Memorandum

Date:	12/19/2018	Ec:	CDFW Document Library
То:	Sarah Mussulman Senior Environmental Scientist Sierra Fisheries Supervisor North Central Region	From:	Isaac Chellman Environmental Scientist High Mountain Lakes North Central Region

Subject: Site assessment of Georgetown Creek, El Dorado County.

INTRODUCTION

This report provides a summary of the communication record and associated site assessment following a stream flow concern expressed by a citizen, Tony Franco, who contacted the Department at various points during fall 2018. Mr. Franco is concerned about the recent dewatering of Georgetown Creek (hereafter "the creek"), which flows through his property in Greenwood, El Dorado County, CA (Figure 1).

TIMELINE and COMMUNICATION RECORD

On 11/19/2018, my supervisor, Sarah Mussulman, informed me of various contacts received by CDFW Region 2 personnel from Mr. Franco during the past month. Sarah forwarded to me an email record containing some background information on Mr. Franco's contacts with various state government personnel. The afternoon of 11/19/2018, I sent Mr. Franco an email message requesting some additional information, and to ask for permission to access the creek via his property. Mr. Franco replied via email the morning of 11/20/2018. Mr. Franco gave written permission to access his property, but requested that I first call him, in part so he could provide some additional information.

<u>NOTE</u>: no appreciable rain fell in the region during most of the fall. Approximately 0.5 inches of rain fell on 10/3/2018, after which nearby weather stations recorded no rain until the day after this survey (11/21/2018). [Records for the nearest weather station (Goldstar Station* KCAGREEN10) obtained from wunderground.com. Accessed December 2018.] * High-quality weather stations that have passed Weather Underground's quality control process for 5 consecutive days.

I called Mr. Franco at 9:43am on 11/20/2018. During the conversation, Mr. Franco provided background information on observations he has made on his property, which included the following:

- During the weekend of 10/12/2018, Mr. Franco noticed that the creek was noticeably higher (i.e., by several inches) than he had recently seen it.
- During the weekend of 10/19/2018, Georgetown Creek was a bit lower than earlier in the month, but still flowing well. To Mr. Franco's knowledge, the creek had been flowing well all summer long.
- Fish were present in the creek (perhaps Rainbow Trout [*Oncorhynchus mykiss*], but Mr. Franco was not sure). Mr. Franco and his neighbors have regularly observed fish in the creek.
- Trail cameras Mr. Franco has placed on his property have documented numerous wildlife species coming to the creek (including black bear, mountain lion, bobcat, fox, and turkey). Mr. Franco provided me with photos from his trial cameras showing each of these species.
- On Wednesday, 10/24/2018, Mr. Franco went back to the creek on his property, and there was almost no water. On Friday, 10/26/2018, the creek was completely dry.
- Mr. Franco has owned this property for several years. The previous owner was there for ~15 years. Some of his neighbors have lived on their lots for ~40 years. Mr. Franco and the neighbors with whom he spoke have never seen Georgetown Creek go dry, including during the 2012–2016 drought.

During our call, Mr. Franco relayed his recollection of information from a phone conversation on 10/30/2018 with Darrell Creeks, Operations Manager with the Georgetown Divide Public Utility District (GDPUD). This information included:

- In order to perform maintenance during this fall, GDPUD has been occasionally shutting off water flow to the Georgetown Divide Ditch (hereafter "the ditch"), which is located north of the creek.
- The recent maintenance involves lining portions of the ditch with a form of concrete. The total area lined so far using the current grant funds is about 10,000 feet.
- According to Mr. Franco, Mr. Creeks does not think that the ditch feeds the creek.
- Also according to Mr. Franco, Mr. Creeks mentioned that there are no fish in the creek.
- Mr. Franco disputes both of these latter points because:
 - 1. Given the correlation in timing of water flow ceasing and commencing in the ditch, and a corresponding response in water gain and loss in the creek, Mr. Franco is "100% convinced" that the creek is fed by the ditch.
 - 2. Mr. Franco and his neighbors have been observing fish in the creek for years.

Later in November, Mr. Franco made the following observations:

- Water began pooling in the creek on 11/9/2018, soon after Mr. Franco observed water being released into the ditch. Mr. Franco took photos of the creek on his property on 11/10/2018 (Figure 2).
- On 11/15/2018, Zach Mayo (Engineering Geologist with the State Water Resources Control Board) visited the creek with Mr. Franco. On this date, the creek was completely dry. Mr. Franco also did not observe any water in the ditch on this date.

Mr. Franco also informed me that Mr. Creeks called Mr. Franco again on 11/15/2018 to inform him that GDPUD would be releasing water into the ditch on 11/18/2018.

The primary concern expressed by Mr. Franco is that he worries the future addition of more lining in the ditch or other maintenance/improvements will eventually stop all flow into the creek during the dry season. Mr. Franco is convinced that the ditch has been unintentionally feeding the creek for decades and this supplemental flow is the reason the creek remains perennial throughout the summer. Given the long period of time that the ditch appears to have been feeding the creek, Mr. Franco thinks that the ecosystem surrounding the creek is now reliant on the supplemental flow, which he fears will cease if GDPUD lines the ditch with non-porous surfacing.

SITE ASSESSMENT

On 11/20/2018, after gaining permission, I went out to Mr. Franco's property to look at the condition of the creek. Once arriving at the lot in the early afternoon, I observed that water was once again flowing in the creek (Figures 3– 5). As would be expected following recent dewatering, I did not observe any fish in the creek. After leaving Mr. Franco's property, I went east on state route 193 to observe upstream areas of the creek. During the assessment, I also examined three small tributaries flowing into the creek from the north. I only examined mapped tributaries in the proximity of the creek (Figure 1). All small tributaries shown on the map appear to originate from the area of the ditch (Figure 1).

