April 15, 2020

VIA ELECTRONIC MAIL

TO: CURRENT SERVICE LIST

EL SUR RANCH HEARING: RULING LETTER ON THE APPLICABILITY OF WATER CODE SECTION 1004 AND PROCEDURAL DIRECTIVE TO THE APPLICANT

This proceeding pertains to Application 30166 filed by James J. Hill III (Applicant) on behalf of El Sur Ranch to appropriate water for the irrigation of 246 acres of pastureland along the Pacific Coast in Monterey County. This ruling letter conveys my opinion on the applicability of Water Code section 1004 to the irrigation of pastureland as proposed in the application, and my direction to the Applicant on the remaining procedural steps necessary for the State Water Resources Control Board (State Water Board or Board) to act upon the application.

From the accounts presented in this proceeding, El Sur Ranch seems to be a unique property of historical, cultural, and aesthetic value. The interpretation of Water Code section 1004 presented here is not a judgment about the value of the continued operation of the ranch. Rather, it is a judgment about the meaning of Water Code section 1004, the intent of the legislature in its enactment, and the merit of reasonable and sustainable irrigation practices for the State of California.

I conclude that Water Code section 1004 applies to the irrigation of pastureland as proposed in the application, and therefore, any permit issued based on the application currently before the Board must be limited to 2.5 acre-feet of water per acre irrigated. This analysis reflects my interpretation of the Water Code based on the information currently before me and is not a final determination or final action by the Board interpreting or applying Water Code section 1004. My opinion, and the content of any final determination by the Board, is subject to change. It is up to the Applicant to decide whether to modify the project and application in response to the opinion reflected here or continue to pursue an application to appropriate in excess of 2.5 acre-feet of water per acre of irrigated pastureland.

In addition to considering the applicability of Water Code section 1004, this letter provides procedural directive to the Applicant in response to developments since the close of the evidentiary hearing in 2011. The Applicant shall submit, within 60 days of the date of this letter: 1) a proposed schedule to revise the application to reflect the Applicant’s current intent, to complete the required environmental documentation, and
to conduct a supplemental hearing; and 2) an interim plan and time schedule for diversions, while the application for a water right is pending, to protect to the extent feasible public trust resources in the Big Sur River. Other parties in this matter will have 30 days to comment on the Applicant’s proposed schedule and interim plan of operation. I will then issue a ruling on further proceedings.

Background on El Sur Ranch Operations

El Sur Ranch consists of about 7,000 acres in Monterey County, located approximately 25 miles south of Monterey. The irrigated pasture at issue in this proceeding is located to the west of Highway 1 along the Pacific Ocean. Water for irrigation of the pasture is pumped from two wells located in nearby Andrew Molera State Park, adjacent to the Big Sur River. One of the wells has been in operation since 1949 and the other was put into operation in 1984. Prior to the filing of Application 30166 by James J. Hill III in 1992, the State Water Board determined that the extractions from the wells were diversions from a subterranean stream and required a permit under Division 2 of the Water Code.

The irrigated pasture is made up of a mixture of forage plants that include both native and non-native species and is used by El Sur Ranch for grazing cattle. (ESR-11, pp. 4-5.) The Ranch’s experts estimate that the carrying capacity of the irrigated pasture is 246 animal units per year based on forage production estimates. (ESR-26, p. 15.) According to testimony by James J. Hill III, owner and operator of El Sur Ranch, the irrigated pasture is fertilized and applied with herbicides for weed control and grazed on a rotation schedule. (ESR-11, pp. 4-5.) Mr. Hill testified that the pasture is not disked, or presumably, tilled by other means, as the soil disturbance would harm the perennial forage species in the pastures and could result in erosion and invasion of weed species. (Ibid.; ESR Hearing, R.T. June 16, 2011, pp. 256:20-257:16.)

