Yampa Valley State of the River

May 19, 2021

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Division 6 Engineer



Topics

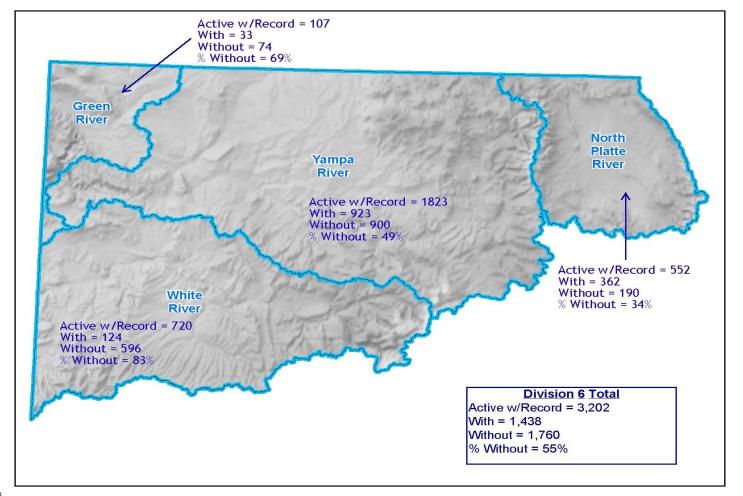
- Update on Measuring Devices
- Update on 2020 Abandonment Process
- Designation of Yampa River as Over-Appropriated



Update on Measuring Devices

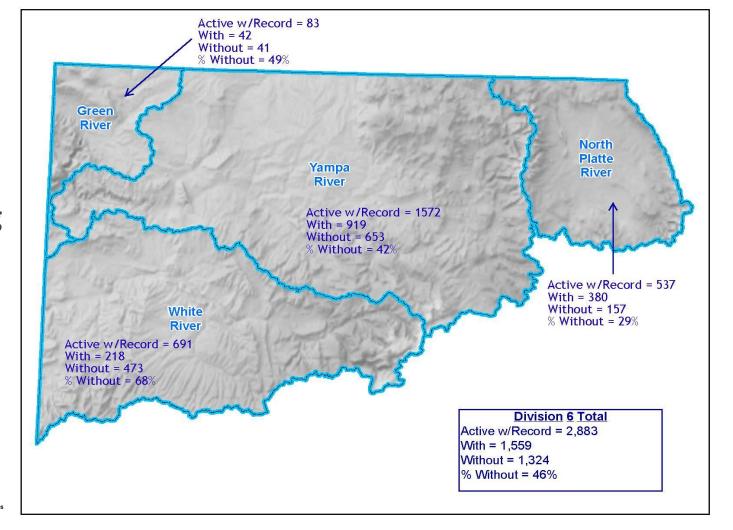


Division 6
Measuring
Device
Count January
2020





Division 6
Measuring
Device
Count April 2021





Update on 2020 Abandonment



The List

- 703 Rights in whole or in part on list
- 196 Pre-Compact Alternate Points of Diversion POD ONLY
- 75 Post Compact Alternate Points
- 289 Rights in Yampa, White, Green Basins
- 143 Rights in North Platte Basin (reduced to 95)*



Objections

- Deadline for filing statement of objections is July 1, 2021
- 107 Objections filed so far in Division 6
 39 in North Platte Basin, 68 in Yampa, White, Green Basins
- 37 Total responded to
- Pre-Compact Alternate Points
- Additional Review



<u>Designation of Yampa River as</u> <u>Over-Appropriated</u>



What Does Over-Appropriation Mean?

A stream system is considered over-appropriated (also known as critical) when at some or all times of the year, the water supplies of said stream system are insufficient to satisfy all the decreed water rights within that system.



What Might Cause a Stream to Become Over-Appropriated?

It is all about Supply and Demand

Has the Supply gone down?

Has the Demand gone up?

