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Heal Utah v. Kane Cnty. Water Conservancy Dist.

Court of Appeals of Utah

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No. 20140429-CA

Reporter

2016 UT App 153 *; 378 P.3d 1246 **; 2016 Utah App. LEXIS 156 ***; 817 Utah Adv. Rep. 45

HEAL UTAH, ET AL.,¹ Appellants, v. KANE COUNTY WATER CONSERVANCY DISTRICT, SAN JUAN COUNTY WATER CONSERVANCY DISTRICT, BLUE CASTLE HOLDINGS INC., AND KENT JONES, Appellees.

Opinion by: KATE A. TOOMEY

Opinion

Prior History: [***1] Seventh District Court, Castle Dale Department. The Honorable George M. Harmond. No. 120700009.

[**1248] TOOMEY, Judge:

[*P1] In this case we must determine whether the district court properly approved two [**1249] change applications requesting to change the points of diversion and the nature of use of water already appropriated to Kane County Water Conservancy District and San Juan County Water Conservancy District (collectively, the Districts). We conclude that it did and therefore affirm.

Counsel: John S. Flitton and Christie Babalis, Attorneys for Appellants.

BACKGROUND

John H. Mabey Jr. and David C. Wright, Attorneys for Appellees Kane County Water Conservancy District, San Juan County Water Conservancy District, and Blue Castle Holdings Inc.

[*P2] The Districts have leased their existing water rights to Blue Castle Holdings Inc. for the proposed development of a nuclear [***2] power plant (the Project) near Green River, in Emery County, Utah. We refer to the Districts and Blue Castle collectively as the Applicants. The Applicants' leases are contingent on approval of the change applications; they also seek approval to store water in a reservoir on the Project's site.

Sean D. Reyes, Julie I. Valdes, and Norman K. Johnson, Attorneys for Appellee Kent Jones.

[*P3] The Project will require the continuous depletion of nearly all of the Districts' apportioned water to create steam to generate power and to cool the power plant. The Project must be completed in phases and must satisfy certain federal and state regulations to proceed. Blue Castle has already invested approximately \$17.5 million of the \$15 to \$20 billion required to complete the Project, including money spent to secure the necessary water rights from the Districts and to purchase real property for the site. The Applicants seek to move the Districts' approved points of diversion from several small tributaries to a single location on a larger river upstream from the existing points of diversion. Before the Project can proceed, an environmental impact assessment must be

Judges: JUDGE KATE A. TOOMEY authored this Opinion, in which JUDGE J. FREDERIC VOROS JR. and SENIOR JUDGE PAMELA T. GREENWOOD concurred.²

¹The parties on appeal are not limited to those listed, but also include other parties whose names appear on the notice of appeal or who have otherwise entered appearances in this court.

²Senior Judge Pamela T. Greenwood sat by special assignment as authorized by law. See generally [Utah R. Jud. Admin. 11-201\(6\)](#).

conducted and an application must be submitted to the Nuclear Regulatory Commission for an Early Site Permit. Furthermore, to [***3] build and operate the Project, any environmental impacts must be resolved.

[*P4] Because of the complexity of this case, we provide background information concerning water rights and change applications in Utah, but we recite only those facts relevant to the issues presented on appeal.

I. Change Application Process

[*P5] In Utah, water belongs to the public. *Utah Code Ann. § 73-1-1* (LexisNexis 2012). This "[p]ublic ownership is founded on the principle that water, a scarce and essential resource in this area of the country, is indispensable to the welfare of all the people." *J.J.N.P. Co. v. Division of Wildlife Res.*, 655 P.2d 1133, 1136 (Utah 1982). "[I]t is essential that putting water to the highest and best beneficial use should not only be encouraged, but carefully safeguarded." *Green River Canal Co. v. Thayne*, 2003 UT 50, ¶ 28, 84 P.3d 1134 (alteration in original) (citation and internal quotation marks omitted). Accordingly, "the State must therefore assume the responsibility of allocating the use of water for the benefit and welfare of the people of the State as a whole." *J.J.N.P. Co.*, 655 P.2d at 1136.

[*P6] Like many other arid western states, Utah has adopted the prior appropriation system—a capture system of water allocation—to maximize productive usage of water. Frederic J. Donaldson, Note, *Farmer Beware: Water Rights Enforcement in Utah*, 27 *J. Land Resources & Envtl. L.* 367, 370-71 (2007) [hereinafter Donaldson]. "The prior appropriation [***4] system has two basic principles: priority and beneficial use." *Id.* at 371. "Priority refers to the general system of first in time, first in right. This means senior water right holders are entitled to their full water right before junior water right holders are entitled to any water." *Id.* (citations omitted); accord *Utah Code Ann. § 73-3-1(5)*. "The principle of beneficial use means a water right is acquired by diverting water and putting it to beneficial use; most uses, such as irrigation or stock watering are considered beneficial. A right to use water may be abandoned or forfeited by nonuse for a statutory period of time." Donaldson, at 371 (footnotes omitted).

[*P7] Through this system, potential users must apply to the State Engineer for authority to withdraw water from the natural environment. See *Utah Code Ann. §§ 73-3-1 to -2*. The application must set forth "the nature of the proposed use," the "quantity of water in acre-feet," "the time during which it is to be used," "the name of the stream or other source from which the water is to be diverted," "the place on the stream or source where the water is to be diverted and the

[**1250] nature of the diverting works," and any "other facts that clearly define the full purpose of the proposed appropriation." *Id.* § 73-3-2(1)(b). But "[a]n appropriation [***5] may be made only for a useful and beneficial purpose." *Id.* § 73-3-1(4). So, among other duties, the State Engineer must ensure "that the waters of the state are used by appropriators in accordance with their priorities and that diverted waters are used for proper beneficial purposes." Donaldson, at 371 (footnote omitted); see also *Utah Code Ann. § 73-2-1* (explaining that the State Engineer is responsible for "the general administrative supervision of the waters of the state and the measurement, appropriation, apportionment, and distribution of those waters").