The Ranch’s experts estimate an average annual irrigation demand of 4.4 acre-feet per acre for the irrigated pasture. (ESR-26, p. 15.) The actual demand varies from year to year depending on weather conditions. (ESR-11, pp. 8-9.) The irrigation season generally begins in April or May and ends in September or October. (ESR-12, p. 48.) Between 1975 and 2009, the Ranch’s reported average annual diversions were estimated to be 889 acre-feet per year, with a maximum annual diversion of 1,737 acre-feet. (Id., pp. 38-39.) To irrigate the pasture, water is pumped from the wells through pipelines to valves located at intervals across the fields. (Id., p. 46.) The ranch manager opens an appropriate number of valves to release water down the fields. (Ibid.) Tailwater is discharged to the ocean or collects in a tailwater pond. (Id., p. 47.) Because of the salinity of irrigation water applied to the pasture, the Ranch’s experts estimate a 10% leaching requirement to prevent the accumulation of salts in the root zone that would be harmful to the pasture grasses. (Id., pp. 33-35.)

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1 Leaching is the practice of applying more irrigation water than is used by the crop to prevent salt concentration from building up in the root zone and reducing crop production.
Procedural Background

In July 1992, Mr. Hill filed Application 30166 with the State Water Board’s Division of Water Rights (Division) for the appropriation of water from the subterranean flow of the Big Sur River to maintain the irrigated pasture on El Sur Ranch. The Applicant amended the application in November and December 2005, in October 2006, and again in June 2011. The current application is for diversion of an annual maximum of 1,320 acre-feet, a maximum 20-year rolling average of 1,087 acre-feet per year, a seasonal limit of 676 acre-feet from July through October, and a monthly limit (July to October) of 203 acre-feet at a rate not to exceed 5.84 cubic feet per second (cfs). Several parties, including the California Department of Fish and Wildlife (CDFW), protested the application based on the impact of the diversions on flows in the Big Sur River and habitat for South Central California steelhead and other protected species.

An evidentiary hearing was held in June and July 2011. The parties submitted extensive evidence and arguments, including argument addressing whether the water sought to be appropriated by the Applicant would be put to reasonable and beneficial use. Several years after the hearing, CDFW identified flow recommendations to protect fish and wildlife resources dependent on the Big Sur River in a report dated September 23, 2016, pursuant to Public Resources Code section 10002. The State Water Board must consider these proposed stream flow requirements when acting on an application to appropriate water. (Wat. Code, § 1257.5.) Because CDFW’s report and flow recommendations for the Big Sur River were issued after the close of the evidentiary hearing, a supplemental hearing is likely necessary to admit the report into the evidentiary record for the Board’s consideration.

After issuance of CDFW’s report, El Sur Ranch and CDFW engaged in lengthy settlement negotiations to attempt to resolve CDFW’s protest to the application. El Sur Ranch and CDFW reached a settlement agreement dated April 15, 2019. (Joint Hearing Management Conference Statement and Hearing Management Plan, Exhibit C [hereafter “Agreement”].) The Agreement would allow the Applicant to obtain a permit that authorizes diversion of up to 1,320 acre-feet per year (1,087 acre-feet per year on a 20-year rolling average) with conditions on the Ranch’s operation of the wells including minimum bypass requirements measured at a USGS gage on the Big Sur River. The Agreement provides that the Ranch will construct an off-stream reservoir to store water for use when bypass requirements limit pumping. The Agreement settles most but not all of the matters in dispute between CDFW and the Applicant. Implementation of the Agreement would require the Applicant to amend its application to include off-stream storage and revise the place of use to reflect the construction of the pond and replacement pasture for the pond area. (Agreement, pp. 1-3.)

On April 30, 2019, the State Water Board held a Hearing Management Conference to consider next steps in acting upon the pending application in light of the Agreement. During the conference, Tom Berliner on behalf of El Sur Ranch and Kevin Takei on behalf of CDFW presented a summary of the Agreement’s terms. The Agreement
strikes a compromise between instream flows for steelhead in the Big Sur River and El Sur Ranch’s operational needs for irrigation by requiring El Sur Ranch to construct an off-stream storage pond to store water pumped when minimum instream flows in the Big Sur River are met, and to forgo diversions when stream flows drop below minimum levels. When water is not available for diversion through the wells, El Sur Ranch must rely on stored water to satisfy irrigation demands.

