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March 31, 2015

Via Courier:
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

Re: Notice to Contest Yellow Creek Instream Flow Appropriations

Dear Members of the Board:

Enclosed for filing is Exxon Mobil Corporation's Notice to Contest the Yellow Creek - Upper (confluence with Barcus Creek to the confluence with Lambert Springs) and Yellow Creek - Lower (confluence with Lambert Springs to the confluence with the White River) instream flow appropriations in accordance with Rule 5k of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program, 2 CCR 408-2

Very truly yours,

Karen L. Henderson

Enclosure

cc: Linda Bassi *(via email: Linda.Bassi@state.co.us)*

74126

BEFORE THE COLORADO WATER CONSERVATION BOARD

STATE OF COLORADO

IN THE MATTER OF PROPOSED INSTREAM FLOW APPROPRIATIONS IN WATER DIVISION NO. 6:

YELLOW CREEK - UPPER
(confluence with Barcus Creek to confluence with Lambert Springs)

YELLOW CREEK - LOWER
(confluence with Lambert Springs to confluence with the White River)

NOTICE TO CONTEST INSTREAM FLOW APPROPRIATIONS

Exxon Mobil Corporation, by and through its undersigned attorneys, submits the following Notice to Contest in accordance with Rule 5k of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program, 2 CCR 408-2 (the "ISF Rules").

A. Identity of Contesting Party:

Exxon Mobil Corporation ("ExxonMobil")
c/o Glen E. Murdock
22777 Springwoods Village Parkway
Nature 4, 4B.375
Spring, TX 77389

Please direct all notices, pleadings, and correspondence to ExxonMobil's counsel:

Glenn E. Porzak
Kristin H. Moseley
Karen L. Henderson
Porzak Browning & Bushong LLP
2120 13th Street
Boulder, CO 80302
Telephone: (303) 443-6800
gporzak@pbblaw.com; kmoseley@pbblaw.com; khenderson@pbblaw.com

B. Identification of the Contested Instream Flow Appropriations:

- Yellow Creek (Upper) – from the confluence with Barcus Creek to the confluence with Lambert Springs.
  CWCB ID: 13/6/A-005
  Upper Terminus. UTM North: 4446251.97, UTM East: 213556.69

Lower Terminus. UTM North: 449129.57, UTM East: 211572.39
Length: 3.66 Miles

- Yellow Creek (Lower) – from the confluence with Lambert Springs to the confluence with the White River.
  CWCB ID: 13/6/A-006
  Upper Terminus: UTM North: 449129.57, UTM East: 211572.39
  Lower Terminus: UTM North: 4452477.49, UTM East: 210214.46
  Length: 3.45 miles

C. Contested Facts (to the extent currently known):

Before the CWCB can initiate a water rights filing for an instream flow, the CWCB is required to meet certain statutory obligations as discussed below. Due to the material errors detailed in the attached report prepared by Resource Engineering, Inc. and other substantial issues, the CWCB cannot meet these statutory obligations and should withdraw the proposed instream flow appropriations.

1. Findings required by C.R.S. 37-92-102(3)(c) and Rule 5(i) of the ISF Rules:

   a. Whether there is a natural environment within the claimed reaches of Yellow Creek that can be preserved to a reasonable degree with the proposed instream flow rights if granted.

      - The CWCB's assessment of the natural environment within the claimed reaches of Yellow Creek must take into account the impacts of energy development in the Piceance and Yellow Creek basins.

      - The CWCB cannot make this finding given the insufficient data and material errors in the evaluation on which the instream flow claims are based as detailed in the attached report prepared by Resource Engineering, Inc.

   b. Whether such natural environment within the claimed reaches of Yellow Creek will be preserved to a reasonable degree by the water available for the appropriations to be made.

      - Yellow Creek is a desert stream that experiences dry sections upstream of the proposed instream flow reaches during significant portions of every year.

      - The CWCB cannot make this finding given the material errors in the evaluation on which the instream flow claims are based as detailed in the attached report prepared by Resource Engineering, Inc.

   c. Whether such natural environment within the claimed reaches of Yellow Creek can exist without material injury to water rights.

- There is not sufficient water available to support the proposed instream flow rights on Yellow Creek.