[*P8] The State Engineer's "approval of an application to appropriate is only a preliminary step It confers upon the applicant no perfected right to the use of water." *Little Cottonwood Water Co. v. Kimball*, 76 Utah 243, 289 P. 116, 118 (Utah 1930). Rather, "[i]t merely clothes the applicant with authority to proceed and perfect, if he can, his proposed appropriation by the actual diversion and application of the water claimed to a beneficial use." *Id.*; see also *J.J.N.P. Co.*, 655 P.2d at 1136 (explaining that an "appropriation does not confer an ownership interest in the water itself"). In other words, it gives an individual only a usufruct in water—the right to use some maximum quantity of water from a specified source, at a specific point of diversion or withdrawal, for a specific use, [***6] and at a specific time. See *Delta Canal Co. v. Frank Vincent Family Ranch, LC*, 2013 UT 69, ¶ 30 (explaining that "the continuing validity of a water right depends on its being used"). Only the amount of water that is actually put to beneficial use vests into a right. *Id.* ¶ 25; accord 78 *Am. Jur. 2d Waters* § 362 (2016) ("[T]o constitute a valid appropriation of water there must be an intent to appropriate water and apply it to a beneficial use, as well as the actual diversion of the water from its natural channel or other source of supply If any of the requisite elements are missing, such as the intent to apply the water to a beneficial use, or the diversion of water, there is no appropriation and no water rights obtained." (emphasis added) (footnotes omitted)).

[*P9] Once a user obtains the right to use unappropriated water, "a water right holder is entitled to change the point of diversion or the place or nature of use of water so long as vested rights are not impaired by the change." *Searle v. Milburn Irrigation Co.*, 2006 UT 16, ¶ 23, 133 P.3d 382; see also *Utah Code Ann. §§ 73-3-1 to -3* (LexisNexis 2012 & Supp. 2015). *Utah Code section 73-3-3* requires the State Engineer to "follow the same procedures . . . for applications to appropriate water" and "applications for permanent changes of point of diversion, place of use, or purpose of use." *Utah Code Ann. § 73-3-3(5)(a)* (2012). Notably, the

code requires the State Engineer [***7] to approve a change application unless "it impairs any vested right without just compensation." *See id.* § 73-3-3(2)(b), (6)(b); *accord id.* § 73-3-8(1). The Utah Supreme Court has explained that the "owner of a water right has a vested right to the quality as well as the quantity which he has beneficially used." *Crafts v. Hansen*, 667 P.2d 1068, 1070 (Utah 1983) (citation omitted). Accordingly, the presumption is to approve a change application, but the State Engineer must first determine that the proposed changes will not impair any vested right to the beneficial use of a certain quality and quantity of water. *Id.*

[*P10] Furthermore, although the State Engineer is "the appropriate officer to initially determine whether an application seeking permission to initiate such a change should be approved," *Searle*, 2006 UT 16, ¶ 23, 133 P.3d 382, a person aggrieved by the State Engineer's decision "may obtain judicial review in accordance with Title 63G, Chapter 4, Administrative Procedures Act," *Utah Code Ann.* § 73-3-14. "District courts have authority to review de novo any final agency action resulting from an informal administrative proceeding, including an action by the State Engineer." *Western Water, LLC v. Olds*, 2008 UT 18, ¶ 17, 184 P.3d 578. "[A] district court, when reviewing the state engineer's decision to approve or reject an application, is not sitting in its capacity as an adjudicator [***8] of rights, but is merely charged with ensuring that the state engineer correctly [**1251] performed an administrative task." *Searle*, 2006 UT 16, ¶ 35, 133 P.3d 382. Further, the district court may only consider issues "subject to determination by the [State] Engineer because the effect of the court's judgment is the same as it would have been if the Engineer had reached the same conclusion in the first instance." *Western Water*, 2008 UT 18, ¶ 18, 184 P.3d 578 (alteration in original) (citation and internal quotation marks omitted). In other words, the district court stands in the same position as the State Engineer did, and its judgment is therefore limited to the issues determined by the State Engineer.

II. The Colorado River Compact

[*P11] The water rights underlying the Applicants' change applications are located in three bodies of water: Wahweap Creek, Lake Powell, and the San Juan River. The Applicants' proposed changes sought to move the diversion point upstream to the Green River. The Green River is approximately 730 miles long, roughly 450 miles of which are in Utah. Roy Webb, *Utah History to Go*, http://historytogo.utah.gov/utah_chapters/the_land/greenriver.html [<https://perma.cc/L34J-HV2E>]. Although its headwaters are in Wyoming, the river drains the entire northeast corner of Utah, and courses through a series of canyons until it meets the Colorado River in the [***9] middle of Canyonlands

National Park in southern Utah. *See id.* In particular, the river flows through the Flaming Gorge Reservoir in northeastern Utah, which provides for the long-term storage of water for beneficial use and allows for the regulation of the Colorado River. Several tributaries below the Flaming Gorge Reservoir and Dam, including the Yampa, Duchesne, White, Price, and San Rafael rivers, feed the Green River before its confluence with the Colorado River.³ *Id.*

[*P12] The Green River's water volume changes dramatically depending on the season—it is generally higher in spring during runoff and times of precipitation and lower in dry summer months and in cold winter months when the river ices over. On average, based on data collected between 1977 and 2007, the river has an average volume of 3.9 million acre-feet per year. There are approximately 139 approved water rights (excluding stock watering rights) on the Green River in the relevant area—between its confluence with the Price River and its confluence with the Colorado River. If all of the [***10] existing approved rights were vested or in use, total depletion from the Green River would be approximately 1.29% of the average volume.

