

benefit to public welfare.

318. The reliable, probative, substantial, and credible evidence demonstrates that the TMT Project will inject money into the local economy and will bring with it job growth, educational prestige and opportunities, and significant advancement of knowledge. The Project will benefit the "public welfare."
319. For all these reasons, and for the reasons set forth in the findings of fact above, the proposed land use will not be materially detrimental to the public health, safety, and welfare.
320. In sum, UH Hilo has borne its burden of proving that the TMT Project satisfies all of the criteria set forth in HAR § 13-5-30(c).

B. THE TMT PROJECT SATISFIES THE PUBLIC TRUST DOCTRINE, AND ART. XI, SEC. 7 OF THE STATE CONSTITUTION, AND CUSTOMARY AND TRADITIONAL NATIVE HAWAIIAN RIGHTS ARE APPROPRIATELY PROTECTED

321. In assessing the Project and determining whether the criteria of HAR § 13-5-30(c) have been satisfied, the State must protect the public trust and the customary and traditional rights and practices of native Hawaiians.

i. The Public Trust Doctrine

322. In assessing the legal aspects of the public trust doctrine, the Board has not relied upon any expert testimony.
323. The public trust doctrine has been adopted in Hawai'i as a "fundamental principle of constitutional law." *In re Water Use Permit Applications*, 94 Haw. 97, 132, 9 P.3d 409, 444 (2000) ("*Waiahole*").
324. Separately, Article XI, section 1 of the Hawai'i Constitution provides that public natural resources are held in trust by the state:

"For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai'i'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."

325. The public trust doctrine arises from the common law. *Id.*, 9 P.3d at 439, n.25. It was first applied in Hawai'i case law to navigable waters. *King vs. Oahu RR & Land Co.*, 11 Haw. 717 (1899), then to the shoreline. *County of Hawai'i v. Sotomura*, 55 Haw. 176,

183-184, 517 P.2d 57, 63 (1973). *In re Waiahole* applied it to all water resources, relying on both art. XI, sec. 1, and art. XI, sec. 7 of the state constitution. *Id.* at 133, P. 3d at 445.

326. The TMT Project obviously does not affect navigable waters or the shoreline. The reliable, credible and substantial evidence establishes that it will not restrict, pollute, or otherwise impair any water resource, including Lake Waiau.
327. Therefore, the TMT Project does not violate the public trust doctrine as currently established in Hawai'i case law.
328. Art. XI, sec. 1 of the Hawai'i state constitution has a much broader scope than the public trust doctrine as applied to date in Hawai'i. It expressly includes **all** natural resources, and provides that "public natural resources are held in trust".

Unquestionably, the public lands on Mauna Kea are part of the public land trust under art. XII, sec. 4 of the state constitution. Unquestionably, art. XI, sec. 1 also imposes mandatory duties on the BLNR to act as a trustee in dealing with those lands and the other publicly-owned natural resources on them.

This does not mean, however, that these lands and natural resources are covered by the "public trust doctrine" as established by *Waiahole* and related cases.

329. The public trust doctrine arose from the concept that "certain resources bestowed by nature are so inviolable that their benefits should accrue to the collective, rather than certain members of society", *Mauna Kea Anaina Hou v. BLNR*, 136 Hawai'i 376, 363 P.2d 224, 351 (2015) (Pollack, J., concurring) and was applied traditionally to "the air, running water, the sea, and consequently the shores of the sea", *Waiahole*, 9 P.3d at 445. For these resources, the trust's basic purpose is "reserving the resource for use and access by the general public without preference or restriction." *Waiahole*, 9 P. 3d 450.

Because of the inherently public character of these resources—water, tidelands, and the shore – the public trust doctrine contains a set of preferred "public trust purposes" which give an "inherent presumption in favor of public use, access, and enjoyment", *Waiahole*, 9 P.3d at 472, rather than a more general notion of public benefit. While uses may be made of the resource that are not public trust purposes, they are given a lower priority. *Waiahole*, 9 P.3d 450.