- The CWCB has not fully evaluated whether the claimed instream flows would cause material injury to existing water rights. No existing absolute or conditional water rights should be modified or injured to support or as a result of the subject instream flow rights.

- The CWCB cannot make this finding given the material errors in the evaluation on which the instream flow claims are based as detailed in the attached report prepared by Resource Engineering, Inc.

2. Compliance with C.R.S. 37-92-102(3):

   a. Whether the proposed instream flows reflect the minimum amount required to preserve the natural environment to a reasonable degree.

   - The CWCB only has the authority to appropriate the minimum amount of water necessary to protect the natural environment to a reasonable degree.

   - The claimed amounts for the instream flows are overstated due to errors in the application of the R2Cross methodology, insufficient data, and use of data that is not representative of the proposed reach.

   - Claiming the same constant flow 24 hours a day for three or nine months at a time defies the physical realities of a stream such as Yellow Creek.

   - Any proposed instream flow must be for no longer than bi-monthly increments to reflect the natural hydrograph, and must provide for daily reductions to reflect diurnal fluctuations of the stream.

   - The section of Yellow Creek containing the proposed reaches is a "gaining stream," in that the flow is supplemented by springs located along the course of the stream. There is no scientific or other basis to claim a fixed amount for an entire stream reach based on measurements taken at the bottom end of a gaining stream. Therefore, the claimed amounts for the proposed instream flow reaches must be adjusted to reflect that there is more water at the bottom of a gaining stream than at the top.

   - Insufficient observation and measurement have been completed to understand the unique hydrology of Yellow Creek.

   - The claimed instream flows are based on material mistakes as detailed in the attached report prepared by Resource Engineering, Inc.

b. Whether the proposed instream flow appropriations would deprive the people of the state of Colorado of the beneficial use of those waters available by law and interstate compact.

- No existing absolute or conditional water rights should be modified to support the subject instream flow rights. This is particularly true given the unique hydrology of this stream system. Except during spring runoff, Yellow Creek is not hydrologically connected to the upper portions of the basin where a number of existing water rights are located. During most of the year, base flows are believed to originate primarily from three springs in the vicinity of the proposed instream flow reaches. Therefore, allowing the CWCB to call out upstream users would be futile and unjustified.

3. Protection of present uses and exchanges under C.R.S. 37-92-102(3)(b).

Any appropriation of the instream flows on Yellow shall be subject to the present uses or exchanges of water being made by other water users pursuant to appropriation or practices in existence on the date of such appropriation, whether or not previously confirmed by court order or decree. The claimed instream flows must also be subject to the terms and conditions detailed in the attached report prepared by Resource Engineering, Inc.

4. Compliance with C.R.S. 37-92-102(4)(a).

The CWCB must adopt and impose terms and conditions on any instream flow appropriations on Yellow Creek, including, but not limited to:

- Ensuring that any instream flow filing may only be enforced at the point on a stream reach where the CWCB has installed a measuring device at its sole cost and expense;

- Ensuring that no instream flow right that could affect upstream users may be approved without additional data and protective conditions stating that the CWCB may not call out upstream junior users absent a conclusive showing that such a call will increase flows within the proposed reaches; and

- The additional terms and conditions detailed in the attached report prepared by Resource Engineering, Inc.

5. Reservation of right to contest other factual and legal matters.

ExxonMobil reserves the right to identify and raise other contested factual and legal issues prior to or at a hearing in this matter.

D. General Description of Supporting Data (to the extent currently known):

1. See the report prepared by Scott Fifer of Resource Engineering, Inc. dated March 30, 2015, attached as **Exhibit A**.

2. All documents, facts, data, photographs, and other material in the record of the CWCB, and in the files of the Colorado Division of Wildlife, and the U.S. Bureau of Land Management, regarding the proposed instream flow rights.

3. Records available from the Division of Water Resources regarding existing rights, decrees, stipulations, engineering reports, call chronology, basin studies, and other relevant information.

4. Data from the USGS "Yellow Creek near White River, CO" gage (No. 09306255).

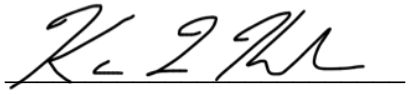
5. All facts and data to be offered in rebuttal.

6. ExxonMobil reserves the right to present other facts, data, documents, and factual and opinion testimony at a hearing on this matter.