New Water Rights

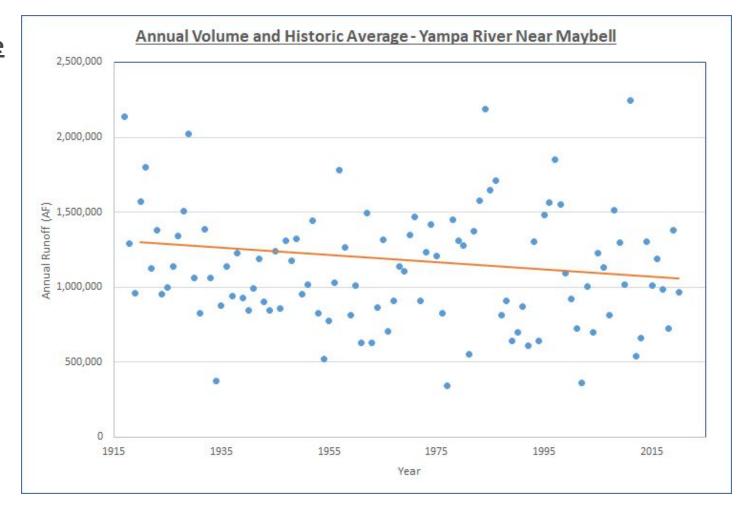
New wells

Higher Crop Consumptive Use



Historic Average Flows at Maybell

Range from about 1.35 million AF per year in 1920 to 1.1 million AF per year in 2020





<u>Demand</u> <u>New Water Rights</u>

- On average there are around 70 new water right applications filed each year.
- Majority are for water rights in the Yampa River basin.
- Many of the applications are for new water rights (some cases with multiple water rights).



<u>Demand</u> <u>New Wells</u>

In Last 10 Years:

- 626 new wells constructed in WD 44, 57 and 58
- 78 General Purpose Well Permits Non-Exempt
- 548 Residential Exempt



<u>Demand</u> <u>Higher Consumptive Use</u>

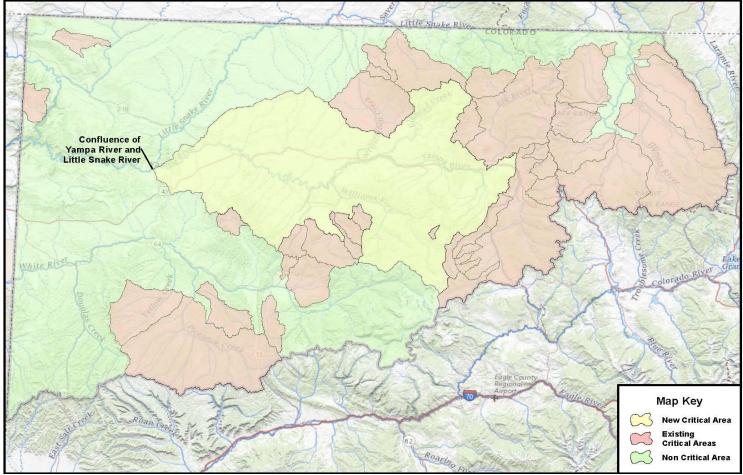
- As temperature rises, crop consumptive use also rises.
- Average temperature in Colorado has increased 2.9 degrees since 1970; though the increase in average temperature varies around the state.



What Part of the Basin Will be Affected?

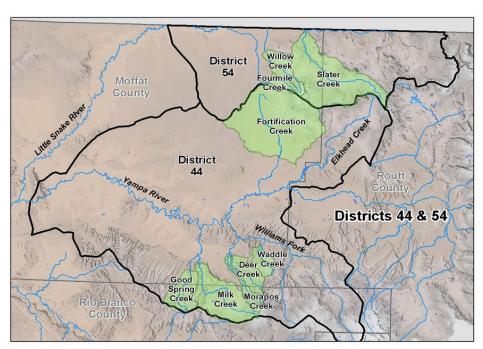
Those areas of the Yampa River basin upstream of the Little Snake River that are not already considered over-appropriated. (Some of the basin is already considered over-appropriated.)

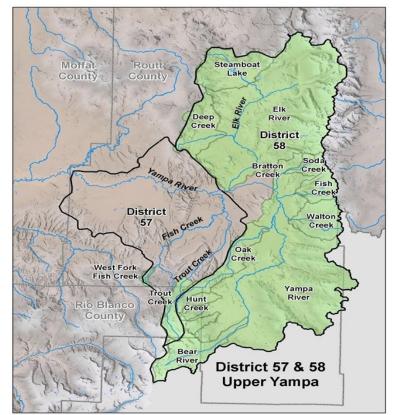






Yampa River Over-Appropriation







How Does Designating a Basin Over-Appropriated Affect Someone's Ability to Obtain a new Surface Water Right?

It does not, though it should be a clear indicator to those individuals establishing a new appropriation that water may not be available all of the time every year to meet their water needs.



How does the designation of a basin affect the issuance of new well permit?



