

Department of water resources
North Region
7600 Mineral Dr Suite 100
Coeur D'Alene ID 83815
Application No. 96-9568
Notes regarding stream Water Diversion// Appropriations Permit

Found in file w/o date
received. Photo attachments
establishes receipt after
8/1/2015 -mlc

The stream that is the subject for the Treiber diversion request is located on Lot 9 in Block 6 of Crawfords Second Addition to East Hope and will be referred to simply as Lot 9.

The main error that the protesting parties are making is that they assume applicant is diverting all of the water from the only source for the water flow in the drainage ditch that runs by their homes. This has caused them to attribute the fluctuations in water flow that they are experiencing downhill solely to the Treiber diversion.

However, the estimated measurements of water running past the protestors homes, regardless of how the measurements were taken, include water from multiple sources feeding the city street drainage system.

The protesting parties assume that all of the water that they see in the drainage ditches by their homes originates in the stream that is the subject of M/M Treiber's application. And so, they conclude, any changes in flow rates they observe relate to the Treiber diversion. This is wrong. By not accounting for the fact that there are multiple sources, the protesting parties substantially inflate the supposed negative impact of the Treiber diversion on the water in the ditch. .

The water that feeds the drainage ditch that runs by the protesting parties' homes originates from multiple sources including:

1. The stream that is the subject of the Treiber diversion.¹
 2. At least (e.g. two other?) springs within Lot 9, the flow for which will not be affected by the Treiber diversion and all of which converge below the point of origin for the water that feeds the Treiber diversion, to enter the city drainage system at a culvert that passes under Spring Street
 3. The catch basin and drain line installed by the City of East Hope to capture and divert an underground spring that had sufficient water volume to undermine the intersection of Spring St. and Cedar, even after multiple attempts at remediation of the problem. (*Picture?*). The drain pipe from this catch basin discharges the substantial flow from this sprung directly into the same drainage ditch that feeds the flow that the protesting parties are concerned about. *Show the location of former water damage at the intersection, the path of the drain pipe and the location of the outflow on a map. If possible and if the outflow will show in an image, measure it and provide an image.*
-

4. The French drain installed at 326 Cedar street home directly above Lot 9, the outlet from which discharges into Lot 9 away from the diversion point that is the subject of this application. *Show on map.*
5. The four French drains installed across the entire Treiber lawn area that run parallel to Spring Street and take underground spring water, unrelated to the subject stream and discharge that water into Lot 9. *Show on map.*
6. On Lakeview itself, the French drain installed on the North side of Lakeview in front of 550 Lakeview immediately next door to the Merica home.
7. The French drain installed on the north side of 610 Spring Street to redirect underground water away from the basement, which drains to the south side of the home and then follows the natural grade directly eastward to the drainage ditch on the south side of Spring St. that eventually flows in the direction of the protestors properties. *Show on map.*

It is speculation and untrue that the diversion of water for the Treiber irrigation system has any significant impact on the net water flow measured around the protesting parties drainage ditches. The Treiber diversion is a small percentage of the total water supply to the drainage system below East Hope.

In fact, the outflow observed at the Bistline property proves this point. The outflow in the culver adjacent to the Bistline property is substantially greater than the outflow from the culvert on Spring Street.

Regarding the protest of Ms. Merica, the flow rates at the source stream on the Treiber property average about .04 CFS. Ms. Merica refers to "rough measurements" of .03 CFS. In whatever manner that those rough measurements were done, Ms. Merica was not measuring the outflow from the subject spring. She was measuring the outflow at her property downhill from multiple streams, multiple percolation points on Lot 9 that are below the point of diversion, multiple French drains that feed the city drainage system, a drain line installed by the city to divert a spring that surfaced at the intersection of Spring and Cedar and from all of the street-side drainage ditches throughout the City of East Hope that are above Lakeview, west of Ellisport Street and east of Cedar Street.

The City of East Hope is full of underground streams, some of which percolate at known points, others which fill the French drains owners have installed to keep their basements dry. These combined sources are what reaches the culverts on Lakeview and this is why, for example, the flow observed at the Bistline property is greater than the flow through the culvert under Spring Street. There is no calculable relationship between the protesting parties measurements at Lakeview and the diversion of one of the several springs on Lot 9.

What may have been, historically, the path of the outflow from the multiple underground springs in East Hope, including those on Lot 9,, is now the roadside drainage system for the city.