WHEREFORE, ExxonMobil contests that proposed Yellow Creek (Upper) and Yellow Creek (Lower) instream flow appropriations and requests that a hearing officer be appointed in accordance with Rule 5(n) of the ISF Rules.

Respectfully dated this 31st day of March, 2015.

PORZAK BROWNING & BUSHONG LLP



Glenn E. Porzak (#2793)
Kristin H. Moseley (#28678)
Karen L. Henderson (#39137)
Attorneys for Exxon Mobil Corporation

RESOURCE ENGINEERING INC.

EXHIBIT A

Karen Henderson, Esq.
Porzak Browning & Bushong LLP
2120 13th Street
Boulder CO 80302

March 30, 2015

RE: CWCB ISF Recommendations, Yellow Creek (Upper) and Yellow Creek (Lower)

Dear Karen:

Pursuant to your request, Resource Engineering, Inc. (RESOURCE) has completed a review of technical information developed by the Bureau of Land Management (BLM) and Colorado Water Conservation Board staff (CWCB) in preparation for application of instream flow water rights on Yellow Creek, tributary to the White River. The CWCB plans to apply for instream flow (ISF) water rights within two segments of Yellow Creek; both located in the lower region of the basin near its confluence with the White River. The reaches are identified as Yellow Creek (Upper) and Yellow Creek (Lower) and are shown graphically in **Figure 1**, attached.

The documents that we have reviewed included:

- A letter from the Bureau of Land Management (BLM) to Linda Bassi of the CWCB conveying its "updated" ISF recommendations for the two reaches (letter dated December 22, 2014)
- BLM White River Field Office Stream Survey Summary document, May 2010
- Field data and office calculations associated with the R2 Cross ISF methodology used to quantify the recommended instream flow (six transects total)
- CWCB Yellow Creek (Lower) Executive Summary for ISF recommendation
- CWCB Yellow Creek (Upper) Executive Summary for ISF recommendation

In summary, our review has identified critical errors in the application of the R2Cross methodology such that the recommended flow values for each reach are not supported by credible evidence. RESOURCE believes that the BLM/CWCB will have to conduct new studies of each reach. Moreover, if and when such studies have been properly conducted, specific terms and conditions should be placed on these instream flow water rights to prevent the CWCB from placing a call on future junior water rights located in the upper reaches of Yellow Creek. This condition is related to the unique hydrologic characteristics of Yellow Creek as explained more fully below.

Yellow Creek Streamflows

As noted in the CWCB Executive Summary for each ISF reach; "Yellow Creek has somewhat unusual hydrology." CWCB staff observes:

> "The river system may have dry sections at different points in the year upstream from the BLM recommended reaches. Springs located in the vicinity of the proposed (Upper & Lower) ISF reaches have been observed to contribute significant amount of flows to the stream."

The significance of the above finding is that it provides evidence that it would be "futile" for the CWCB to attempt to place a call on upstream junior water rights. The intervening dry stream bed suggests that any water bypassed as a result of the call would not necessarily be delivered to the downstream reach. Until the BLM /CWCB complete a geo-hydrologic investigation of the relationship between surface and groundwater flows in Yellow Creek, the CWCB ISF rights should not be in a position to place a call on water rights located above the specific claimed reaches. RESOURCE recommends that a term and condition on this issue be included in any future water court decree.

Yellow Creek (Upper)

The BLM/CWCB recommended ISF for the upper reach of Yellow Creek is based on an evaluation of the hydrologic characteristics of Yellow Creek using the R2Cross quantification procedure. Four separate streamflows were measured and evaluated at three selected study transects sites over the period 2004 through 2011. Based upon these evaluations, the agencies recommend a winter ISF of 0.6 cfs and a summer ISF of 1.5 cfs. However, as shown in Table 2, page 4 of the CWCB Executive Summary, three of the four measurements recorded a streamflow volume too low to permit quantification of a higher summer ISF (the higher flows were outside of the accuracy range of R2Cross). Only the BLM's June 21, 2005 streamflow measurement of 0.82 cfs and related R2Cross analysis could be used to quantify a summer ISF value. Based on the results of this single study transect, the agencies recommend a summer ISF flow rate of 1.5 cfs.