[*P13] As the largest tributary of the Colorado River, the Green River is managed under numerous compacts, federal laws, court decisions, and regulatory guidelines, including the Colorado River Compact.⁴ Under this compact, Utah is allowed to deplete twenty-three percent of the water allocated to Utah, Colorado, Wyoming, New Mexico, and Arizona, *Utah Code Ann.* § 73-13-10 art. III (a)(2) (LexisNexis 2012), which equates to about 1.4 million acre-feet per year. The State Engineer estimates "that Utah water users currently deplete approximately one million acre-feet annually, which represents an underutilization of Utah's share of the Colorado River."⁵ But he also concedes that if all Utah "water rights of

³The Applicants' change applications sought to divert water from the Green River below all significant tributaries except the San Rafael River.

⁴In 1921, Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming entered into the Colorado River Compact to, among other things, provide for "the equitable division and apportionment of the use of the waters of the Colorado River System." *Utah Code Ann.* § 73-12a-2 art. I (LexisNexis 2012). For further information regarding the various other laws that govern the Colorado [***12] River, see generally U.S. Bureau of Reclamation, Dep't of the Interior, *Colorado River Storage Project, Law of the River*, <http://www.usbr.gov/uc/rm/crsp/index.html#law> (last updated Feb. 03, 2016) [<https://perma.cc/85P7-BM73>].

⁵*Utah Code section 73-1-2* provides, "The standard unit of measurement of the flow of water shall be the discharge of one cubic foot per second of time, which shall be known as a secondfoot; and

record were to be fully developed and put to use," that could deplete more than two million acre-feet, roughly 600,000 acre-feet more than Utah is [**1252] allotted under the compact. Indeed, characteristics of a prior appropriation system provide "the means for continued overappropriation of water" where an "established user can suddenly find himself in a junior position without a dependable [***11] water supply even in normal water years." Harrison C. Dunning, *State Equitable Apportionment of Western Water Resources*, 66 Neb. L. Rev. 76, 86-87 & n.6 (1987) (explaining that because of "its tendency to lead to overappropriation, . . . prior appropriation tends to produce great disparities between paper rights and actual rights"). Nevertheless, as the State Engineer points out, there are "at least 574,600 acre-feet of approved yet undeveloped water in the Upper Colorado River in Utah."⁶ So, although water rights are overapportioned, the amount of water actually in use, or the number of *vested* water rights, is significantly less than what is appropriated. Further, according to the U.S. Bureau of Reclamation, even under rapid growth in population, by 2060 Utah will have developed 1.38 million acre-feet of the 1.4 million acre-feet allotted under the compact.⁷

III. Procedural Background

[*P14] In January 2012, the State Engineer approved the Applicants' change applications, in which they sought to change the points of diversion and the nature of the use of the Districts' existing water rights. The San Juan County Water Conservancy District enjoys rights to 24,000 acre-feet of

the standard unit of measurement of the volume of water shall be the acre-foot, being the amount of water upon an acre covered one foot deep, equivalent to 43,560 cubic feet."

⁶The Upper Colorado River is part of the Colorado River Basin. "The term 'Colorado River Basin' means all of the drainage area of the Colorado River System and all other territory within the United States of America to which the waters of the Colorado River System shall be beneficially applied." *Utah Code Ann. § 73-12a-2 art. II(b)*. The Colorado River Basin "is divided into two basins, and an apportionment of the use of part of the water of the Colorado River System is made to each of them with the provision that further equitable apportionment may be made." *Id. § 73-12a-2 art. I*. In relevant part, the Upper Basin includes those areas of Arizona, Colorado, New Mexico, Utah, and Wyoming from which waters naturally drain into the [***13] Colorado River System above Lee Ferry ("a point in the Colorado River one mile below the mouth of the Paria River"). *Id. § 73-12a-2 art. II*.

⁷For an overview of the Colorado River in Utah, see generally D. Larry Anderson, *Utah's Perspective: The Colorado River* (2d ed. May 2002), <http://www.water.utah.gov/InterstateStreams/PDF/TheColoradoRiverart.pdf> [<https://perma.cc/XB7O-KWDF>].

water from the San Juan River in San Juan County to use for a coal-fired steam generation power plant.⁸ In its change application, the San Juan County Water Conservancy District proposed to change the point of diversion from the smaller San Juan River to the Green River in Emery County, Utah. The application also proposed that San Juan County Water Conservancy District's water would be stored in a new reservoir and be used for the Project.

[*P15] The Kane County Water Conservancy District also sought changes [***14] to its existing water rights. It holds rights to 29,600 acre-feet of water from Wahweap Creek and Lake Powell in Kane County, Utah, for steam generation in the abandoned Kaiparowits Power Project.⁹ In its change application, the Kane County Water Conservancy District also proposed to use its water rights to aid in producing nuclear power for the Project. Rather than diverting the water from Lake Powell, the Kane County Water Conservancy District proposed to divert the water from the same location proposed by the San Juan County Water Conservancy District in the Green River.

[*P16] After the State Engineer advertised the proposed changes, see *Utah Code Ann. § 73-3-6*, nearly fifty protests were filed against the Kane County Water Conservancy District's application and close to thirty protests against the San Juan County Water Conservancy District's application. In January 2010, the State Engineer held an informal administrative hearing on each application in Green River, Utah. Two years later, he approved the applications in separate orders.

[*P17] [**1253] HEAL Utah sought judicial review of both [***15] orders in the district court and named the State Engineer as a respondent. The district court consolidated the two cases pursuant to a stipulation and held a bench trial in September 2013. The Applicants called ten witnesses, including two rebuttal witnesses and at least four expert witnesses, and HEAL Utah called four witnesses. The district court's well-written and thorough twenty-five-page memorandum decision employed the reason-to-believe standard, and ruled that the Applicants' change applications met the statutory criteria. It therefore approved them subject to certain conditions. HEAL Utah now appeals the district court's decision.

ISSUES AND STANDARD OF REVIEW

⁸Although the Districts hold state-approved water rights, neither of the Districts has put its rights to use.

⁹The Kaiparowits Power Project was abandoned after the lands were included as part of the 1996 Grand Staircase-Escalante National Monument.