Beginning at Spring Street, and south in the direction of Lake Pend Oreille, since the water includes street drainage trench water, the water in the ditch below Spring Street is

not well suited for any bona fide aquatic life, fishing, transportation, wildlife or aesthetic purpose.

In fact, the water from the city drainage system eventually reaches the roadside drainage culvert along Denton Way where the flow completely stops and the water stagnates or returns underground. I was told by Pat Bistline, there is a culvert under Denton Way, however I was unable to find it.

The impact the protesting parties refer to does not fall within the criteria of the statute because the water passing by their homes is the flow of a city drainage ditch that exists to divert all water from city streets that originates from multiple underground springs in East Hope. The water in the ditch next to the protesting parties does not support fish, is not a wildlife habitat, does not support any significant aquatic life (except perhaps Mosquito's), is clearly not navigable and has no transportation value except to the extent its purpose is to prevent flooding on city streets.

The protesting parties are wrong in claiming that the City of E. Hope has installed a water system that is more than capable of providing irrigation water for the applicant. The true facts are that during summer months the City of E. Hope water system is insufficient to meet the requirements of homeowners. The official report on the condition of the aging City of East Hope water system (completed in 2014) commented concerning water usage during the period from 2008 to 2012:

"maximum day flow was highest in 2009, with a peak day to average day peaking factor of 3.22. Peak hour demand cannot be identified as it is not tracked; however, it is likely higher than the plant capacity (171 gpm, 0.24 mgd). Maximum day water use was lower in the years following 2009 due to watering restrictions that were implemented by the City in an attempt to keep the maximum day flows below the capacity of the treatment facility."

In simple terms, the report shows that in 2009 the average daily use of water had reached 261,000 gallons per day against a maximum system capacity of 246,240 gallons per day. The average use between 2008 and 2012 was 244,000 per day as the result of water restrictions implemented in 2009. The City of East Hope water system is beyond its capacity when water restrictions are not in place and is not capable of providing the irrigation water required by applicant.

In fact, the City of E. Hope has strongly encouraged M/M Treiber to use diverted water from their Lot 9 in order to take stress off of the city water system.

There is a roadside drainage system that includes roadside ditches along the north side of Spring Street, essentially in the Treiber front yard and culvert that allows the flow from Lot 9, including the subject stream and several other springs on Lot 9, pass under Spring Street. The Treiber landscape area that is the subject of the irrigation to which the application relates is above Lot 9 and graded downwards in the direction of the roadside drainage ditch and culvert. That area has multiple subsurface springs that had caused the

landscape area to be too soggy to maintain. As the result M/M Treiber installed four French drains running parallel to Spring Street the full width and of their main landscape area. Those four French drains outflow into Lot 9. Thus, when the Treiber's irrigate the area in question, most of which is lawn, water that penetrates the soil meets with various subsurface flows and ends up in the French drains flowing into Lot 9. Water that does not penetrate the surface either flows downhill into the roadside drainage ditch, and then into Lot 9 where it joins water from other springs in Lot 9 to continue its journey through the culvert under Spring Street, or is lost to evaporation. However, water lost to evaporation is minimal because the sprinklers are run during night time hours and the very early morning hours - specifically to avoid water lost to evaporation. So the water taken from the subject spring re-circulates back into Lot 9 as the result of the French drains in the lawn and the grading of the contiguous Treiber property. It is most likely that only a miniscule amount of water, water lost through evaporation during pre-dawn sprinkling hours, is not recycled back into Lot 9.

Larry Treiber



PO box 311

Hope ID 83836

208-264-0399

FL address: 1820 Peachtree ave, The Villages, FL 32162

352-753-6087

A few extra facts.

1. This system has been installed and operating for 11 years, with no complaints!
2. I take great pride in the appearance of my property. I have spent over \$60,000 with a landscaper to improve the property. (See photo from 1991 and 2015)
3. For the entire time I have owned this property the stream I am using, had been putting out 18 GPM until this year, (one of the driest and warmest on record.) The stream that I use the volume had dropped this year from 18GPM to 12GPM. (Sometime between Jul 15 and Aug 15) When this happened I reduced my watering time by 50%.
4. I measured water flow of the stream from the culvert that goes under Lookout (behind the Bistline home) on Jul 25, Aug 2, and Aug 20. The lowest volume was 17GPM and the highest was 20GPM. I also checked the out the flow on 5 other occasions, they all seemed to be about the same.
5. I only water my lawn from as needed and only from June first to mid September. As far as I can tell I use no more than 4% of the annual flow from this stream.