The problem with this recommendation, however, is that the only study transect used to quantify the summer ISF is not located within the defined Yellow Creek (Upper) ISF reach. Rather, it is located approximately 1/3 mile upstream of the confluence of Yellow Creek and Barcus Creek, the upper terminus of the claimed ISF reach. Although the submitted R2Cross data sheets label the location of the study transect as; "1,800 feet d/s from conf. w/Barcus Creek" (within the study reach), we believe this description to be in error. Review of the original field notes which include both a written description and an associated latitude and longitude that place the study site upstream of the Barcus Creek confluence. Accordingly, the data collected and relied upon by the agencies to quantify the summer ISF is not representative of the Yellow Creek (upper) ISF reach and therefore, should be disregarded. This leaves no viable data to support a summer ISF within this reach. The location of the BLM/CWCB study site in relationship to the upper ISF reach is shown in **Figure 2**.

Yellow Creek (Lower)

Similar to the upper reach, the BLM/CWCB recommended ISF for the lower reach of Yellow Creek is based upon an evaluation of the hydrologic characteristics of Yellow Creek using the R2Cross quantification procedure. Two separate streamflows were evaluated at two selected study transects sites on September 27, 2011. As shown in Table 2, page 4 of the CWCB Executive Summary for the lower reach, the agencies recommend a winter ISF of 1.1 cfs and a summer ISF of 2.28 cfs. These values were obtained by averaging the results of the two separate transects using the R2Cross methodology.

In evaluation of the BLM/CWCB supporting data, however, it is apparent that the investigators have erred in their application of the R2Cross methodology. In quantification of a summer ISF, one of the three hydraulic characteristics that must be met includes a streamflow capable of inundating 50% of the defined wetted perimeter. A 100% wetted perimeter would be that length of channel cross section as measured from the grassline of one streambank to the grassline of the opposite streambank and thus, is representative of bank full conditions that occur during seasonally high streamflows. The ISF streamflow selection criteria would be satisfied at a depth of water that would cover 50% of this defined high flow channel length (cross section length). In this study, it appears that the 100% bankfull width was not correctly identified in either study transect and therefore, the assumed flow that would occur at the 50% wetted perimeter is not correct. In one of two of the study transects, the error results in a significant overestimate of the streamflow necessary to satisfy the 50% criteria. As a result, the claimed ISF is not representative of the minimum amount of water necessary to preserve the natural environment to a reasonable degree.

Attachment 1 and **Attachment 2** show the channel cross sections of the two study sites as contained in the agencies referenced materials. Hand notes have been placed on the cross sections by RESOURCE to display the water elevation and corresponding streamflow that would occur at the 100% wetted perimeter that was identified by the BLM/CWCB. **Attachment 1** represents the study transect that was evaluated with a corresponding measured streamflow of 1.19 cfs. At the 100% wetted perimeter identified by the investigators, the streamflow of Yellow Creek would have to be at a flow of 20.1 cfs. The CWCB's water availability analysis contained in the executive summary, however, shows that maximum streamflow occurring at this site is approximately 4.9 cfs (**Attachment 3**). The daily streamflow summary was based upon review of a nearby USGS streamflow gage. The measured data indicates that the 100% wetted perimeter should have been placed at an elevation in the cross section closer to streamflow conditions at 5 cfs, not 20 cfs. The resulting error is significant. The BLM/CWCB staff conclude that the 50% wetted perimeter criteria would be met at a flow of 3.31 cfs when in fact, it appears that the criteria is met at flows of approximately 0.2 cfs. The reason that the criteria can be met at lower flows is attributed to the characteristics of the channel within the lower reach. Both transects have a high width/depth ratio. A similar mistake was made with respect to the second transect that was studied at a flow rate of 1.04 cfs. The defined 100% wetted perimeter would require streamflows of approximately 17 cfs (**Attachment 2**). If the 100% wetted perimeter was properly located at an elevation supporting a flow of approximately 5 cfs (bank full), the wetted perimeter criteria would be satisfied at a lower streamflow. Due to these apparent errors, the summer ISF recommendation the Yellow Creek (lower) reach appears to be significantly over stated.

In closing, for the reasons as outline above, RESOURCE concludes that the BLM/CWCB R2Cross analyses completed on the Yellow Creek (Upper) and Yellow Creek (Lower) stream reaches are flawed. As a result, the ISF recommendations proposed by the CWCB staff are not supported by credible evidence. If, and when, additional information regarding the Yellow Creek studies becomes available, RESOURCE reserves the right to supplement and add to its findings as described herein.