[*P18] On appeal, HEAL Utah contends the district court erred when it approved the Applicants' change applications because the Applicants "have not satisfied the burden of demonstrating that the Change Applications meet the requirements of [[Utah Code section 73-3-8](#)]."¹⁰ Specifically, it argues that (1) there is no unappropriated water in the proposed source, (2) the proposed diversion will have an "unreasonable impact on the natural stream environment" and is "contrary to the public welfare," and (3) the proposed change is not feasible and is speculative. [***16]

[*P19] Before considering the issues identified by HEAL Utah on appeal, we note that this is not an appeal from an adjudication of the parties' rights to use water. Rather, HEAL Utah's appeal requires us to determine whether the district court properly approved the Applicants' change applications which effectively authorized Blue Castle to proceed with plans to appropriate the water. Examining whether a change application meets the statutory criteria is a mixed question of law and fact, and the district court is given "significant, but not broad, discretion" in applying [***17] [Utah Code section 73-3-8](#) to the facts using the reason-to-believe standard. See [Searle v. Milburn Irrigation Co., 2006 UT 16, ¶ 18, 133 P.3d 382](#).

ANALYSIS

[*P20] [Utah Code section 73-3-8](#) requires, in relevant part, that a change application be approved if "there is reason to believe" that "there is unappropriated water in the proposed source," "the proposed use will not impair existing rights or interfere with the more beneficial use of the water," the proposed plan is "physically and economically feasible" and "would not prove detrimental to the public welfare," and "the applicant has the financial ability to complete the proposed works." See [Utah Code Ann. § 73-3-8\(1\)\(a\)](#) (LexisNexis Supp. 2015).

[*P21] The Utah Supreme Court has explained that "the burden of persuasion [rests] squarely on the change applicant." [Searle, 2006 UT 16, ¶ 50, 133 P.3d 382](#). But

because a change application is not a final adjudication of water rights, the reason-to-believe standard puts "a fairly low burden on a party seeking approval of a change application." [Id. ¶ 36](#); see also [id. ¶¶ 35-42](#) (explaining that "the reason to believe standard governs the change application process" and "a preponderance standard is reserved for a final adjudication of rights"). Despite this low burden of persuasion, however, "there may be situations in which even an unopposed change application is not approved because [***18] the applicant has failed to adequately persuade the decisionmaker that there is reason to believe that no harm will result from approval." [Id. ¶ 53](#). Further, "any party protesting a change application is . . . entitled to present evidence in an effort to convince the decisionmaker that application approval is not warranted under the circumstance." [Id.](#) And "[i]f the evidence produced by a protestant is compelling enough to undermine the [***1254] reasonableness of the assertion that the proposed change will not impair vested rights, the state engineer should reject the application seeking to effect that change." [Id. ¶ 56](#).

[*P22] Nevertheless, the Utah Supreme Court has explained that because "the policy of the law is to prevent waste and promote the largest beneficial use of water, new appropriations or changes should be favored and not hindered." [Little Cottonwood Water Co. v. Kimball, 76 Utah 243, 289 P. 116, 118 \(Utah 1930\)](#). Even in "a doubtful case, when the conclusion is not clear, it is more consistent with sound policy and with the general scheme of the law, to approve the application to appropriate and afford the new claimant the legal status and the opportunity to proceed in due order of law and have the disputed questions definitely and authoritatively determined, rather [***19] than to shut off such determination by the denial of his application." [Id.](#); accord [Lehi Irrigation Co. v. Jones, 115 Utah 136, 202 P.2d 892, 895 \(Utah 1949\)](#). Thus, "a change applicant's burden is satisfied if there is sufficient evidence to support a reasonable belief that the changes outlined in the application can be perfected without impairing vested rights." [Searle, 2006 UT 16, ¶ 46, 133 P.3d 382](#). In other words, a "change application cannot be rejected without a showing that vested rights will thereby be substantially impaired." [Crafts v. Hansen, 667 P.2d 1068, 1070 \(Utah 1983\)](#) (citation omitted). We address HEAL Utah's three contentions in turn.

1. There Is Reason to Believe There Is Unappropriated Water in the Green River for the Proposed Changes.

[*P23] HEAL Utah argues there is no unappropriated water in the Green River and therefore "the water rights upon which the Change Applications are based do not meet the requirements of [[Utah Code section 73-3-8\(1\)\(a\)\(i\)](#)]." Specifically, it argues the Green River is overappropriated, and the court's findings regarding the volume of water in the river

¹⁰Our analysis of HEAL Utah's arguments is limited because its arguments are often inadequately supported and briefed. Specifically, it has failed to marshal any evidence that contradicts its assertions and has largely failed to provide citations to the record. See [Utah R. App. P. 24\(a\)\(9\)](#). Rather, HEAL Utah only selectively refers to case law and the district court's decision. See [State v. Thomas, 961 P.2d 299, 305 \(Utah 1998\)](#) (explaining that adequate briefing requires "not just bald citation to authority but development of that authority," and "this court is not a depository in which the appealing party may dump the burden of argument and research" (citations and internal quotation marks omitted)).

was clearly erroneous.

[*P24] *Utah Code section 73-3-8* requires the State Engineer to consider whether there is reason to believe there is "unappropriated water in the proposed source." *Utah Code Ann. § 73-3-8(1)(a)(i)*. The statute does not define "unappropriated water."¹¹ But it does provide that "[b]eneficial use shall be the basis, the measure and the limit [***20] of all rights to the use of water in this state." *Utah Code Ann. § 73-1-3* (LexisNexis 2012). The statute's plain language expressly provides that Utah's water must be put to beneficial use and indicates that holders have the right to use only the amount of water that is actually put to beneficial use. Thus, "[a] water user's appropriations are limited to the amount that can be put to beneficial use. . . . 'regardless of the quantity [of water] that has been used for [past] purposes and the length of time it may have been used.'" *Green River Canal Co. v. Thayn*, 2003 UT 50, ¶ 34, 84 P.3d 1134 (second and third alterations in original) (quoting *Big Cottonwood Tanner Ditch Co. v. Shurtliff*, 49 Utah 569, 164 P. 856, 859 (Utah 1916)). In other words, to determine whether there is unappropriated water in a water source, the State Engineer does not simply add up all approved users' appropriation limits (the most water a particular holder is authorized to use); rather, he considers the amount of water from the source being put to beneficial use.

