Ditch Doings June-July 2018

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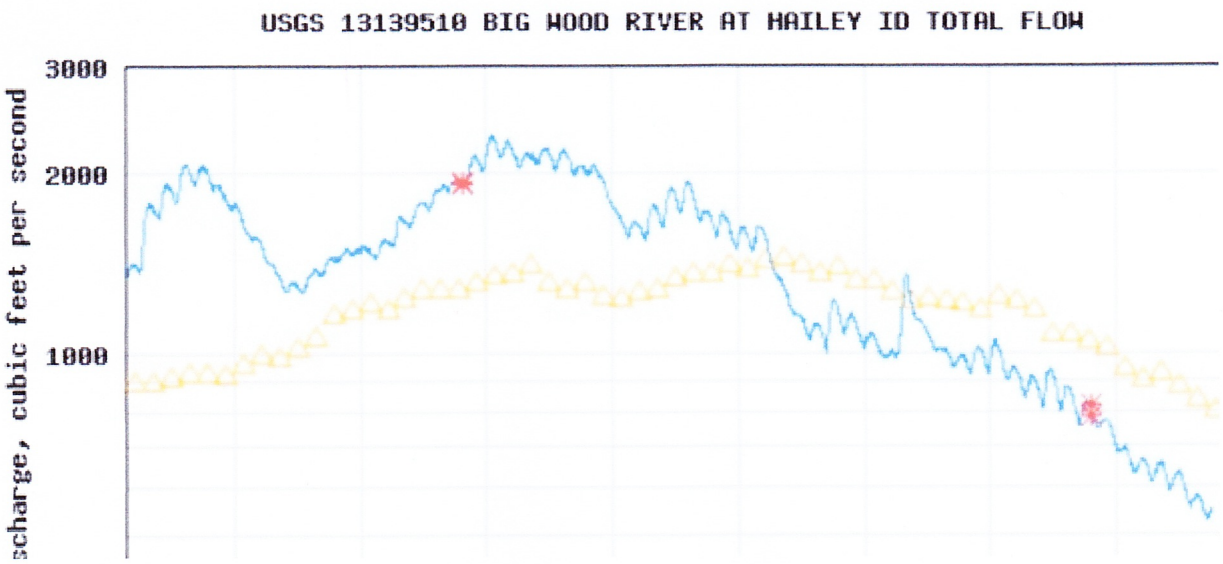


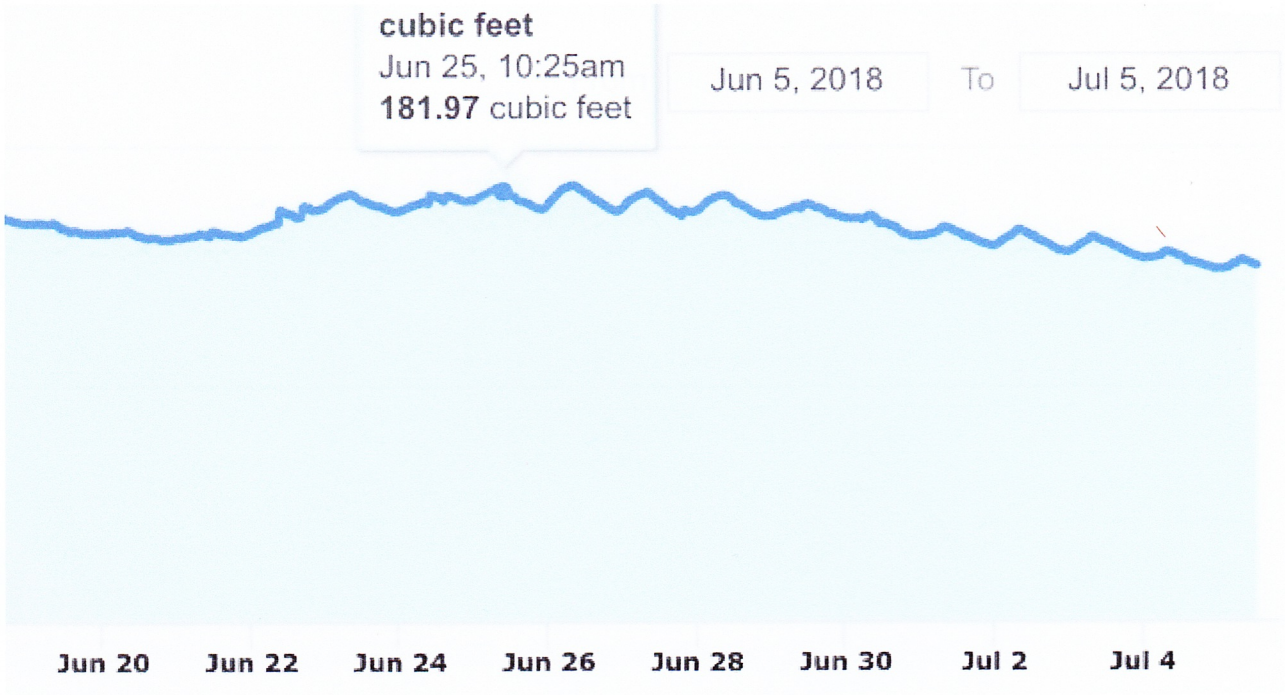
Most Recent Instantaneous Value: 552 cfs