Should you have any questions or would like to discuss the results of the above findings in greater detail, please do not hesitate to contact me.

Sincerely,

RESOURCE ENGINEERING, INC.

R. Scott Fifer, P.H.
Hydrologist

RSF/mmm
471-3.0

Attachments

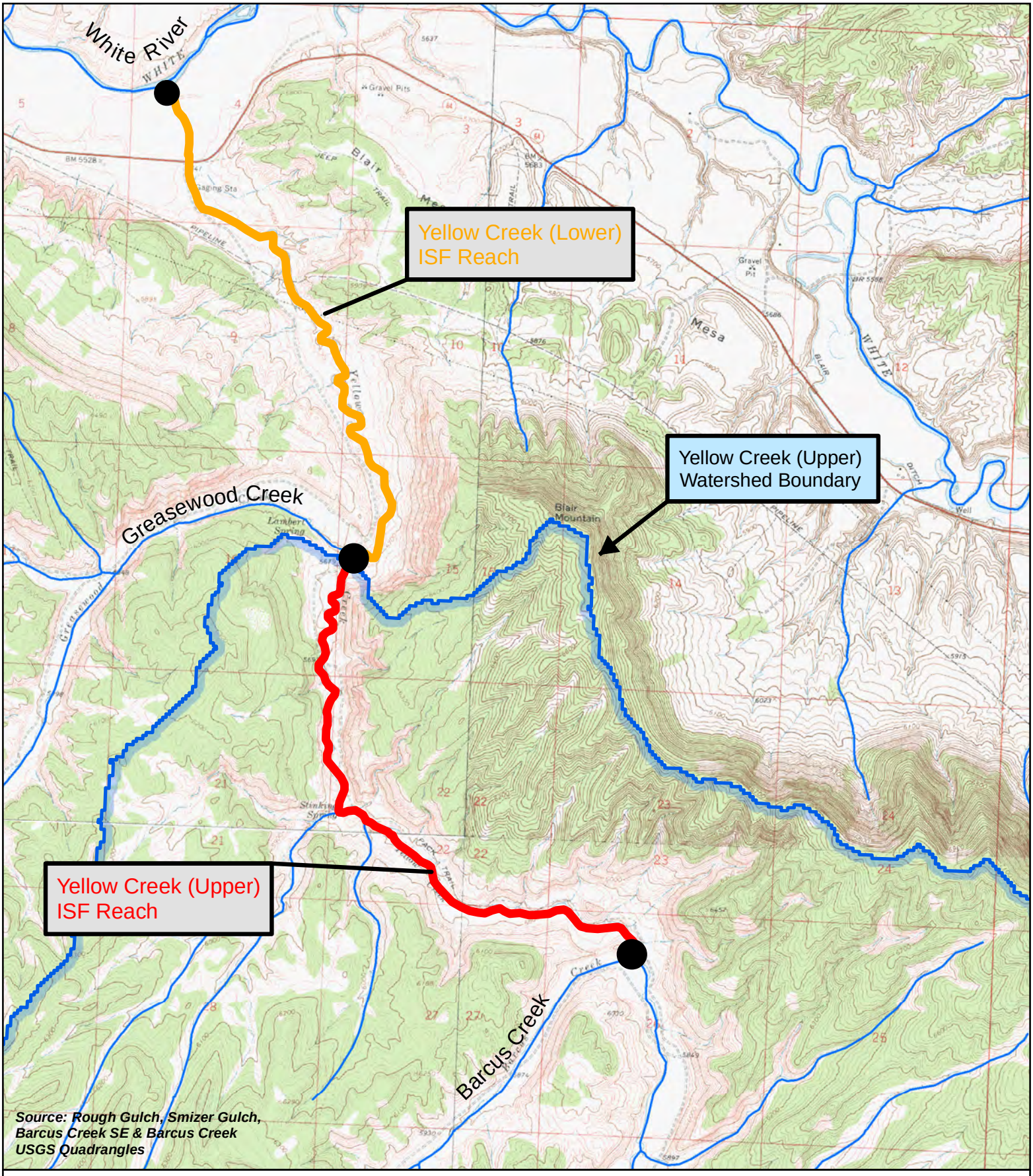


Figure 1: Yellow Creek
Lower and Upper ISF Claim

RESOURCE ENGINEERING, INC.
909 Colorado Avenue / Glenwood Springs, CO 81601
Voice: (970) 945-6777 - Web: www.resource-eng.com