Under the language of the statute it is not a prerequisite to the approval of an application that the state engineer find affirmatively that there is unappropriated water in the proposed source. The proposition is stated in the negative, and it is only when there is no unappropriated water in the source that the application [***21] is to be rejected.

Little Cottonwood Water Co., 289 P. at 118. Thus, if there is unappropriated water in a proposed source, or "it is not clear that there is no unappropriated water in the proposed source, and the applicant satisfies the other requirements, the State Engineer should not withhold his approval." *Lehi Irrigation Co.*, 202 P.2d at 895. Accordingly, when a dispute [**1255] arises about whether there is unappropriated water, two questions naturally arise: (1) What is the total supply? and (2) How much is in use? See *Little Cottonwood Water Co.*, 289 P. at 117. Only if the State Engineer finds the amount of water in beneficial use exceeds the supply can he find that there is no unappropriated water.

[*P25] Here, the district court determined there is "unappropriated water available for the Project in the Colorado River Drainage in Utah, and specifically in the Green River." With regard to the first question, the court determined that under the Colorado River Compact, Utah is allotted approximately 1.4 million acre-feet per year. The court found that "Utah has [***22] developed and uses approximately 1 million acre-feet per year of its Colorado River allocation, leaving approximately 400,000 acre-feet . . . per year currently unappropriated." Further, it found that approximately 369,000 acre-feet of water in the Colorado River Basin is available to be applied to a beneficial use.

[*P26] Second, it found that "there are at least 574,600 acre-feet of approved yet undeveloped water in the Upper Colorado River Basin in Utah for which the State Engineer has previously approved appropriation applications, but which remains unappropriated, including the Kane and San Juan Applications." The court explained, "If all of the water represented by the approved applications for appropriation were actually appropriated, that is, put to beneficial use, then Utah's allocation would in fact be over-appropriated." But, it further reasoned, because many of the approved applications for appropriation have not been applied to some beneficial use, "the Upper Basin in Utah is not, in fact, over appropriated." The court further explained the Applicants' change applications "concern water already approved for appropriation within the Colorado River drainage in Utah, but not yet [***23] appropriated, or actually applied to the approved use." Recognizing that "all water tributary to the Colorado River Basin [is] hydrologically connected," it therefore determined, "[a]pproval of the Applications does not constitute a new appropriation of water within the Colorado River Basin," but instead merely constitutes "new diversions from the Green River, which is part of that Basin."

[*P27] On appeal, HEAL Utah contends the district court erred because its determination inappropriately relied on water released from Flaming Gorge Reservoir during periods of low flow that "is not available for appropriation." Specifically, it argues that using water released from the Flaming Gorge Dam and Reservoir will disrupt the natural stream environment. In other words, Heal Utah essentially argues that water from the Flaming Gorge Reservoir is "legally" unavailable for appropriation and cannot be diverted because it is needed for a recovery program governed by the *Endangered Species Act* meant to protect critical habitats and recover endangered fish.

[*P28] Not only are HEAL Utah's assertions insufficiently supported, they are incorrect. Except for a general citation to the Endangered Species Act and a record cite [***24] to the U.S. Bureau of Reclamation's impact statement for the

¹¹ This omission seems worth addressing legislatively. Appropriation is a key concept in water law and the word appears frequently in title 73 of the Utah Code. In fact, chapter 3 of the title bears the name "Appropriation." Yet, the code does not define it.

proposed recovery program, HEAL Utah cites to no statute or law that mandates these types of restrictions on the Green River. See *Utah R. App. P. 24(a)(9)* (explaining that arguments must contain citation to "authorities, statutes, and parts of the record relied on"). Instead, HEAL Utah merely asserts that the water from the Flaming Gorge Reservoir, during low flow or dry seasons, is "specifically calculated to meet flow and temperature targets for all" parts of the Green River and is "intended to be left in the river undiverted from the point of release . . . to maintain and restore designated critical habitat." But nothing in the record suggests that water from the Flaming Gorge Reservoir cannot be diverted, and although the goal of the recovery program is to "recover the listed species of the Upper Colorado River to the point of delisting," the program also expressly allows for "the continued operation and development of the water resources of the Upper Colorado River Basin." Water releases from the Flaming Gorge Dam and Reservoir are not just for this recovery program; rather, according to the U.S. Bureau of Reclamation, releases for the recovery [***25] program are merely modifications of the regular operations of the Flaming [**1256] Gorge Dam "to achieve the flows and temperatures" to assist in the recovery of endangered fish and their habitat. Thus, by its plain language, the recovery program's "goal is to implement the proposed action and, at the same time, maintain and continue all authorized purposes of the Colorado River Storage Project"—which is to allow Upper Basin states to utilize their Colorado River Compact apportionments. See U.S. Bureau of Reclamation, Dep't of the Interior, Record of Decision: Operation of Flaming Gorge Dam Environmental Impact Statement 1 (Feb. 2006), <http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1581&context=govdocs> [<https://perma.cc/8J54-JETK>] ; see also U.S. Bureau of Reclamation, Dep't of the Interior, *Colorado River Storage Project, Overview*, <http://www.usbr.gov/uc/rm/crsp/#overview> (last updated Feb. 3, 2016) [<https://perma.cc/TZ98-YW77>] .

[*P29] HEAL Utah's argument ignores the fact that the Green River and its tributaries form an interconnected system of which the Flaming Gorge Reservoir is only a part. The Green River, with its many tributaries, spans parts of Wyoming, Colorado, and Utah before joining the Colorado River. Although one portion of the Green River flow is largely influenced by the reservoir, according to the U.S. Bureau of Reclamation, the portion [***26] of the river the Applicants propose to use is further "influenced by tributary flows from the White, Duchesne, Price, and San Rafael Rivers." Accordingly, only a portion of the flow in the Green River at the proposed point of diversion relies on release from the Flaming Gorge Reservoir. We therefore conclude the court did not err in determining there is reason to believe that there is unappropriated water in the Green River.