The verticals are the weeks of May-July; each little peak is usually around 9 am each morning. The river's high flow of 2400 cfs, was in the last week of May, slightly earlier peak than normal, but well above average. The middle of June was dominated by warm rains, followed by very rapid growth, as everyone can see. All that green veg the length of the Valley, really sucks up the water when it gets as warm as it is now.

When the Big Wood drops below 500 cfs in Hailey, the first cuts will be made. Judging from this graph, I'd say its going to be very soon. Typically the first cut doesn't effect us because when Junior cuts are made upstream we end up with a little more water available, usually only for a few days.

The Main Headgate is already open as much as possible and we are only getting enough water to get to the far ends of the lateral ditches when some of the larger users shut down for their 2nd cutting of alfalfa, which is starting right now. When those users turn back on, after being off for 7-10 days, most will need to turn on their ground water pumps to continue irrigating.

Soon after that, the Barley fields will be turning off irrigation to begin their drying for harvest. The demand for water will drop significantly. As a result: we will have water in some laterals for several weeks still. As low as the river is, we still are only about half way thru the season.

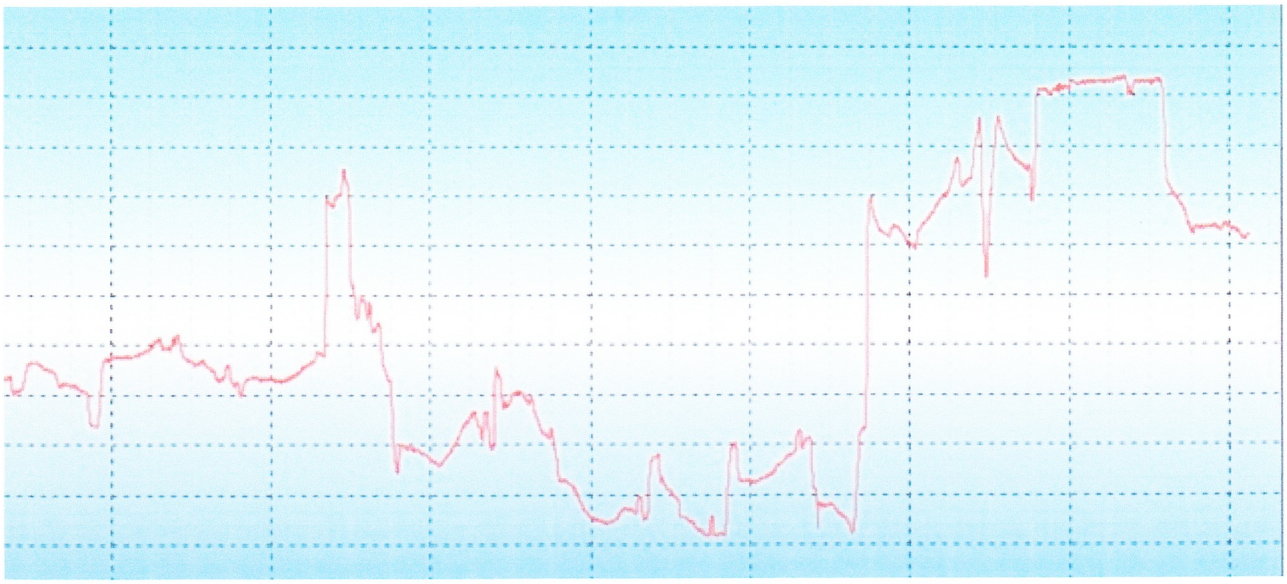


Our share of that

Today our flow into the system from the river is right about 150 cfs. And its adequate, barely. This shows the flow we control with the big gates, The Mains, in Bellevue. The little dips are daily variations due to fluctuations in the river, itself. The deeper ones indicate about 10 cfs change. Our high for the year was 185 cfs.