0 0.25 0.5 1 Miles

Date:03/27/2015
File: 471-3.0
Drawn: DNR
Approved: RSF

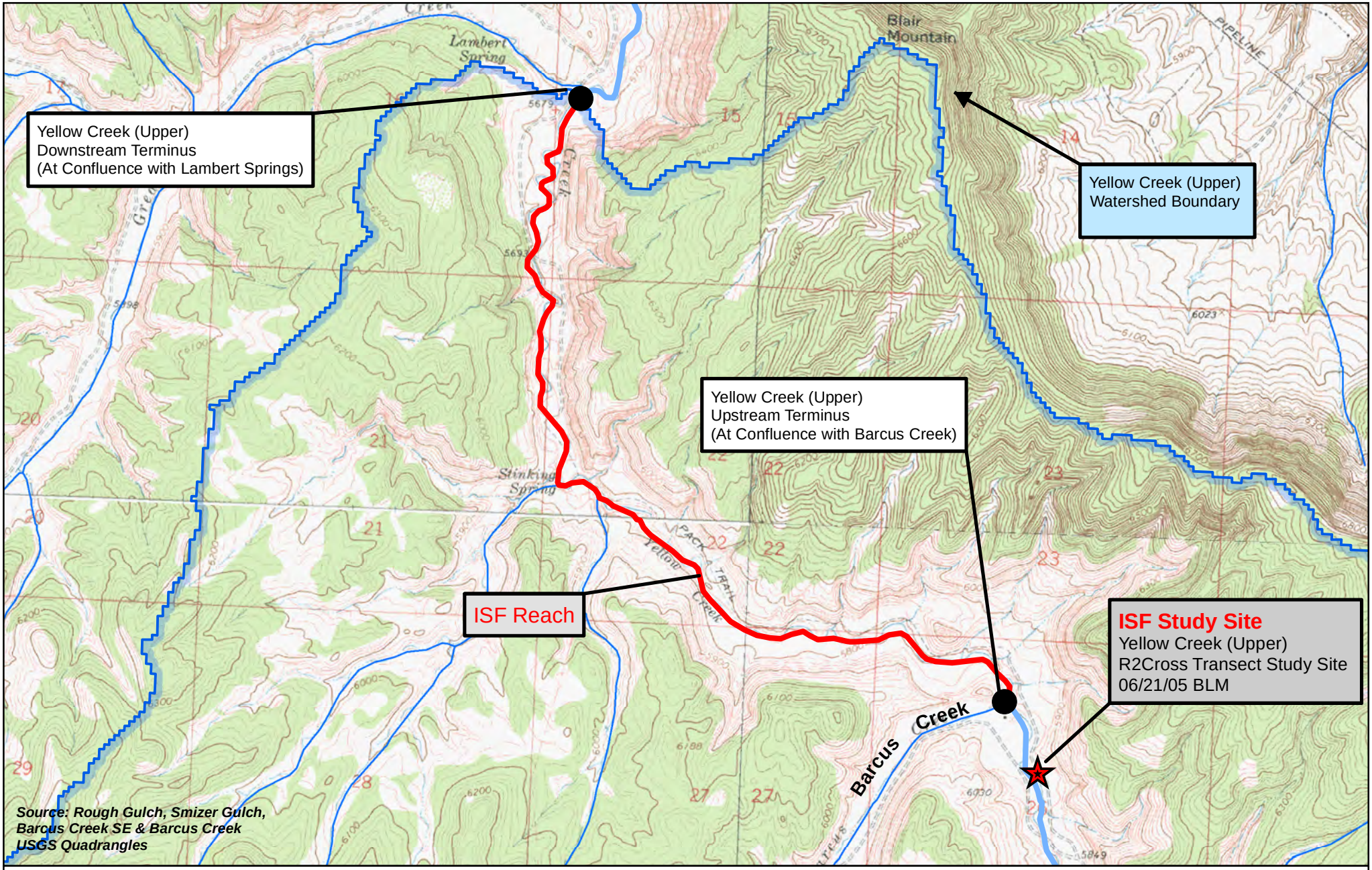


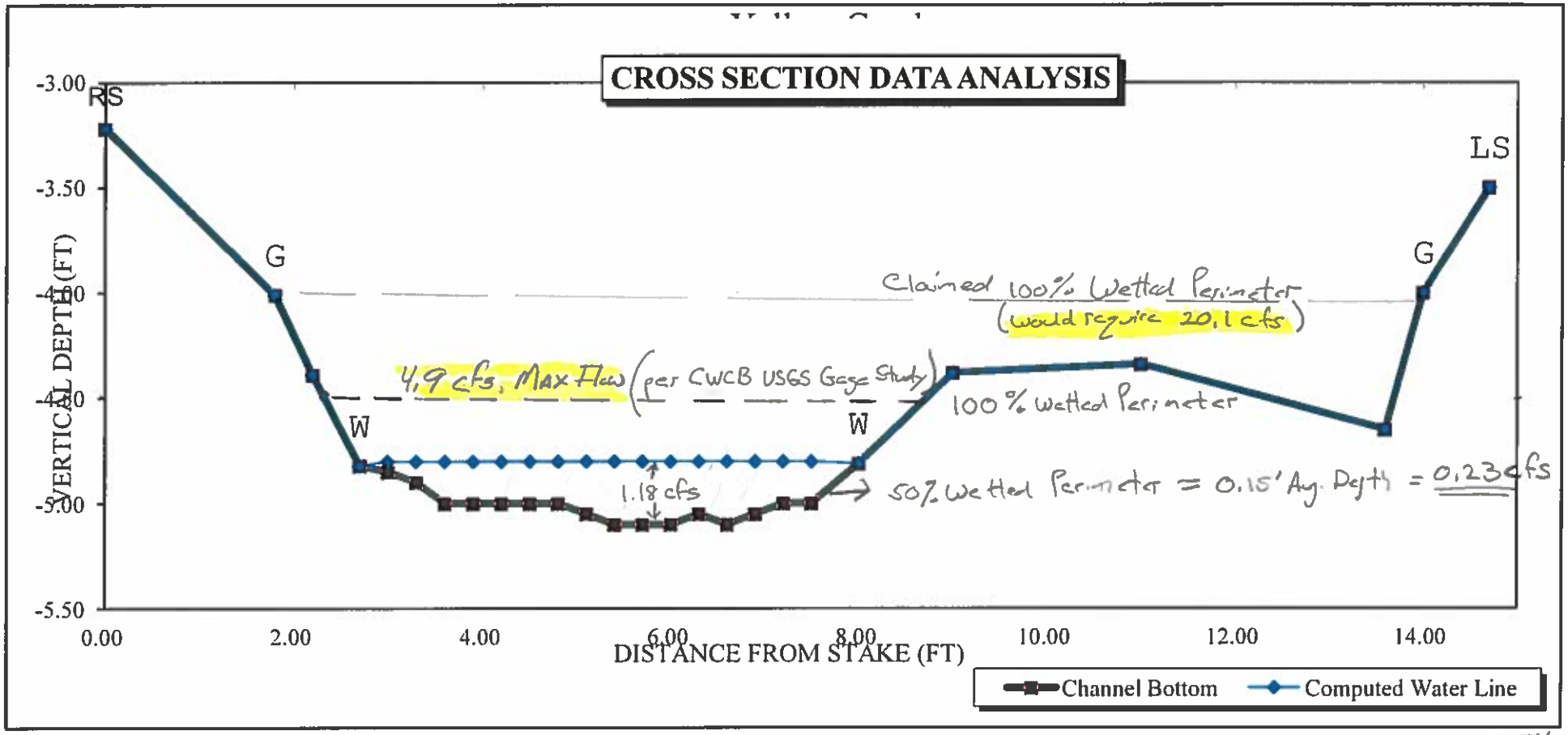
Figure 2: Yellow Creek (Upper)
ISF Claim

RESOURCE ENGINEERING, INC.
909 Colorado Avenue / Glenwood Springs, CO 81601
Voice: (970) 945-6777 - Web: www.resource-eng.com