Differences exist between at least some of the resources covered by art. XI, sec. 1, and those referred to so far as "public trust resources" in Hawai'i case law. For example, land and fertile soil are surely natural resources. If the state owned a particularly fertile tract of soil, no legal precedent would suggest that its public trust responsibilities create a preference for the land to be opened for general public use to be farmed in common rather than leased to qualified individual farmers.

The text and history of Art. XI, sec. 1 show that the trustee's duty under this clause is to ensure public **benefit** from the management of the resources, rather than necessarily public **use**. It explicitly says that "All public natural resources are held in trust by the

State for the **benefit** of the people." (emphasis added). The history of this article, quoted more fully below, was that these resources be developed to "assure their highest economic or social **benefits**." *See* Stand. Comm. Rep. No. 77, in 1978 Proceedings, at 685-86 (emphasis added).

The *Waiahole* court recognized that different resources would need different rules under the public trust doctrine. *Id.*, 9 P.3d at 441.

The Board will apply art. XI, sec. 1 to this decision, under the terms of that constitutional mandate. It will then discuss the public trust doctrine as described in *Waiahole* and other cases, as if it applied to this decision. There is, of course, considerable overlap in the two concepts.

330. By its express terms, art. XI, sec. 1 encourages the "development and utilization of natural resources."
331. The dark sky and clear stable air at the summit of Mauna Kea constitute a natural resource for the science of astronomy. It is a unique resource, one of the finest sites in the world for astronomy.
332. The development and utilization of this natural resource by the various observatories has furthered human knowledge, promoted interest in science, enhanced the University of Hawai'i, and provided broadly-shared economic benefits.
333. The use of Mauna Kea by observatories does not degrade the clear stable air and dark skies at the summit, and therefore, follows art. XI, sec. 1's mandate that the development and utilization of natural resources "be consistent with their conservation." It is also consistent with the resource protection mandate under the public trust doctrine.
334. The *Waiahole* court explained the meaning of "conservation" in art. XI, sec. 1:

The framers deemed it necessary to define "conservation" and agreed on the following: "the protection, improvement and use of natural resources according to principles that will assure their highest economic or social benefits." *See* Stand. Comm. Rep. No. 77, in 1978 Proceedings, at 685-86 (emphases added). The second clause of article XI, section 1 thus resembles laws in other states mandating the maximum beneficial or highest and best use of [trust] resources. *See, e.g.*, Cal. Const. art. X, § 2; N.D. Cent. Code § 61-04-01.1.1 (Supp. 1999) . . . [A]rticle XI, section 1's mandate of "conservation"-minded use recognizes "protection" as a valid purpose consonant with assuring the "highest economic and social benefits" of the resource. . . In short, the object is not maximum consumptive use, but rather the most equitable, reasonable, and beneficial allocation of [trust] resources, with full recognition that resource protection also constitutes "use." 94 Hawai'i at 139-40, 9 P.3d at 451-52.

335. Because "conservation" of natural resources, as defined in the state constitution, includes their use and development for the highest economic and social benefits, it follows that if the construction of a large building such as the TMT Observatory is necessary for the use and development of a resource, that such construction is compatible with "conservation" in the constitutional sense. This does not mean that every project that uses and develops natural resources must be approved, regardless of consequences, but only that the large structures may be consistent with conservation as defined in our constitution.
336. Art. XI, sec. 1 also requires the protection of natural beauty, which is itself a natural resource. Stand. Comm. Rep. No. 77, in 1978 Proceedings, at 686.
337. To the extent that the "development and utilization" of the TMT site for astronomy may affect Mauna Kea's natural beauty, art. XI, sec. 1 and the public trust doctrine require a balancing of the competing interests. See *Waiahole* at 94 Hawai'i at 142 n.43, 9 P.3d at 454 n.43; *Center for Biological Diversity, Inc. v. Fpl Group, Inc.*, 166 Cal. App.4th 1349, 1371, 83 Cal. Rptr. 3d 588 (Cal. App., 2008)(where wind turbines harm wild birds, a public trust resource, agencies must balance competing interests); *Payne v. Kassab*, 468 Pa.226, 361 A.2d 263, 273(1976)(state properly balanced duty as trustee between park and highway uses).
338. Given the development that has already taken place on Mauna Kea, this balance strongly favors the TMT Project. The major public benefits from the TMT Project have been fully described elsewhere in these findings of fact and conclusions of law. While Mauna Kea remains a magnificent and beautiful mountain, the visual experience has for many decades included large observatories, six of them 100 feet high or taller. The TMT Project will not significantly change that experience.