Fun to look back: A year ago, the Big Wood went over 6000 cfs. Our high, in the system, was 184 cfs, with the exception of a couple of unexpected debris plugs washing thru, and our own orchestrated test of system capacity, when we reached 260 cfs, momentarily and strictly controlled.

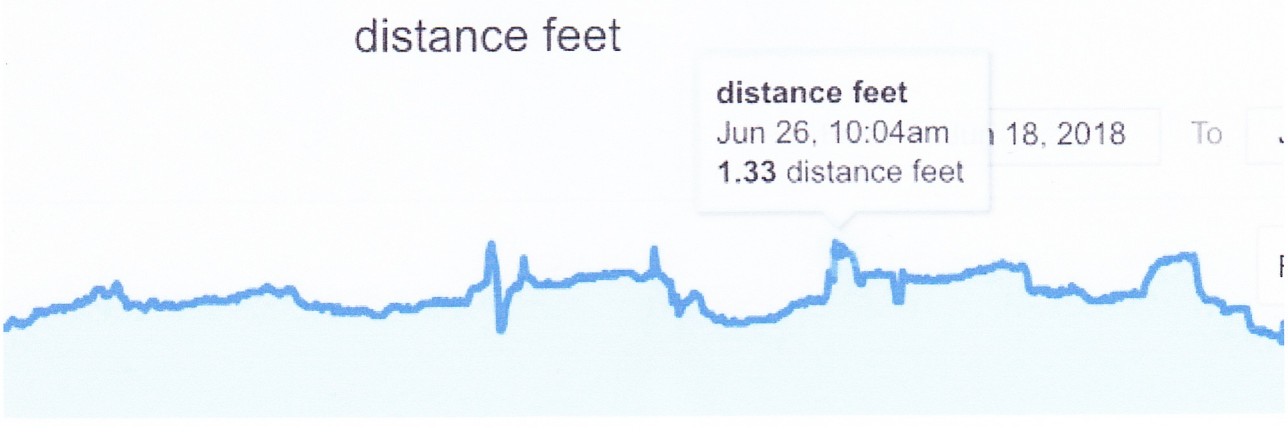
Our restriction to going higher was mostly my fear of some sort of wash-out somewhere down stream, but it served to confirm that our potential well outstrips our demand. Running at that high of flow dramatically increases the anxiety level at all points. Its fast, furious, and destructive. If we decided we needed that flow, we'd have to put in several more ponds and contouring meanders, just to slow it down.



The flow at the end of our largest lateral

The verticals in this case are days during mid June when our demand and availability were well matched. The high mark is over 28 cfs; the lows are near 10 cfs, which is what is needed at this place. Having access to this information makes a significant contribution to flow management. I can check the flow level at the end without needing to make the trip for another visual, every time an adjustment is made. Excess flow, evident on this gragh, goes into one of the various "recharge" ponds which allow us to keep the flow high and available, throughout the system, and not have to adjust it at the top, near the river, every time a large user turns their irrigation up or down.

The sharp rises happen when a big irrigation pivot is shut down above this flow meter. Its easy to see that in some cases, the simple flip of an electrical switch can lead to flooding down stream. Its nice to be forewarned, by the user, before they hit the switch. When the graph shows such a climb happening in the middle of the night its safe to assume that the pivot quit on its own. Previous canal managers would have been rousted out of bed to deal with it. I sleep thru the night because the ponds allow for such variations in flow to be absorbed.