In all tributaries I examined, water was present. The small tributary flowing into the creek immediately below Mr. Franco's lot (UTM Zone 10S 682474 E, 4307085 N) contained very little flow. The next small tributary to the east, which flows into the creek at Serene Drive (UTM Zone 10S 683506 E, 4307139 N) also contained water, but was barely flowing. The final and most eastern tributary I examined (located adjacent to a private drive) was small, but flowing well (UTM Zone 10S 684505 E, 4307209 N). It appeared that this small tributary was providing the most water to the creek. However, the creek was flowing above its confluence with this small tributary (Figure 6).

The final stretch of the creek is located directly adjacent to route 193. The final location at which I could see any water in the creek (UTM Zone 10S 685172 E, 4307024 N; Figure 7) was immediately downstream of where the creek flows underneath route 193. Upstream of this point, the creek was masked by a virtually impenetrable curtain of brush, including blackberry and willow. I was not able to observe any water in the final stretch of the creek (as shown on the topographic map), which is located on the western side of route 193.

Lastly, I examined the ditch where it flows directly adjacent to route 193 (UTM Zone 10S 686163 E, 4307947 N). At this location, the ditch was flowing freely and appeared to be unmodified with any new lining (Figure 8). I only briefly examined the ditch, so I did not attempt to observe any fish that may have been present.

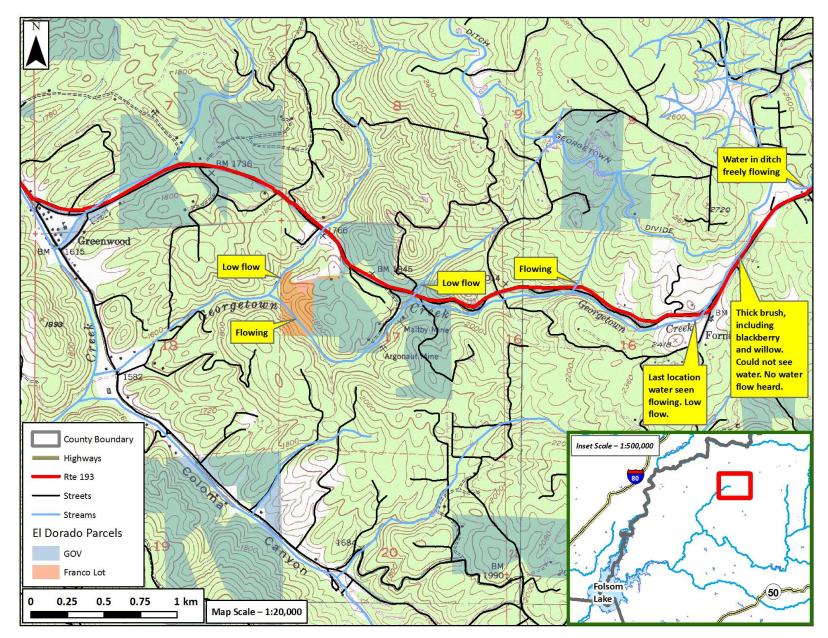


Figure 1. Area of Georgetown Creek (El Dorado County, CA) surveyed on 11/20/2018. Key observations of water flow are noted on the map. The text boxes are pointing directly to the locations at which observations were made. No fish were observed in Georgetown Creek or the marked tributaries. The Georgetown Divide Ditch was only briefly examined to see if there was flowing water (therefore, no fish observations were made).



Figure 2. Georgetown Creek as viewed from the Franco lot on 11/10/2018. According to Mr. Franco, water had been recently released into the ditch. (Tony Franco photo)



Figure 3. Georgetown Creek as viewed from the Franco lot on 11/20/2018. According to Mr. Franco, water had been rereleased into the ditch beginning on 11/18/2018. (CDFW photo)



Figure 4. Georgetown Creek as viewed from the Franco lot on 11/20/2018. According to Mr. Franco, water had been rereleased into the ditch beginning on 11/18/2018. (CDFW photo)



Figure 5. Georgetown Creek as viewed from the Franco lot on 11/20/2018. According to Mr. Franco, water had been rereleased into the ditch beginning on 11/18/2018. (CDFW photo)

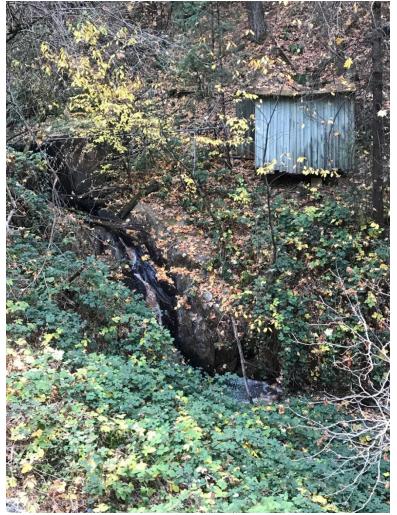


Figure 6. Georgetown Creek, upstream of the confluence with the last flowing side tributary feeding the creek, as observed on 11/20/2018. This photo was taken from the edge of state highway 193 (UTM Zone 10S 684716E, 4307140N). (CDFW photo)



Figure 7. The last area where water was observed in Georgetown Creek on 11/20/2018. This photo was taken facing downstream while standing on state highway 193. (UTM Zone 10S 685172E, 4307024N). (CDFW photo)



Figure 8. Georgetown Divide Ditch, viewed from the edge of state highway 193, on 11/20/2018. (UTM Zone 10S 686163E, 4307947N). (CDFW photo)