2. There Is Reason to Believe the Proposed Changes Will Not Unreasonably Affect Public Welfare and the Natural Stream Environment.

[*P30] HEAL Utah contends that the reduction in flows in the Green River, specifically in the quantities contemplated under the Applicants' change applications, will unreasonably affect the natural stream environment and is contrary to public welfare.

[*P31] *Utah Code section 73-3-8* provides,

If the state engineer, because of information in the state engineer's possession obtained either by the state engineer's own investigation or otherwise, has reason to believe that an application [to appropriate water] . . . will unreasonably affect public recreation or the natural stream environment, or will prove detrimental to the public welfare, the state engineer shall withhold approval [***27] or rejection of the application until the state engineer has investigated the matter.

Utah Code Ann. § 73-3-8(1)(b) (LexisNexis Supp. 2015). "If an application does not meet the requirements of this section, it shall be rejected." *Id. § 73-3-8(1)(c)*.

[*P32] With the information in its possession, the district court found there was reason to believe the proposed changes would not affect public recreation or the natural stream environment, and there would be no detriment to the public welfare. In particular, based on evidence presented by the Applicants, the court found that "99% of the time the width of the river will be reduced less than 1.5 feet, out of an average width of approximately 350 feet" and "99% of the time the depth of the river would be reduced less than 1.5 inches." The court also found that, although the "stretch of the Green and Colorado Rivers from Flaming Gorge Reservoir to Lake Powell includes critical habitat" for the four species of endangered fish unique to the Colorado River system, HEAL Utah's evidence and experts were unable to demonstrate the extent of impact the diversions would have on the fish or stream. Specifically, it found that, based on expert testimony offered by HEAL Utah, "the depth necessary for [***28] the fish larvae and fry to survive and thrive was between 29 and 38 centimeters (i.e., approximately 11 to 14 inches)." Then, the court restated that the evidence showed a change in depth less than 1.5 inches "99% of the time" and less than 1 inch "95% of the time." It reasoned that to accept HEAL Utah's argument would be illogical because "no one between Flaming Gorge and the confluence of the Green and Colorado rivers [**1257] would be able to divert or use any water" to "satisfy the requirements of the Endangered Species Act." The court therefore concluded "that there is reason to believe

that there will not be any unreasonable effect on the natural stream environment."

[*P33] Importantly, the court emphasized that the nuclear power plant licensing process is comprehensive and requires Blue Castle to "undergo a safety review, an environmental review and antitrust review." "In order to construct or operate a nuclear power plant," the court explained, "an applicant must submit a Safety Analysis Report," which contains the design information of the plant, comprehensive data on the proposed site, discussion of various hypothetical accident situations and safety features of the plant, and a comprehensive [***29] assessment of the plant's environmental impact. Thus, it determined that, in light of the heavy regulation of nuclear power plants and the U.S. Supreme Court's decision in *Power Reactor Development Co. v. International Union of Electrical, Radio and Machine Workers, AFL-CIO*, 367 U.S. 396, 81 S. Ct. 1529, 6 L. Ed. 2d 924 (1961), which explains that nuclear power plant licenses "can be issued only consistently with the health and safety of the public," the court has "reason to believe that the proposed plan will not prove detrimental to the public welfare." (Quoting *id. at 404.*) Essentially, the court pointed out that there are stringent federal and state regulations concerning the construction and operation of nuclear power plants, and the State Engineer has continued "jurisdiction to participate in the review and approval (or disapproval) of diversion structure plans and the construction of water storage facilities." Then, it concluded that although concerns regarding the environmental impacts and the radiological health are valid, federal and state oversight of building and operation of nuclear production, "together with a lack of evidence indicating negative" impacts, means that federal or state agencies will not allow the Project to proceed in a manner that will be detrimental to the public welfare.

[*P34] On appeal, as it did in the district court [***30] below, HEAL Utah argues that the Applicants' proposed diversions would "undermine" the recovery program at the Flaming Gorge Reservoir and Dam by threatening fish populations and this negatively affects the nature of the stream. Again, HEAL Utah argues that to protect the fish species in the Colorado River, the U.S. Fish and Wildlife Service has called for the "[l]egal protection of Green River flows from Flaming Gorge Dam and Lake Powell." It further argues that the proposed change "will negatively impact the agricultural economy of Green River that is wholly dependent on vested water rights." HEAL Utah essentially asserts that the small benefit of nuclear power is outweighed by negative consequences for tourism, local economies, and agriculture.

[*P35] But HEAL Utah has failed to meet its burden of persuasion on appeal. Mere probabilities and speculative

evidence may be sufficient to challenge a change application; a protestant need only produce enough compelling evidence "to undermine the reasonableness" of the change application. *Searle v. Milburn Irrigation Co.*, 2006 UT 16, ¶¶ 55-56, 133 P.3d 382 (explaining that "[d]eterminations of whether impairment would result from application approval often hinge on probabilities," but that "circumstantial evidence showing a possibility [***31] of impairment" does not always justify denying an application). But on appeal, considering the "significant" deference enjoyed by the district court when determining whether evidence "is sufficiently compelling to foreclose application approval," see *id.* ¶ 18, the appellant must "marshal all the supporting evidence and demonstrate its insufficiency" to challenge the court's findings, see *Cowley v. Porter*, 2005 UT App 518, ¶ 32, 127 P.3d 1224 (citation omitted). "[A] party challenging a factual finding or sufficiency of the evidence to support a verdict will almost certainly fail to carry its burden of persuasion on appeal if it fails to marshal." *State v. Nielsen*, 2014 UT 10, ¶ 42, 326 P.3d 645.

