

198 Sprucemont Place

San Jose, CA. 95139

22 May 2019

Ms. Michelle Siebal

State Water Resources Control Board

Water Quality Certification Unit

P.O. Box 2000

Sacramento, CA 95812-2000

Re: Draft Environmental Report April 2019

Kilarc-Cow Creek Hydroelectric Project

License Surrender

Dear Ms. Siebal

Please find below comments together with attachments to this letter that should be reviewed and addressed before Environmental Impact Report is issued.

1. Somewhere [possibly Chapter 2 (2.5 .x)] should be a brief high level overview of the key changes since 2009 (10 years) in physical infrastructure of these two physically independent hydro operations. For example, for Cow Creek Powerhouse that discharges to Hooten Gulch, there has only been 50% capacity for about 10 years. More recently [Licensee can provide exact date] Kilarc now only has 50% capacity. Lower area of Penstock on Cow Creek totally failed and "blew out" about 4 years ago. Similarly, since then all access to Cow Creek Forebay, Canal & Dam has been from Powerhouse side as there are structural issues with the wet crossing across South Cow Creek.
2. Section 3.2.2 [Alternative 2- Retaining Flow to Abbott Ditch Users] is fundamentally structured well with one exception:
 - a. Section 3.3.2.1 should be entirely deleted for multiple reasons. (a-1) It is "technically stupid" with respect to the ADU best realizing its 13.13 cfs water right. What is the net % of this water right realized given water losses between P,G,&E's diversion structure on South Cow Creek and the Power house discharge plus the

additional losses from that point to the beginning the ADU irrigation canal located near the confluence of Hooten Gulch and South Cow Creek. (a-2) It has to be astronomically expensive - Why hasn't even a ballpark \$\$ estimate been done???

(a-3) This EIR has not chosen to use the same Alternatives as put forth in the NEPA. Whereas; other less educated government agencies might have a similar alternative, the SWRCB well understands and administer California "water rights law". They well know that this specific alternative is "legally" in direct conflict with the Adjudication and 1969 Decree provisions. It shows total disrespect to all other individuals subject to the Decree; especially those private owners having Project infrastructure on their lands. What are the "ethics standards" policy that SWRCB following in creating this Alternative in 3.3.2.1?

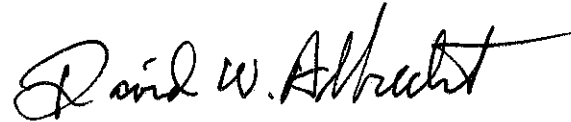
- b. It would be helpful to have a specific Figure or Map for the 3.3.2 area that incorporates all items associated with the various proposed [valid] alternatives. Map should incorporate items such upper end of boundary for ADU agricultural area; labels on East Channel / West Channel of south Cow Creek; Div. 72 location on East channel; existing Div. 73 structure in Hooten Gulch; 1911/12 Right of Way water course path from South Cow to Div. 73; Option B course; Option C location, Option D course. See Attachment "A" map that has some of the above. This attachment reflects that South Cow Creek channel has shifted about 50 feet to the West of where it was in 1911 with respect to ADU water rights diversion structure; and that Hooten Gulch has also had shifts in course towards the East.
 - c. See Attachment "D" for overview notes addressing the ADU, and all Diversions in the "Lower Cow Creek Group" of the Adjudication. Only purpose is to provide insight with respect to the "water physics" for ADU diversion alternatives [hardware design issues] that are consistent with the Adjudication.
 - d. It could be helpful if the adjective "East" was deleted in 3.3.2.2 text (2x places).
 - e. See Attachment "B" with how "East Channel" adjective in used for description of Diversion 72 in the 1965 Water Rights Report.
3. Possibly a fourth alternative should be proposed that could be described as belonging to the design set as now set forth in 3.3.2.4, and is schematically show in Attachment "C". The basic principles are as follows. It would involve about a 2.5 foot X 3 foot ? wide concrete structure spanning South Cow, and would be located to the west / northwest/ north of point "0" in the 1912 Easement . Upstream and Downstream of this feature on both the East & West side of the channel are much higher concrete retaining walls to stabilize the Creek channel. Extending at the base of this feature is a concrete spill plate for a distance of (?) so the structure does not undercut from the water spill. To this