The conditions of approval require that funds be set aside for the eventual decommissioning and removal of the TMT. Its effect on the natural beauty of Mauna Kea need not be permanent.

The conditions of approval require that sublease rent be used for the maintenance of the Mauna Kea area. This means that the TMT Project will contribute to the preservation of the resource, a valid purpose under both the public trust doctrine and art. XI, sec. 1.

339. Turning to the public trust doctrine as explained in *Waiahole*, the State acting through its agencies has a duty to "'protect' natural resources and to promote their 'use and development.'" 94 Hawai'i at 138-39, 9 P.3d at 450-51. This duty prevents public trust resources from being irrevocably transferred to private parties. *Id.* at 139, 9 P.3d at 451. The public trust doctrine also requires the "reasonable and beneficial use" of public trust resources "to maximize their social and economic benefit." *Id.*
340. Thus, the public trust doctrine does not require absolute preservation of natural resources, but rather requires a balancing between "1) protection and 2) maximum reasonable and beneficial use." *Id.* The State must apply a rule of reasonableness in which environmental costs and benefits are balanced against economic, social, and other factors. See *Id.* at 140-43, 9 P.3d at 453-55.

341. The Hawai'i Supreme Court has made it clear that the public trust doctrine's mandate with respect to "conservation" does not prohibit development; rather, the doctrine requires that protection of a resource must also be consonant with assuring the "highest economic and social benefits" of the resource. See *Waiahole, supra*, at 94 Hawai'i at 139-40, 9 P.3d at 451-52.
342. The use of the summit area of Mauna Kea for the TMT Project promotes the "maximum reasonable and beneficial use", *Waiahole, supra*, of the combination of natural resources that is unique to that location. It is the best site in the world to locate a premier scientific instrument intended to help answer such questions as "what is the nature and composition of the universe", and "is there life elsewhere in the universe". Ex. A-3/R-3 at p. 2-4.
343. The use of the combination of natural resources that is unique to the summit area of Mauna Kea for the scientific study and investigation and the advancement of knowledge that will result from the TMT Project is consistent with the public trust doctrine.
344. UH Hilo is not a private commercial user, and its proposed use of the land in question is not a private commercial use. On the contrary, the TMT Project will advance knowledge, foster educational opportunities in Hawai'i's public institutions of higher learning, and maintain Hawai'i's place as a world leader in scientific research. These are public or quasi-public land uses, and valid public trust uses.
345. The purposes of the TMT Project are valid public trust uses as confirmed by Section 5(f) of the Admission Act of 1959, which specifies public educational institutions as beneficiaries of public trust lands and their proceeds, and Article X, section 5 of the Hawai'i Constitution, which creates the University and gives it title to all real property conveyed to it, "which shall be held in public trust for its purposes, to be administered and disposed of as provided by law."
346. UH Hilo's public trust uses are "superior to" the private interests discussed in *Waiahole*. 94 Hawai'i at 138, 140, 9 P.3d at 450, 452; see *In re Contested Case Hearing on Water Use ("Waiola")*, 103 Hawai'i 401, 429, 83 P.3d 664, 692 (2004).
347. In addition, the fact that the TMT Project will be constructed and operated under a sublease from UH Hilo to a non-profit consortium of educational and research institutions for research and educational use (and not by a for-profit entity for private use), further supports the conclusion that the proposed use of the land for the TMT Project is a public, or at a very minimum, a quasi-public, use of the land. The results of the research done by the TMT Project and other observatories are shared with the public. (Haslinger, Tr. 10/27/16 at 14-15.)
348. Even assuming the TMT Project is construed as a private use, however, the University remains the lessor of the land on which the TMT Project will be built, and at the end of the TMT Project's useful life or of a lease permitting its continued occupancy of its site (whichever comes first), the TMT Project is required to be decommissioned.
349. The TMT Project does not involve the irrevocable transfer of public trust land and resources to others, and the "protection" element of the public trust doctrine is therefore