0 0.25 0.5 1 Miles

Date:03/26/2015
File: 471-3.0
Drawn: DNR
Approved: RSF

Attachment 1



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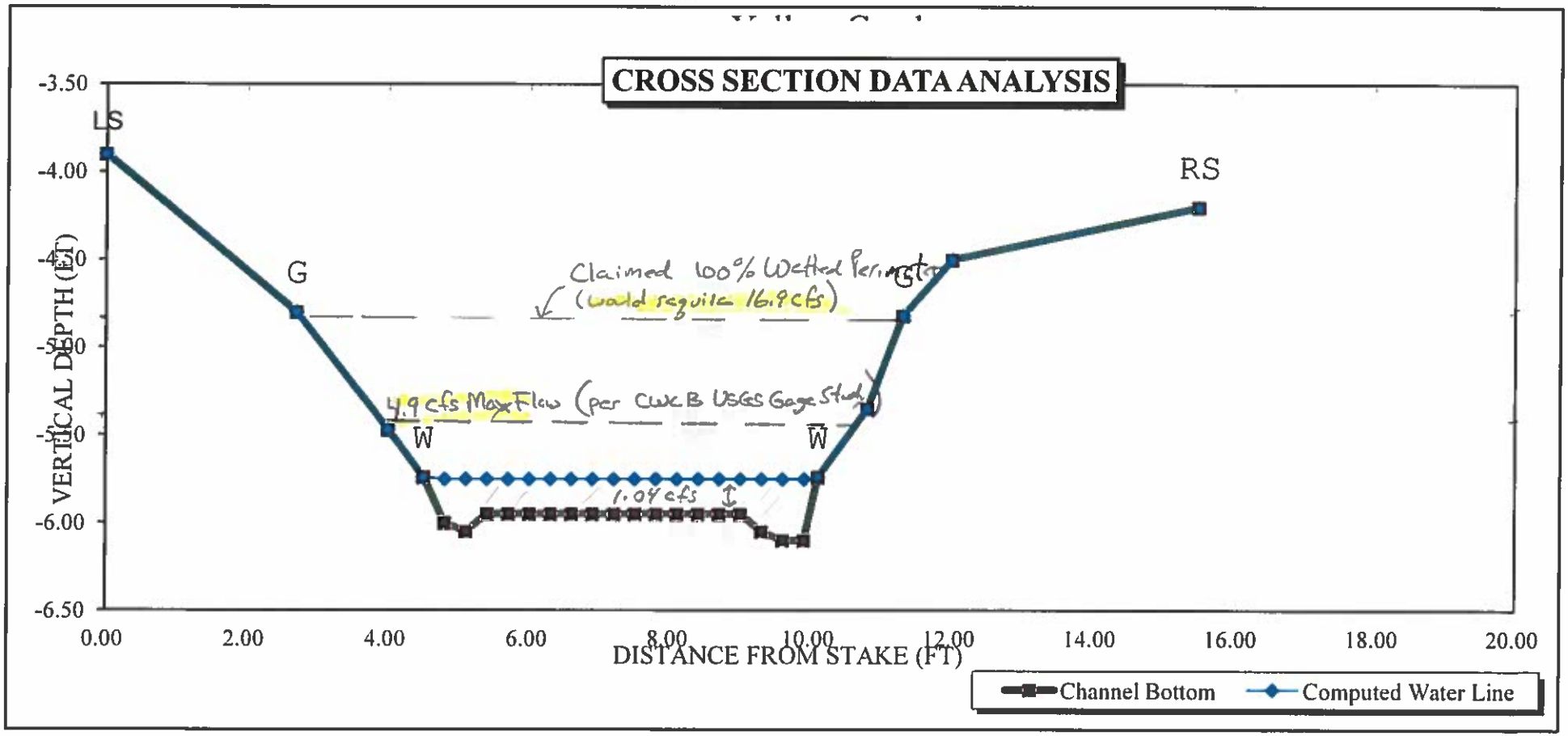
Yellow Creek Below Lambert Spring
9/27/11 Transect 1

Yellow Creek (Lower)
ISF Claim 1

Attachment 2



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Yellow Creek Below Lam Lert Spring

9/27/11 Transect 2

Yellow Creek (Lower)
ISF Claim

Attachment 3

Yellow Creek (Lower ISF)

Confluence with White River