The Agreement does not address, and the parties to the Agreement did not explicitly consider in their negotiations, legal objections to the application raised by CDFW in its protest and during the hearing based on Water Code section 1004. (ESR Hearing Management Plan Conference, R.T. April 30, 2019, p. 23:10-23:13; CDFW Closing Brief, pp. 26-28.) Water Code section 1004 states:

As used in this division, “useful or beneficial purpose” shall not be construed to mean the use in any one year of more than 2 ½ acre-feet of water per acre in the irrigation of uncultivated areas of land not devoted to cultivated crops.

CDFW asserted in its protest and during the hearing that Water Code section 1004 applied to operations at El Sur Ranch because the irrigated pasture is an uncultivated area of land not devoted to cultivated crops. If applicable to El Sur Ranch’s pastureland, the State Water Board is limited to permitting no more than 2.5 acre-feet per acre for irrigation. The application currently requests a total maximum diversion volume well in excess of this amount: up to 5.4 acre-feet per acre under the proposed maximum annual diversion and up to 4.4 acre-feet per acre under the proposed 20-year annual rolling average. Even setting aside El Sur Ranch’s estimated 10% leaching requirement would not reduce the proposed diversion amounts within the limits allowed by section 1004. In turn, El Sur Ranch has asserted throughout this proceeding that Water Code section 1004 does not apply to the ranch’s irrigated pastureland because the pasture is subject to active agricultural management. (ESR Hearing Management Plan Conference, R.T. April 30, 2019, p. 20:21- 20:24; ESR Closing Brief, pp. 22-24.)

In acting on the application, or an amended application incorporating terms of the agreement between CDFW and El Sur Ranch, the Board will have to determine whether Water Code section 1004 applies to irrigation of El Sur Ranch’s pastureland. If section 1004 applies, the Board is prohibited by law from finding the application of water in excess of 2.5 acre-feet per acre to be a beneficial use and would be unable to approve the application in accordance with the Agreement. Water Code section 1004 raises a threshold question that could significantly limit the quantity of water that may be permitted for appropriation. The following analysis is intended to articulate for the applicant and other parties my consideration of this important issue so that the applicant has this information when deciding how to proceed, though I reiterate that this letter is not a final determination.
Historical Background of Water Code Section 1004

Water Code section 1004 was enacted as section 42 of the Water Commission Act of 1913. (Stats. 1913, ch. 586, § 42, pp. 1012–1033.) The provision appears to have originated from conflicts in the Central Valley between riparian landowners who used water for flood irrigation of grasslands for cattle forage, and upstream appropriative irrigators. The 1886 decision of the California Supreme Court in Lux v. Haggin and subsequent rulings of the California courts solidified the superior right of riparian landowners to the full flow of the stream, regardless of demands for beneficial use by upstream appropriators. (Lux v. Haggin (1886) 69 Cal. 255.) In that case, the cattle ranching enterprise of Miller & Lux, Inc., successfully obtained an injunction to prevent upstream diversion of water for irrigation of non-riparian agricultural lands so that it could continue to flood irrigate thousands of acres of grasslands for cattle forage. (Ibid.; Eric T. Freyfogle, Lux v. Haggin and the Common Law Burdens of Modern Water Law, 57 U.Colo.L.Rev. 485 (1986).)

In 1911, the California Legislature established a Conservation Commission to investigate and report on the use and management of natural resources in the state and propose a legislative solution. In the portion of its report on water resources, the Commission noted the practice of a particular riparian landowner in the San Joaquin Valley (likely Henry Miller of Miller & Lux, Inc.) to flood his “almost limitless cattle pastures with unnecessarily enormous quantities of water.” (Report of the Conservation Commission of the State of California (January 1, 1913) p. 28 [hereafter, “Commission Report”].) The draft water bill proposed by the Conservation Commission did not, however, include the specific language of Section 42 that would limit irrigation of uncultivated lands to 2.5 acre-feet per year. Section 42 was introduced in an amendment to the bill by the Senate with no discussion on the record. There is unfortunately little additional legislative history on the provision to illuminate the legislature’s intent.