satisfied.

350. Accordingly, for all of the reasons herein, although the privately-operated TMT Project involves the use of government land, the proposed use is consistent with the public trust doctrine regardless of whether the TMT Project is construed as a public, quasi-public, or a private use of land.
351. Different valid public trust uses for the same land must be balanced; native Hawaiian uses have been recognized as valid public trust uses. *Waiahole*, 94 Hawai‘i at 137, 9 P.3d at 449. The evidence in this proceeding demonstrated a dearth of native Hawaiian uses of the specific location of the TMT Project, and further demonstrated that, as to the summit region of Mauna Kea in general, astronomy and native Hawaiian uses have (for many years) – and in fact, do – co-exist, and that the TMT Project will not curtail or restrict native Hawaiian uses.
352. "[T]he public trust assigns no priorities or presumptions in the balancing of public trust purposes." *Waiahole*, 94 Hawai‘i at 142 n.43, 9 P.3d at 454 n.43. The BLNR "must ensure that all public trust purposes are protected to the extent feasible," requiring a balancing of competing public trust uses on a case-by-case basis. *Id.*
353. The evidence supports the conclusion that in proposing the TMT Project, UH Hilo has balanced the public trust obligations for this public purpose, and has protected native Hawaiian interests to the extent feasible.

The TMT Project will limit public access and use of Mauna Kea only on the project site itself, a tiny fraction of the summit area. The TMT access road will facilitate public use of the Northern Plateau. All of the observatories taken together limit public use of the mountain on only a small fraction of the mountain. The road to the summit, built to promote and serve astronomical use, greatly facilitates the use of the mountain by sight-seers, recreational users, and native Hawaiians for cultural practices. (William H. Brown, WDT at 1.)

354. The public trust doctrine must be viewed in the context of the relevant statute or rules at issue in a proceeding. Public trust principles, and an agency’s public trust obligations, may already be incorporated into the statute or rules at issue. *See Waiahole*, 94 Hawai‘i at 130-33, 9 P.3d at 442-45 (agency’s public trust obligations were incorporated into Water Code).
355. Here, the public trust principles have been incorporated into the Conservation District statute. That law’s stated purpose is "to conserve, protect, and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare." HRS § 183C-1.
356. The Conservation District rules likewise provide:

"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 and cultural resources of the State

through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare."

HAR § 13-5-1.