feature are provisions to add (removable) 1.0 foot high flash boards during the irrigation season from March thru October to develop an addition 1.0 foot of pressure head into a take-off pipe that has an inside diameter** on the order of 2.0 feet (2.5 Diameter max). The centerline of pipe would be in a 2.5 deep concrete pit attached to the East retaining wall. Pit would have a very strong hinge cover so the lid can be lifted to allow maintenance in the pit if necessary. The primary function of the lid is keep "Pit" from silting in during the winter season when sediment transport in SCC can be very high. But it also minimizes vegetation debris input to the irrigation system that can transport to a fish screen. Fish screen can be anywhere between take-off point and existing spanning diversion structure at end of Hooten. But, locating it where it is unlikely to be damaged by Winter flood events (rare) that overflow the channel banks, and keeping it free of vegetation contamination are design details that should be considered. In irrigation season, a small hinged flap port on top lid could be raised to flood the "pit". Take-off pipe may be buried in a very deep and backfilled trench; but that trench should become progressively shallower on its course towards Hooten; and likely could discharge into an open water ditch before reaching there. Where this would be is all dependent on "z" elevation details at the pipe take-off point; and the pipe path as it is generally running south or southeast towards Hooten. All of above is very primitively shown in a schematic in Attachment "C". Efforts should continue between the ADU, Licensee, and specific Resource Agencies to develop other "gravity" fed diversion options unless the preferred ADU outcome is the "Pump" Option C.

** Pipe diameter to be sized on 13.16 cfs + ?? cfs return flow to SCC requirement from upstream side of fish screen.

4. In this Draft, All the PME's associated with the removal of the Project Diversion structure on South Cow Creek have been "white washed" and Gold Leafed". Once again, if some are not revised; and they are used as now written; the post Project result will be a "Muck around Channel". For the CEQA, input on this issue was done in 2014 and has been ignored; except for burial service in an Appendix A Table. In a long Process, having documentation flaws, without flags, is how future "implementation documentation" becomes deficient. Avoidable and unnecessary shoddy outcomes then result.
5. Section 5.5.6 "Environmentally Superior Alternative" is good and honest summation only if present 3.3.2.1 [Option A] is deleted in its entirety. If this is not done, this summation becomes a "putrid" one.

Respectfully.

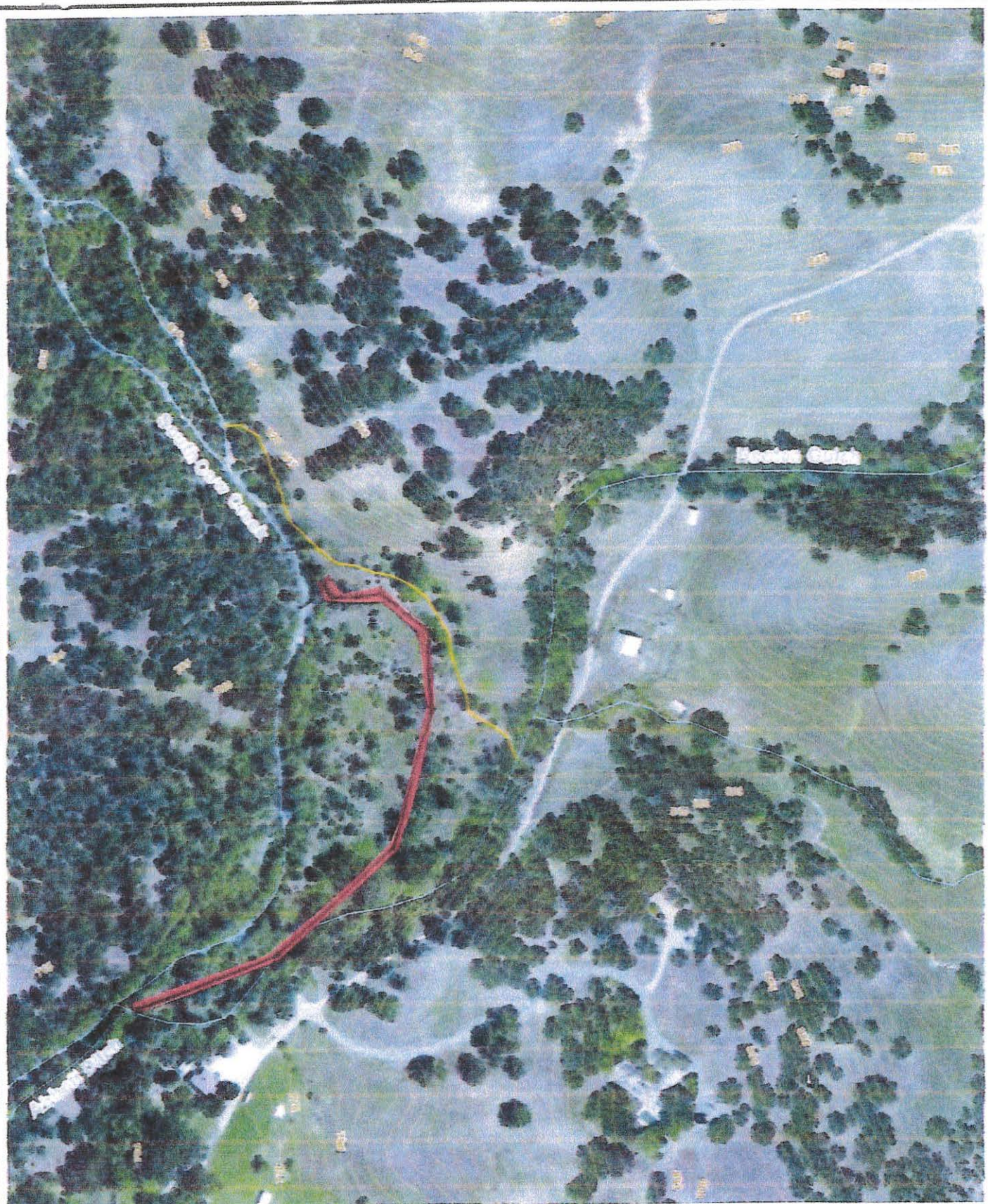
A handwritten signature in black ink that reads "David W. Albrecht". The signature is written in a cursive style with a long horizontal stroke extending from the end of the name.