The only judicial consideration of section 42 of the Water Commission Act that is readily available was in the case of Herminghaus v. Southern California Edison Co. (1926) 200 Cal. 81. The California Supreme Court held that the limitation on irrigation in section 42 undermined vested riparian rights and therefore exceeded the police powers of the state. The court’s decision prompted an amendment of the California Constitution in 1928, to prohibit the wasteful or unreasonable use of waters of the state regardless of the claim of right under which the diversions were made. (Cal. Const., Art. X, section 2.) Subsequent case law upheld the prohibition against the unreasonable diversion or use of water, effectively reinstating section 42 (now codified as Water Code section 1004) in application to riparian rights. (See Gin Chow v. City of Santa Barbara (1933) 217 Cal. 673, 700-706; Code Com. Notes, 67C West’s Ann. Wat. Code (2009 ed.) foll. § 1004, pp. 395-396 [the limitation was included in the 1943 codification of the Water Code, because the 1928 constitutional amendment superseded Herminghaus, supra].)
Analysis of Section 1004

Irrigation of pasture for livestock is generally considered to be a beneficial use. Water Code section 1004 dictates, however, that the use of more than 2 ½ acre-feet per acre per year of water to irrigate uncultivated areas of land not devoted to cultivated crops shall not be considered beneficial. El Sur Ranch asserts that section 1004 does not apply to the Ranch’s irrigated pasture because the land has been extensively managed and improved by skill, labor, and investment. (ESR Closing Brief, p. 22.) As described by witnesses for the Ranch, the Ranch actively manages its pasture land to improve its productivity as compared to natural conditions, including leveling and construction of berms, consultation with agricultural experts on growth of pasture grasses, installation of an irrigation system and drainage improvements, planting and management of non-native forage, annual pasture fertilization, application of herbicides and control of invasive species, and restoration and repair of the pasture as needed. (Id., p. 23.) The Ranch points to case law, dictionaries, expert testimony, and USDA’s glossary of terms in support of its position that the term “uncultivated” in section 1004 should be construed narrowly, to exclude improved and managed lands even if the lands are not tilled.

El Sur Ranch cites two judicial opinions in support of its proposed definition of cultivated lands, *Quarterman v. Kefauver* (1997) 55 Cal.App.4th 1366, 1371, and *Reeves v. Shears* 2004 WL 2320358 (unpublished).2 These cases address the definition of “lands under cultivation” in California Code of Civil Procedure section 1021.9. In *Quarterman*, the court determined that the word “cultivated” was ambiguous, noting that the term’s meaning varies from statute to statute. The court turned to legislative history and context to determine the term’s meaning as applied in section 1021.9. The court concluded that cultivated lands could not refer to an urban backyard as the legislative intent was to include only rural lands under section 1021.9. The opinion in *Reeves* interprets the same provision, finding that “lands under cultivation” does not include timberland. Neither of these cases address facts analogous to those presented by El Sur Ranch’s application.

The dictionary definitions cited by El Sur Ranch only further demonstrate that the term cultivation may have different meanings in different contexts. In some contexts, the word “cultivate” is meant narrowly as “till” – the English word “cultivate” derives from the latin “cultivus,” meaning “tilled” – but in other contexts it may have a broader meaning that includes general husbandry and improvement in fertility or production, such as the cultivation of oysters or trees. (ESR Closing Brief, pp. 22-23, fn. 156; *Quarterman*, 55 Cal.App.4th 1366, 1373.) Whether the narrow or the broad definition is applicable depends on the particular context.

The testimony provided by the Ranch’s experts does not help to clarify the meaning of “uncultivated areas of land” as used specifically in Water Code section 1004.

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2 See Cal. Rules of Court, rule 8.1115 (with limited exceptions, unpublished opinions of California courts should not be cited or relied upon).
Dr. Sage’s testimony concludes that the irrigated pastureland should be considered cultivated because of the difference in forage composition of the plants and the fertilization, weed control, re-seeding, and grazing management applied to improve the condition of the pasture. (ESR Hearing, R.T. June 16, 2011, 144:17-145:5.) Dr. Sage’s testimony is uncontroversial in that the Ranch’s irrigated pasture could be considered cultivated under a definition of the term that includes general husbandry, in the same way that oysters or microorganisms or other living things may be “cultivated.” (ESR Closing Brief, pp. 22-23, fn. 156.) That conclusion does not, however, help to inform whether Water Code section 1004 adopted this meaning. Mr. Allen’s testimony, in contrast, is quite consistent with a more specific definition of “cultivated” as “tilled”:

These fields have been leveled to some extent and cultivated in planting the pasture. The better job you do in maintaining the pasture, of course, would minimize the number of times you need to reestablish and till the pasture … pastures can be quite permanent but they are started through cultivation and planning.