[*P36] HEAL Utah has not actually challenged the district court's factual findings. Rather, it provides the history and details of the recovery program, a description of the relationship between water in the Green River and the local community, and then asserts that residents in other states, not Utah residents, [***1258] will benefit from the nuclear power generated by the Project. HEAL Utah cites no legal authority to support its arguments, and offers no references to the parts of the record on which it relies. See *State v. Thomas*, 961 P.2d 299, 305 (Utah 1998); see also *Utah R. App. P. 24(a)(9)*. It has, accordingly, not demonstrated that the district court erred in finding [***32] a reason to believe that the change will not unreasonably affect public recreation or the natural stream environment, or be a detriment to the public welfare.

3. There Is Reason to Believe the Proposed Changes Are Feasible and Not Speculative.

[*P37] HEAL Utah finally contends that the Applicants' change applications do "not provide the necessary statutory information to support an approval by the State Engineer." Specifically, it argues the information the Applicants provided in their applications "demonstrates that the proposed beneficial use of water—supplying a currently unbuilt nuclear power plant—is neither financially feasible nor anything more than a purely speculative use of water."

[*P38] *Utah Code subsection 73-3-8(1)(a)* provides that the State Engineer should approve an application if "there is reason to believe" that (A) "the proposed plan . . . is physically and economically feasible," and (B) "the application was filed in good faith and not for purposes of speculation or monopoly." *Utah Code Ann. § 73-3-*

[8\(1\)\(a\)\(iii\)-\(v\)](#) (LexisNexis Supp. 2015). These determinations are fact-intensive.

A. Physical and Economic Feasibility

[*P39] HEAL Utah argues that the Applicants failed to demonstrate that the proposed plan is physically feasible [***33] because they did not present any evidence from the Nuclear Regulatory Commission. Similarly, it argues that the Applicants failed to demonstrate the proposed plan is economically feasible because they "failed to provide any credible evidence or expert testimony regarding the economic feasibility of the project." The information contained in the record, HEAL Utah argues, "amounts to little more than vague generalizations regarding 'power need.'"

[*P40] "To prove that a potential use of property is feasible, three specific elements must be established." Cf. [City of Hildale v. Cooke, 2001 UT 56, ¶ 24, 28 P.3d 697](#) (discussing the determination of feasibility with regard to the use of condemned property).

First, it must be demonstrated that the use is physically feasible—that the land is physically suited or adaptable to the potential use. Second, it must be established that the use is legally feasible—that the land is legally available for the potential use, or that any legal restrictions currently preventing the potential use have a reasonable probability of being modified so that they no longer pose a barrier. Finally, it must be proven that the potential use is economically feasible—that there is sufficient demand for the potential use.

Id. (citations [***34] omitted). "[A] landowner may testify concerning the individual elements of feasibility, but that landowner must offer the testimony of a properly qualified expert to prove the actual feasibility of a potential use." *Id.* ¶ 25. The Utah Supreme Court has explained,

While landowners may testify as to a proposed use they may have for the land . . . , including their own foundational testimony establishing what steps have been taken to realize a transformation in use of their property, they may not testify to the highest and best use of the property itself unless a foundation is laid establishing their expertise.

Id. (citations omitted).

[*P41] The district court considered the proposed site for the Project and examined its feasibility. With regard to its physical feasibility, the court considered the site's proximity to necessary rail transportation, highways, and electrical transmission lines, along with the fact that "[u]nder the supervision of the Nuclear Regulatory Commission ("NRC"), the Project has conducted geological testing and

archaeological studies, has installed seismic monitoring equipment, and has completed approximately 50% of the NRC Early Site [**1259] Permit application, at a total cost of \$17.5 [***35] million to date." Although Blue Castle had not decided on a reactor design, the court explained that "[n]o physical impediments have been identified that would prohibit construction of the Project" and that the permit process necessarily "resolves site safety, environmental protection, and emergency preparedness issues independent of a specific nuclear plant design." It concluded "that there is reason to believe the proposed plan is physically feasible because the physical site proposed for the Project so far meets all the criteria necessary for the construction of the proposed works."

[*P42] With regard to the Project's economic feasibility, the court found that Utah's position as the third fastest growing state in the United States will increase the demands for electrical power. The court made further findings of fact regarding energy supply and demand for both Utah and the nation. Specifically, it determined that at Utah's growth rate, "by 2025 Utah will require 1,440 megawatts of new power beyond that currently produced in the state." The court weighed the benefits and problems with alternative sources of power, such as solar power and natural gas, and particularly that "98% of Utah's electricity [***36] is currently generated by fossil fuel power plants" and that it "is highly unlikely that any new coal plants will be constructed in Utah, or in the western region where the Project would likely serve." Then, it determined that, based on Blue Castle's proposal, "[n]uclear power is ideal for base load" because it "produces no carbon or particulate emissions and does not result in visual pollution." It further explained that Blue Castle had "established the cost-effectiveness of supplying nuclear power," particularly that "nuclear's production costs are lower than any other thermal resource" and that "nuclear power [is] permanently competitive with" coal and natural gas production. The court recognized the high cost of plant construction, but the cost of power generation "is equivalent to or cheaper than other alternatives." Finally, although the court recognized that it was unclear if Blue Castle could "find partners to construct the nuclear plant itself," the court found that "Blue Castle's business plan shows the Project, if built, will eventually be profitable." The court explained, "Blue Castle is not required to have a business plan that is certain to succeed, but rather it is only required [***37] to establish that its plan is economically feasible." It then concluded, "Even though there are high construction costs associated with a nuclear plant, at this point . . . there is reason to believe the Project is economically feasible."

[*P43] Similarly, the district court determined there is reason to believe Blue Castle has the financial ability to

complete the Project. The Project will cost between \$15 and \$20 billion, and Blue Castle was on track with its "staged plan to build the Project," including the \$17.5 million already raised and raising the approximately \$50 million necessary for the early site permit.