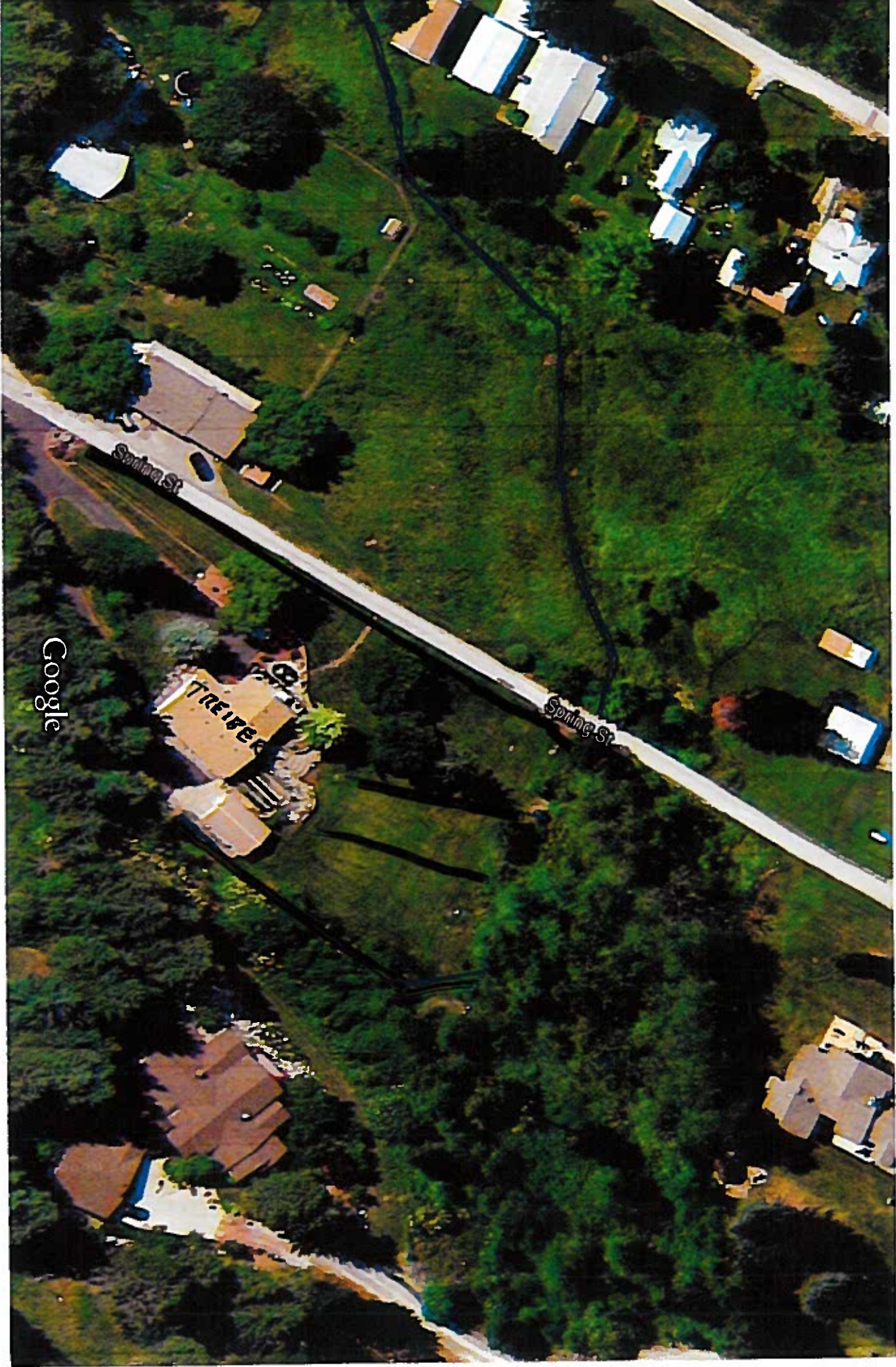
2015

TREIBER
Home



1991





Google

Imagery ©2015 Google, Map data ©2015 Google 50 ft