David W. Albrecht

[Landowner w/ Project Infrastructure]

Attachments

- A. Map of ADU area for input to Comprehensive Map
- B. Definition of "East" & "West" Channel
- C. Another Alternative ADU Diversion - Concept Schematic
- D. Adjudication Notes on Lower Cow Group re: ADU



Existing Channel
Recorded Survey [a] Approximate Path

South Cow Creek / Hooten Gulch Abbott Ditch Take-off Area
[a] Survey 10/02 -10/07 1911 Map [Recorded]
[b] Right of Way Deed E. Wagoner, etal . to W. Abbott 07/31/1912
[c] Right of Way Deed N. Wagoner to B. Abbott 06/24/1980



ATTACHMENT B

[Definition of East Channel & West Channel of South Cow Creek]

[Adjudication Process / August 1969 Decree]

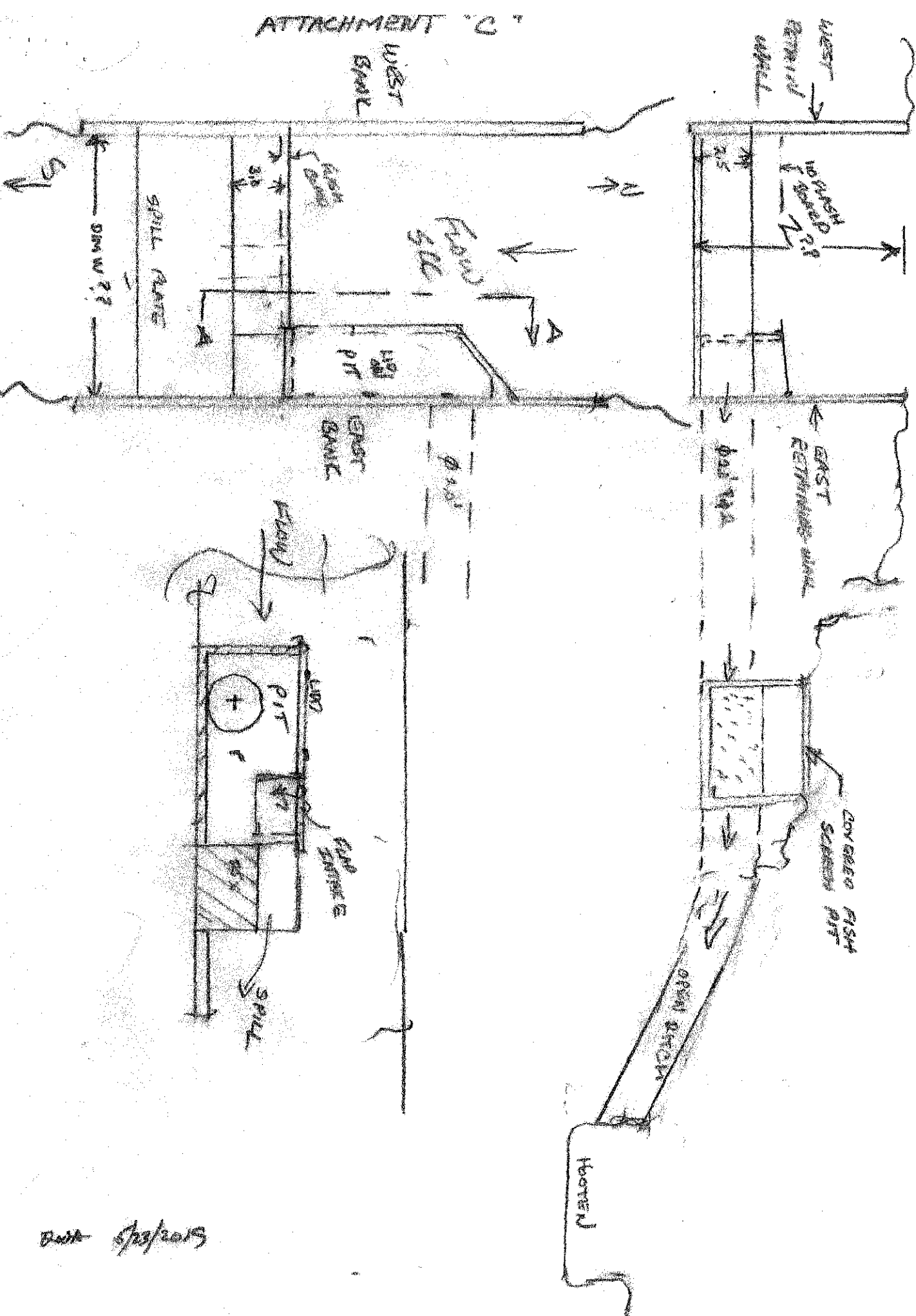
Diversion 72 is the Wagoner Ditch from the east side of the east channel of South Cow Creek above its confluence with the tailrace discharge from South Cow Creek Powerhouse in Hooten Gulch. The South Cow Creek channel divides into two branches a short distance upstream from this diversion point. The diversion is within $\text{NE}\frac{1}{4}$ of $\text{SW}\frac{1}{4}$ of Section 6, T31N, R1W. Measured ditch flow varied from the full ditch capacity of 0.85 cubic foot per second on June 25, 1964, to 0.77 cubic foot per second on August 31.

