper disposal site. HO FOF 502.</p> <p>The TMT Project's storage and waste management include a Spill Prevention and Response Plan and a Materials Storage/Waste Management Plan. HO FOF 505, 888-893.</p> <p>Ward admitted that she was unaware of any previous spills on Mauna Kea resulting from vehicles overturning en route to the MKSR. HO FOF 894.</p> <p>Implementation of a Ride-Sharing Program that will reduce the number of vehicle trips per day to the summit. HO FOF 336, 552.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>Operation of the TMT would increase the use and storage of chemicals on Mauna Kea. The chemicals will be stored underground and transported by truck -- although the number of trucks and frequency of trips was not known by the Applicant's witnesses. The TMT project would require the use, handling and storage of hazardous materials at Mauna Kea including: propylene glycol, acetone, methyl ethyl ketone, at least 2,000 gallons of diesel fuel, ethylene glycol, hydraulic fluid, liquid adhesives, coating metals, acids, paints, solvents, and other cleaning chemicals. Ex A-308 CMP FEIS Vol. 1, p. 3-129.</p>	<p>The TMT Project will implement measures to mitigate the risk of an accident spill to the extent logically and reasonably practicable based on best means and methods available to mitigate against such events. HO FOF 501-505.</p> <p>The chance of a spill entering the surrounding environment is negligible. HO FOF 883-897. The TMT Project will employ mitigation measures to minimize the potential for an accidental spill while waste materials are in transit down the mountain to a proper disposal site. HO FOF 502.</p> <p>The TMT Project's storage and waste management include a Spill Prevention and Response Plan and a Materials Storage/Waste Management Plan. HO FOF 505, 888-893.</p> <p>No support for proposition that the use, handling, and storage of hazardous materials disqualifies a project from receiving a CDUP.</p> <p>The TMT Project has protocols in place for the use, handling, and storage of hazardous materials. See HO FOF 335, 500, 505, 883-897.</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>The Applicant's witness, Mr Nance, stated that he had read the EIS as the basis for his testimony. Mr Nance could provide no data to substantiate his testimony, and he could not cite studies conducted on Mauna Kea or in Area E. Mr Nance stated that the runoff would percolate downward, but he didn't know if it would be confined. Nance Tr.12.13.16 V16 p. 145.</p>	<p>UH-TIO note that 3-129 of the FEIS does not specifically reference the chemicals propylene glycol, acetone, and methyl ethyl ketone, but it is not disputed in the record that the TMT Project will utilize vehicle and generator fuel, alcohols, liquid adhesives, various metals, lubricants, hydraulic fluid, glycol coolants, and small quantities of acids, paints and solvents. Extensive measures will be in place to manage these materials, and the chance of a spill entering the surrounding environment is negligible. See HO FOF 335, 500, 505, 883-897.</p> <p>Nance provided evidence in the form of his testimony, which the Hearing Officer found to be credible, probative, and reliable.</p> <p>The record demonstrates the fact that groundwater is extremely remote and very unlikely from the TMT Project. HO FOF 506-507, 855-882.</p> <p>Any discharge on the summit would be naturally treated and filtered through thousands of feet of the porous lavas, thereby removing any contamination in that discharge by the time it reaches</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>Runoff would move downward through the unsaturated lava, traversing vertically downward to underlying groundwater. Mr Nance stated that we don't know the distance because we don't know exactly where the groundwater is. Nance Tr.12.13.16 V16 p.99-100.</p>	<p>groundwater. HO FOF 863.</p> <p>Mr. Nance's actual statement was that water "would traverse thousands of feet downward before it ever reached the underlying groundwater, maybe 6,700 feet."</p> <p>The record demonstrates the fact that groundwater contamination is extremely remote and very unlikely from the TMT Project. HO FOF 506-507, 855-882.</p> <p>Any discharge on the summit would be naturally treated and filtered through thousands of feet of the porous lavas, thereby removing any contamination in that discharge by the time it reaches groundwater. HO FOF 863.</p> <p>It is extremely unlikely that any spill would be large enough to have any impact on the drinking water for Hawai'i County. The main threats to Mauna Kea's aquifer occur at lower elevations in areas of heavier population and use. See HO FOF</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>The runoff from the TMT site will go downslope to the North, following topography, on the northern flank of Mauna Kea. Nance Tr.12.13.16 V16 p. 110. Mr Nance provided no evidence that spills and leaks would not percolate into high level groundwater. Mr Nance did admit that three potable wells are tapped into high level dike-confined groundwater. Nance Tr.12.13.16 V16 at 113:7-8. (See Pet responses to App FOFs)</p>	<p>863, 855-882.</p> <p>Argument is misleading. Nance testified as to the existence of four potable wells. Tr. 12/13/16 at 113:13-22. Nance further testified that the TMT Project would not affect any of these possible water sources. Tr. 12/13/16 at 114:14-16. The Hearing Officer determined that Nance's testimony on this issue was credible and probative. HO FOF 862-863, 881-882.</p> <p>The record demonstrates the fact that groundwater is extremely remote and very unlikely from the TMT Project. HO FOF 506-507, 855-882.</p> <p>Any discharge on the summit would be naturally treated and filtered through thousands of feet of the porous lavas, thereby removing any contamination in that discharge by the time it reaches groundwater. HO FOF 863.</p>
8b		<p>The impact of noise on the esthetic wilderness experience for the</p>	<p>Operation of the TMT Project will not contribute to a noticeable increase in noise</p>