[*P44] Much like its other arguments HEAL Utah has not actually challenged the district court's findings. Rather, it essentially argues the Applicants could not have met their burdens without "a properly qualified expert to prove the actual feasibility of a potential use." (Quoting *City of Hildale*, 2001 UT 56, ¶ 25, 28 P.3d 697.) But by its plain language, *section 73-3-8* only requires the Applicants to demonstrate there is a "reason to believe" the Project is feasible. *Utah Code Ann. § 73-3-8(1)(a)(iii)* (LexisNexis Supp. 2015). Our supreme court has explained that this "reason to believe" standard is a low hurdle. Indeed, to satisfy this burden, the Applicants merely must demonstrate [***38] by less than a preponderance of the evidence that the Project is feasible. See *Searle v. Milburn Irrigation Co.*, 2006 UT 16, ¶ 46, 133 P.3d 382 (explaining that the "reason to believe" standard falls "between the preponderance standard applicable in final adjudications" and "the lowest of hurdles").

[*P45] Despite the relatively early stage of the Project, the Applicants offered considerable evidence that the Project is feasible, including a detailed business plan, purchase contracts for land, lease agreements for the Districts' water rights, and evidence that shows it has had discussions with eighteen utilities expressing an interest in the plant's power. More importantly, contrary to HEAL Utah's assertions, the Applicants offered expert [**1260] testimony from at least one designated expert in the field of energy economics and regulatory consultation, who testified regarding the Project's economic feasibility, the quality of Blue Castle's development plan and business model, and "the embedded optionality in the project as proposed." In particular, an expert testified that Blue Castle's business model was based on reasonable assumptions and that the "growth in demand in Utah, driven by macro-economic and demographic growth, taken in aggregate in the coming decades, [***39] more than justifies" Blue Castle's plan. In sum, the expert testified that various factors, including Utah's demand for cleaner energy and the reasonableness of Blue Castle's business plan, made the Project economically feasible. So, although the Project is a risky venture and has not yet been licensed through the Nuclear Regulatory Commission, the Applicants presented evidence that the Project is both physically and economically feasible. Therefore, in light of the low burden on the Applicants and HEAL Utah's failure to adequately challenge the district court's factual findings, we cannot conclude the court erred.

B. Speculation and Monopoly

[*P46] HEAL Utah argues the Project is speculative because Blue Castle has failed to take title of the proposed site. It also argues the Applicants have not shown that they "inten[d] to divert and use water allocated under the application" because they "are merely attempting to claim water for future use by another." It asserts that the Applicants "do not contest this description of the limited role that they will play in the proposed diversion or beneficial use of the water." Rather, HEAL Utah argues that, by Blue Castle's own account, "Blue Castle will shoulder [***40] the project through licensing and then [unidentified] utility participants effectively use their own credit facilities to construct the project." (Alteration in original.) (Internal quotation marks omitted.)

[*P47] The district court found, "While the Project is certainly ambitious, Blue Castle has mapped out a clear pathway to achieve its plan." It explained that Blue Castle "intends to market [the Project] through a 'derisking' process to make the Project attractive to investors" but that "does not amount to speculation within the meaning of the statute." Rather, the court concluded that, within the context of *Utah Code section 73-3-8*, "'speculation' means holding the water itself for the purposes of speculation." Further, the court determined that the fact that Blue Castle has spent upwards of \$17.5 million working on the Project demonstrated that its use of the water was not speculative.

[*P48] By its plain language, the statute requires an applicant to apply for apportionment in a good faith manner. See *Utah Code Ann. § 73-3-8(1)* (LexisNexis Supp. 2015). The Utah Supreme Court has emphasized that "speculation in the public waters of this state is against the best interests of its people." *Frailey v. McGarry*, 116 Utah 504, 211 P.2d 840, 847 (Utah 1949). It further explained, "Although the legislature has [***41] given formal expression to this principle, the principle would be equally true in the absence of statute." *Id.* But no case law has defined what it means to apply for appropriation of water for the "purposes of speculation," and there are few Utah cases regarding speculative uses of water.

[*P49] In one such case, the Utah Supreme Court determined that an application was properly rejected where the applicant sought to obtain water for speculative purposes. In *Western Water, LLC v. Olds*, the Utah Supreme Court determined that an application was speculative where the applicant had various alternative plans to use "water from virtually every source in the Salt Lake and Utah Valley watersheds" to sell to others. 2008 UT 18, ¶ 26, 184 P.3d 578. Further, it "listed over 150 separate diversion points" to be "salvaged and stored for new and more efficient uses." *Id.* ¶ 5.

But the applicant's proposed plans were so complex that the State Engineer characterized them as "grandiose and highly speculative." *Id.* ¶ 4 (internal quotation marks omitted). As the supreme court explained, the application essentially asked the State Engineer to "root around for unappropriated water and then award that water." *Id.* ¶ 26. Essentially, "the only [***42] proposed beneficial use for the water was a plan to sell it to others." *Id.* ¶ 8. Yet [**1261] the applicant had "no lands, facilities, customers, or contracts" in support of the various proposed plans. *Id.* (internal quotation marks omitted).

[*P50] But here, there are contracts in place assigning the Districts' current water rights to Blue Castle. Although Blue Castle does not intend to build the power plant without the assistance of other entities, the purpose and use of the water is clearly defined—it will be used for the generation of nuclear power. Unlike the applicants in *Western Water*, Blue Castle has proposed a site for the plant, invested money to develop the plant, and offered a detailed description of the purpose for the water and specific amount of water needed. This enormous risk and detailed plan for the nuclear plant demonstrates that Blue Castle's interest in obtaining this water is not merely speculative. In sum, HEAL Utah has not shown that the district court erred in concluding the change applications were filed in good faith and are not speculative or for monopoly of the water.

CONCLUSION

[*P51] Because the Applicants put forth enough evidence to demonstrate that the proposed changes can [***43] be undertaken without impairing vested rights, we conclude the district court properly approved the Applicants' change applications. Although it has identified some evidence to undermine the Applicants' reasoning, HEAL Utah's unsupported arguments are not sufficient to compel the denial of the change applications. We therefore affirm the district court's decision.