....another test run

So this year we got a little smarter, or perhaps older, so less willing to face the high anxiety, and at the right moment, just filled one ditch, the East Lateral, to the brim, to find out what it will hold. During Fall work we had cleaned out a couple of choke points so our flow was higher than last year.

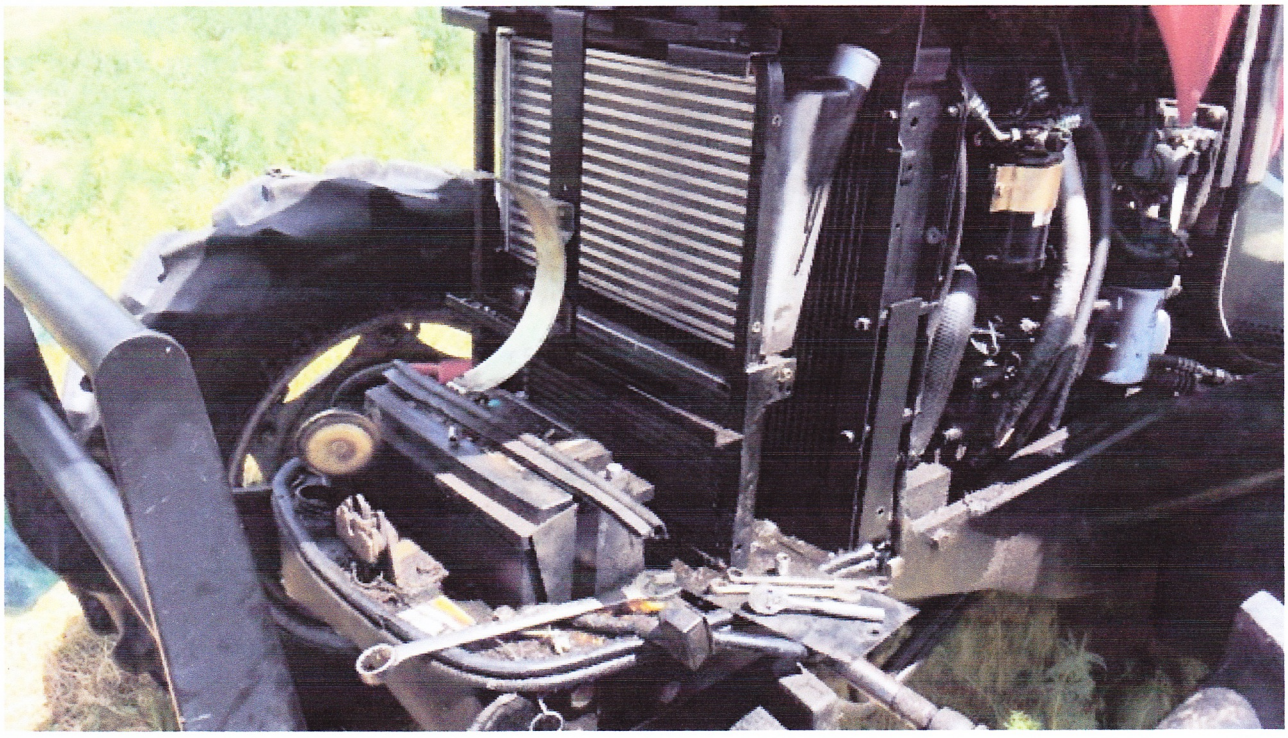
We ended up with 33 cfs at a point where water rights add up to near 100, and we couldn't squeeze in any more. It also was only slightly higher than what we run in there when all users are running at max rates. We marked a couple additional choke points to clean out when the season is over but we would still be a long ways from getting 70 more cfs to that locale.

It begs a few questions: "Do we need more?" "Did it ever hold more?" ....and others..

I'm looking in to it. More on this, later.

Early June

My attempts to mow along the highway, before my mom came to visit, led to a lot of broken sheer bolts, scary moments, and this.....



...wrenching...

Needless to say: very little mowing got done and soon, I had to return the rented tractor to its home for the hay season. But, I expect to try again later in the summer.

I've acquired a hang-mower to try out on some of the tamer sections of canal bank.

....we will see...

...obstacles to getting into work on time...

I always carry a chainsaw.

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...*Mom*...

I tried to only show her the places where good progress has recently been made...

I had to ask her to close her eyes most of the time.....

....but not always...