Residential Wells

Not Over-Appropriated

Regardless of lot size a residential well permit may be issued for up to 3 single family dwellings, one acre lawn and garden and livestock watering

Over-Appropriated

For existing lots less than 35 acres, use is limited to in-house use only absent a plan for augmentation allowing additional uses.

Lots greater than 35 acres are not affected



General Purpose Wells (Any well other than residential)

Not Over-Appropriated

May obtain a well permit without a plan for augmentation

Over-Appropriated

Regardless of lot size, a plan for augmentation is required



What is a Plan for Augmentation?

A plan to replace out of priority depletions in time, place and amount



Why does well permitting change when a basin is over-appropriated?

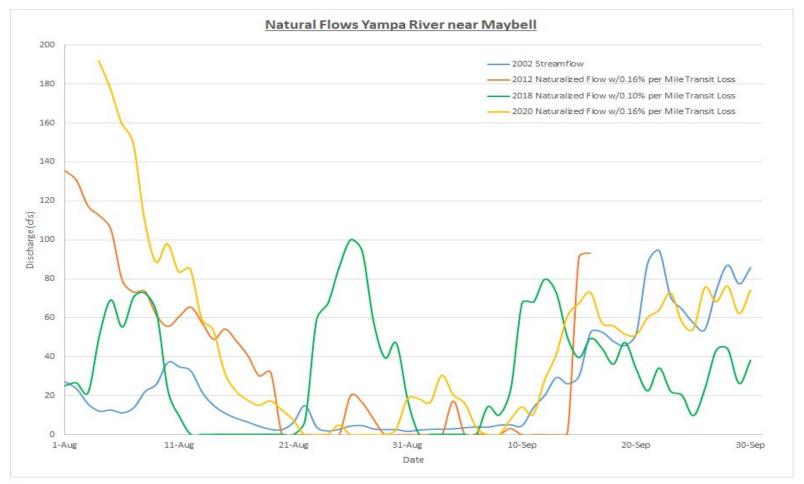
- All groundwater is considered tributary to surface water
- When a junior surface water right is causing injury to a senior water right, the junior surface water right can be curtailed/shut off
- Wells on the other hand cannot simply be turned off resulting in an immediate effect on the river
 - Depletions from wells are delayed
 - Pumping from yesterday, a month ago or even a year ago, may still be impacting the stream
 - As such, how well permits are issued must be modified



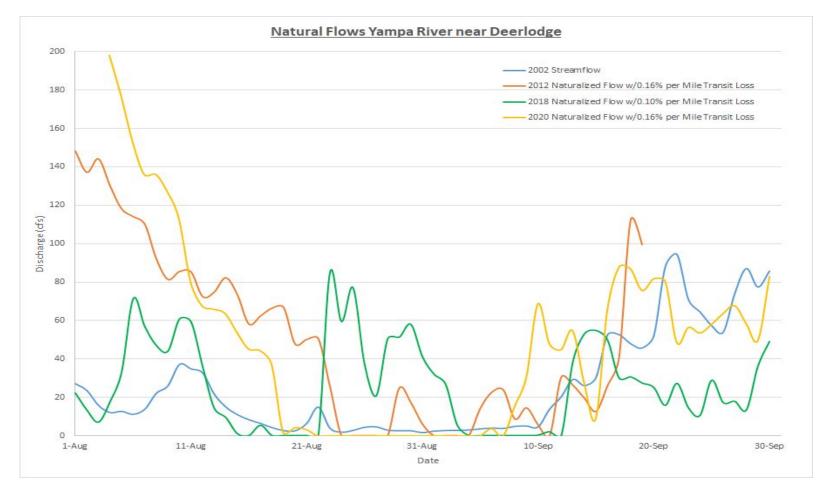
What was considered when evaluating the designation of the Yampa River as over-appropriated?

- Has there been a call?
- Were there other critical low flow years but without a call?
- What would the river have looked like without releases of water from reservoirs for non-consumptive purposes?
- How much water has been appropriated on the system in comparison to the amount of available water?
- What has changed that would warrant the designation?











What is the process from here?

- ✓ Written report submitted to State Engineer on March 17, 2021
- ✓ Notice of the recommended designation was given through the SWSP notification list on March 19, 2021 and through a press release on March 23, 2021
- ✓ 30-day comment period from time of notice.
- Respond to comments received and continue public outreach
- Decision will be made by State Engineer
- Date set when basin will be considered over-appropriated