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A concrete dam about 30 feet long and $3\frac{1}{2}$ feet high diverts water into an earth ditch about $2\frac{1}{2}$ feet wide and 6 inches deep. About 700 feet from the head of the ditch a concrete stilling tank is used to convey a portion of the water through about 1,400 feet of $2\frac{1}{2}$ -inch steel pipe to the W. G. Wagoner house for domestic use. At the end of the ditch a portion of the water is conducted by 250 feet of $1\frac{1}{2}$ -inch pipe easterly across Hooten Gulch and the Powerhouse Road to livestock barns and sheds for stock water use on the Wagoner ranch. The ditch is also used to flood irrigate 3.7 acres of pasture on the ranch just south of the concrete stilling tank. Of this total 1.3 acres were not irrigated in 1964.

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ATTACHMENT "C"



Bank Spillways

ATTACHMENT D

ABBOTT DITCH / 1969 DECREE & LOWER COW CREEK GROUP

The Abbot Ditch [diversion # 73] is the first and most upstream of 44 diversions belonging to the LOWER COW CREEK GROUP in the Adjudication Decree #38577 of August 25, 1969. All these diversions are "Pump" except #73, and one other that does not source its water supply from Cow Creek. Diversion # 73 is on the order of 21 river miles from Cow Creek's confluence with the Sacramento River, wherein the change in elevation along this course is only on the order of 400 feet. This is the reason the diversions are all "Pump". South Cow Creek makes its first change in slope at about where Hooten Gulch has its confluence with South Cow Creek. The above is why the ADU is the only diversion that has the potential to source its water by gravity. It also explains the succession of 3 three "water rights" legal documents filed and recorded over the short time span of 4 months in 1911 [June 23, August 24, & October 21]; wherein in the final one; J.L. Jones places the location of the diversion across South Cow Creek about 1000 feet upstream of the Hooten Gulch / South Cow confluence wherein the water is first diverted to Hooten Gulch, and then down Hooten to the start of the Abbott & Jones Irrigation Canal. This course was surveyed [Oct. 2 thru 7, 1911]; as was the course of the Irrigation Canal; and that Survey was also Recorded. Very soon thereafter in July 31, 1912; E.A. Wagoner, etal. grant to W. and E Abbott a "right of way" for that water course across their lands per the course explicitly described and mapped in that 1911 Survey.

Sixty-eight years later on June 24, 1980; and eleven years after the Adjudication Decree, and shortly before Norm Wagoner and his wife sell their Ranch, they grant to Blanch Abbott a new modern day easement that is 100% the same as that one of 1912. Both clearly understood the importance of this "Easement" to the ADU water rights as per the Adjudication; and wanted no future mis-understandings for the new; or other future owners of the Wagoner [Tetrick] lands.