(ESR Hearing, R.T. June 16, 2011, 256:10-256:15 [emphasis added].)

It seems that Mr. Allen believes that the pastureland was tilled at one time, possibly when the pasture was originally established. He uses the term cultivation as something that would have been done in planting and starting the pasture, suggesting cultivation as tillage rather than an ongoing activity that equates with regular management.

Finally, both El Sur Ranch and protestants point to the definition of cultivated cropland adopted by the United States Department of Agriculture (USDA) in its glossary for the Natural Resources Conservation Service (NRCS) in support of their positions. (ESR-42.) The glossary includes land cover and land use categories for purposes of NRCS programs. Cropland is sub-divided into two land use categories, cultivated and “noncultivated” cropland. Cultivated cropland includes row crops and close-grown crops as well as hayland or pastureland that is in a rotation with row or close-grown crops. Noncultivated cropland includes permanent hayland and horticultural cropland.

Pastureland is a second category of land use separate from cropland and is defined as land managed primarily for the production of introduced forage plants for livestock grazing. El Sur Ranch asserts that “pastureland” is within the NRCS category of cultivated cropland. Upon my reading, however, the definition of cultivated cropland includes only pastureland that is in rotation with row or close-grown crops. I disagree with the assertion in the Ranch’s brief that pastureland such as the pasture in question in this proceeding is categorized as cultivated cropland under USDA’s definitions.

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3 Land cover is defined as the vegetation or other kind of material that covers that land surface.
4 Land use is defined as the purpose of human activity on the land.
5 Close-grown crops are crops that are generally drill-seeded or broadcast such as wheat, oats, rice, barley, and flax.
6 Hayland is managed for the production of forage crops that are machine harvested. Horticultural cropland is used for growing fruit, nut, berry, vineyard and other bush fruit and similar crops.
Because the evidence in the record concerning the definition of cultivated and uncultivated lands is inconclusive, other sources may assist in clarifying how the terms may have been understood when section 1004 was adopted in 1914. Use of the term “cultivated” in other government publications and decisions of the time period likewise support a technical definition under which tillage is a necessary element of cultivated land. In a decision by the Supreme Court of Iowa in 1891, interpreting the federal Swamp Land Act, the court states the following:

[The defendant asserts that] if the greater part of any subdivision could be seeded to such grasses as timothy or red top, and mowed year after year, and crops of grass be thereby secured, it was not so wet as to be unfit for cultivation, and therefore was not swamp land. But by the cultivation of land is ordinarily understood something more than the gathering of crops which grow spontaneously, or with little care. Land which can be cultivated, within the meaning of the act, is arable land,—that which is adapted to the raising of crops which require annual planting and tillage, as corn, wheat, oats, rye, and barley in this country, and which is susceptible of such cultivation in all ordinary seasons.

(Am. Emigrant Co. v. Rogers Locomotive Mach. Works (1896) 83 Iowa 612 [rev’d on other grounds, Rovers v. Locomotive Mach. Works v. Am. Emigrant Co. (1896) 164 U.S. 559.]; see also United States v. Niemeyer (Dist.Ct.Ark. 1899) 94 F. 147 ["Making a stock farm or stock range of land is not putting it into cultivation. Fitting it for grazing, cutting the trees for the purpose of putting it in condition for grazing purposes, is not putting it in cultivation. That is not what the law contemplates when it says cultivation. It means plowing and preparing it for crops, or the raising of something that grows from the ground, besides grass."]] Nancy M. Hough (January 18, 1921) 47 Pub. Lands Dec. 621, 624 ["The popular definition of ‘cultivation’ is the working of ground for the purpose of raising crops, the raising of crops by tillage, etc.”].)

Specifically addressing irrigated and managed forage crop, a bulletin issued in 1903 by the U.S. Department of Agriculture, Bureau of Plant Industry, describes the production and harvesting of crops of timothy and redtop on uncultivated land in California by the scattering of large quantities of seeds and the use of flood irrigation:

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7 The Board may take official notice of dictionary definitions pursuant to California Code of Regulations, title 23, section 648.2 and California Code of Evidence, section 451, subsection e.
A very large proportion of these two crops [timothy and redtop] ... is raised on uncultivated land... in many situations where magnificent crops of timothy and redtop are raised it is rather risky to plow the ground.... The amount of timothy and redtop seed scattered on uncultivated land in this region is very great ....