357. The criteria set out in HAR § 13-5-30(c) expressly promote these public trust objectives. For example: (1) HAR § 13-5-30(c)(1) requires that any proposed land use in the Conservation District be consistent with the purpose of HRS Chapter 183C and its implementing regulations; (2) HAR § 13-5-30(c)(4) requires that the proposed land use not cause substantial adverse impacts to the existing natural resources within the surrounding area, community, or region; and (3) HAR § 13-5-30(c)(8) requires that the proposed land use not be materially detrimental to the public health, safety, and welfare.
358. A thorough and diligent assessment of those criteria necessarily addresses the concerns that doctrine protects since the criteria set out in HAR § 13-5-30(c) embody and implement the public trust doctrine, *See Morimoto*, 107 Hawai‘i at 308, 113 P.3d at 184 (where the BLNR properly concluded that project would not cause substantial adverse impact on natural resources of project area, claim that the BLNR’s decision violated Article XI, section 1 and the public trust doctrine "present[s] no new arguments" and "does not implicate any error on the part of BLNR"). *See also, Kilakila*, 138 Hawai‘i at 410-11, 382 P.3d at 222-23 (McKenna, J., concurring) (noting that the BLNR’s findings and conclusions regarding the criteria of HAR § 13-5-30(c) as outlined in the majority opinion "illustrate that the BLNR carefully considered and applied the applicable constitutional considerations.")
359. Thus, the Conservation District rules do not supplant the protections of the public trust doctrine, but they do embody and implement them.
360. Petitioners and Opposing Intervenors have not identified any public trust obligation that is not already reflected in the eight criteria of HAR § 13-5-30(c). Therefore, the conclusion that those criteria are satisfied – for the reasons set forth in detail above – is a compelling indication that the public trust obligations of both UH Hilo and the BLNR are satisfied as well.
361. Natural beauty is also fully considered in, and protected by, the eight criteria. The findings and conclusions above demonstrate how the TMT Project satisfies the eight criteria. Because the project satisfies the criteria with respect to natural beauty, it must, as discussed above, satisfy art. XI, sec. 1 and the public trust doctrine with respect to natural beauty.
362. Whether the public trust obligations are viewed as being encompassed within the eight criteria of HAR § 13-5-30(c) or as independent of those criteria, the approval of the CDUA here is consistent with and satisfies the public trust obligations of both UH Hilo and the BLNR to protect Hawai‘i’s natural resources and to promote their development and utilization in a manner consistent with their conservation and in furtherance of the State’s self-sufficiency.
363. Viewed in light of the public trust obligations described above, and the implementation of

those obligations through HAR § 13-5-30(c), the TMT Project satisfies all public trust legal obligations as it is "the most equitable, reasonable, and beneficial allocation of state [trust] resources." *Waiahole*, 94 Hawai'i at 140, 9 P.3d at 452.

364. The TMT Project provides for the development and utilization of natural resources for scientific and educational purposes for the benefit of the people of the State. It satisfies the obligations of protection and maximizing reasonable and beneficial use, and it is consistent with the constitutional, statutory, and regulatory mandates of "conservation."

ii. The Protection of Customary and Traditional Native Hawaiian Rights

a. Article XII, Section 7 of the Hawai'i Constitution and the Ka Pa'akai Analysis

365. The Hawai'i Constitution also mandates that the State recognize and protect customary and traditional native Hawaiian rights. Article XII, section 7 provides:

"The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights."

366. To fulfill its duty to preserve and protect customary and traditional native Hawaiian rights to the extent feasible under *Ka Pa'akai*, an agency must examine and make specific findings and conclusions as to:

(1) the identity and scope of "valued cultural, historical, or natural resources in the [application] area, including the extent to which traditional and customary native Hawaiian rights are exercised in the [application] area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the [agency] to reasonably protect native Hawaiian rights if they are found to exist. *Ka Pa'akai*, 94 Hawai'i at 47, 7 P.3d at 1084 (footnotes omitted).

367. This analytical framework ensures that a state agency properly effectuates its "obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests," and fulfills its duty "to preserve and protect customary and traditional native Hawaiian rights to the extent feasible[.]" *Ka Pa'akai*, 94 Hawai'i at 46-47, 7 P.3d at 1083-84.
368. The utmost respect is afforded the Petitioners and Opposing Intervenors regarding their beliefs and practices; to the extent that they claim such practices constitute traditional and customary rights under *PASH* and its progeny, those rights are subject to regulation by the laws of the State of Hawai'i. Haw. Const. art. XII, § 7; *State v. Pratt*, 127 Hawai'i at 217, 277 P.2d at 311.