Exception #	Page	Exception to FOF/COL	Response
		<p>recreational user has been discounted and dismissed by HO FOF 994-1002 in the Report. The conclusions are misleading and do not reflect the evidence in the record. The noise and dust generated by Project activities will adversely affect the spiritual and sacred quality of Maunakea and the Historic District. (Ex. A-5, TMT FEIS, p. G-61) As a recreational user Ward and others, including witnesses Townsend and Fujikane, has experienced the noise of observatory air conditioning, blowers, generators, associated vehicles and industrial activity and has found it disturbing to other recreational users. Noise level in the vicinities of the existing observatories varied from 38 dBA to 77dBA Leq, and 40-78 dBA L10, with noise levels at or below 60 dBA Leq beyond a distance of 50 feet from HVAC exhausts. The loudest noise levels of 68 and 77 dBA Leq and 69 and 78 dBA L10, were measured at locations within 15 feet of HVAC exhaust outputs. (Ex A-3 FEIS Section 3.13 Noise p 3-175, 176) The Applicant does not define "noise sensitive areas." (Ex A-3 FEIS Section 3.13 Noise p 3-179). Applicant does not analyze the cultural impacts of noise levels and offers no analysis of noise from culturally significant places like Pu'u Poliahu. (Ex A-3 FEIS Section 3.13 Noise p 3-179). The Applicant concedes that significant noise would result from construction activities such as excavation, trenching, grading, pouring of foundations, and erection of structures. (Ex A-3, FEIS, p 3-202) Construction of the proposed project would violate noise regulations, such that a noise variance would be required under HAR 11-46-8 for construction of the TMT Observatory. (Ex A-3 FEIS, p 3-202). The Applicant acknowledges the proposed project would generate construction-related noise in the 80-100 dBA range at 50 feet for front-end loaders, backhoes, tractors, scrapers, graders, pavers, trucks, concrete mixers, concrete pumps, cranes, compressors, pneumatic</p>	<p>levels at the identified recreational sites in the surrounding area recognized as sensitive to noise, and any noise impact from the project will be less than significant. HO FOF 994-999.</p> <p>The noise impacts from the TMT Project will be less than significant. Noise impacts from construction will be mitigated through compliance with conditions in Noise Permits and the Noise Variance. Construction noise at the TMT Observatory site is likely to be inaudible from a relatively short distance from the source due to the existing background noise associated with the strong wind conditions at the summit. Ex. A-3/R-3 at 3-203.</p>

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		<p>wrenches, jack hammers, and rock drills. Short periods of blasting may also be necessary to dig foundations for the TMT Observatory. (Ex A-3 FEIS, p 3-202).</p>	
8c		<p>The wilderness of the Mauna Kea conservation district is important to the health and welfare of the public. The Applicant dismisses this, again opting to focus solely on economic growth – a consideration that is outside the scope of Haw. Admin. R. §13-5 and BLNR’s jurisdiction. Focusing, however, on those factors BLNR is responsible for, it is apparent the TMT will further undermine the quality of the wilderness on Mauna Kea and thus the public health and welfare that relies on it.</p> <p>Construction of the TMT on Mauna Kea would pollute the conservation district with dust, fumes, and noise – all of which are categorically inapposite to the tranquility and purity that one can still find on the northern plateau of Mauna Kea. The Applicant concedes that air quality and noise levels are directly related to human activity on the mountain – the more human activity the greater the air pollution and louder the ambient noise.. Construction of the TMT would not only increase the basic level of human activity on Mauna Kea, but would specifically generate “vehicle exhaust, chemical fumes from construction and maintenance activities, and fugitive dust”. Construction activities, such as excavation, trenching, grading, pouring of foundations, and erection of structures, would generate significant noise levels in excess of 80-100 dBA, which violates noise restrictions.</p> <p>Creating an urban environment at the top of Mauna Kea undermines the character of the conservation district for which people rely on it for rest, rejuvenation, and spiritual connection. The Petitioners are just a few examples of the kinds of people who walk out to the northern plateau to escape the sight and sounds of buildings and roads that have intruded on</p>	<p>The referenced HO COL are accurate, relevant and supported by the reliable, probative, and substantial evidence in the record and the citations therein. Ward’s arguments fail to establish otherwise.</p> <p>Ward’s arguments here are wholly conclusory and not supported by evidence or citations to the record.</p> <p>Additionally, Ward fails to establish how the wilderness is relevant to public health, safety and welfare, while science, education, and economic benefits are not.</p>



Exception #	Page	Exception to FOF/COL	Response
		<p>the natural vista of the summit. Building the TMT on the northern plateau would expand the degradation and destruction found on the summit area to the northern plateau and irrevocably harm the ability of people to find a quiet, natural environment on the northern plateau of the mountain.</p> <p>Because construction of the TMT would undermine the one of the last remaining wilderness area on Mauna Kea where people go for rest and rejuvenation, the TMT CDUA does not satisfy criterion 8 and must be denied. It is for these reasons that the Petitioners object to HO COLs 277-282, 296, 297 on the ground they are inaccurate. Without evidence proving otherwise, the Applicant cannot demonstrate compliance with criterion eight and the CDUA must be denied.</p>	

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

Contested Case Hearing Re Conservation  
District Use Application (CDUA) HA-3568  
for the Thirty Meter Telescope at the Mauna  
Kea Science Reserve, Ka'ohē Mauka,  
Hāmākua, Hawai'i, TMK (3) 4-4-015:009

BLNR Contested Case HA-16-002

**CERTIFICATE OF SERVICE**

**CERTIFICATE OF SERVICE**

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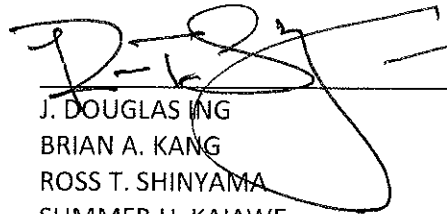
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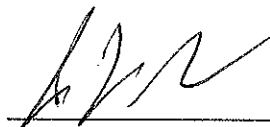
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