( pp. 29-30.)

As visible in the photograph, the grass crops were certainly the subject of husbandry and management as it was seeded, irrigated, and harvested, but the land on which it was grown is considered uncultivated because it was not plowed.

The historical context in which Water Code section 1004 was adopted should also be considered to determine its meaning. As already described, the provision arose in the shadow of an ongoing contest between riparian landholders and appropriators, in which the riparian landholders – particularly the Miller & Lux Corporation – claimed the right to the full flow of the river to flood irrigate "limitless cattle pastures with unnecessarily enormous quantities of water." (Commission Report, p. 28.) “[M]uch of the tributary land is now perhaps best adapted to grain and forage crops irrigated by wild flooding....” (Id., p. 226.) There is little evidence in the record about the activities of the Miller & Lux Corporation in managing its pasturelands, but the Ranch’s own expert opined that Henry Miller likely seeded his pasturelands because native vegetation would have been
inadequate for cattle forage. (ESR Hearing, R.T. June 16, 2011, pp. 281:20-282:19.) If
irrigation and seeding was not sufficient to consider the land “cultivated” then tillage
seems the key distinction between cultivated and uncultivated lands as the term was
used in the Water Commission Act.

The discussion and analysis presented here does not address the application of Water
Code section 1004 to croplands subject to “no-till” or similar conservation tillage
practices. No-till commercial agriculture in the United States is a relatively recent
development, supported in part by the availability of chemical herbicides for weed
control. Given that these practices were generally unknown before the mid-19th century,
it seems fair to conclude that the language of section 1004 was not intended to address
lands on which modern no-till practices are applied to traditionally cultivated crops. This
question does not, however, need to be resolved in the context of this application.

Finally, the principles at stake weigh heavily in favor of construing Water Code section
1004 to prevent the flood irrigation of unplowed pastureland. In the last decade, the
State of California has redoubled its efforts to achieve sustainable management of its
water resources, maximize beneficial use while protecting fisheries and ecosystems,
and prohibit the wasteful and unreasonable application of water. (Water Code,
§§10720-10737.8; State Water Board Resolution 2018-0059; Water Code,
§§10004-10013.) Ironically, Mr. Hill mentioned during the recent hearing management
conference that one of the benefits of flood irrigation of the pasture was the elimination
of gophers, a practice that has long-been determined an unreasonable and wasteful
3 Cal.2d 489.) The Legislature’s determination to limit the amount of water applied to
uncultivated lands to 2.5 acre-feet is certainly as appropriate today, with the availability
of modern agricultural and irrigation practices and alternative crop choices, as it was in
1913.

Next Steps
The Applicant is directed to submit within 60 days of the date of this letter a proposed
schedule for the following:

- Submission of an amended application reflecting the Applicant’s currently
  proposed project, including offstream storage;
- Completion of environmental documentation under CEQA, including an initial
  study, draft environmental documents, public comment, and final adoption;
- Providing public notice of the amended application and conducting a
  supplemental hearing to admit the report issued by CDFW, “Final Instream Flow
  Regime Recommendations, Big Sur River, Monterey County,” and evidence
  relevant to any revisions to the project.

The applicant is also directed to submit an interim plan and time schedule for diversions
while the application for a water right is pending, to protect to the extent feasible public
trust resources in the Big Sur River.
Other parties in this matter will have 30 days to comment on the proposed schedule and the interim plan of operation. I will then issue a procedural ruling setting a schedule for further proceedings. Absent agreement on a proposed interim plan of operation, I may refer the matter to the State Water Board’s Office of Enforcement.

If you have any non-controversial, procedural questions about this ruling please contact the hearing team by phone at (916) 323-5175 or by email at wr_hearing.unit@waterboards.ca.gov.

Sincerely,

ORIGINAL SIGNED BY:

Tam M. Doduc, State Water Board Member
El Sur Ranch Project Hearing Officer