

LEARNING BY DOING

2018 Notable Events

The following summary of notable events in 2018 is provided to give context to the ongoing monitoring and cooperative Learning By Doing (LBD) effort in Grand County, Colorado. This summary is followed by a one-page “Monitoring Year 2018 Snapshot,” which summarizes monitoring results in the Fraser and Colorado River basins. Additional information on monitoring results for the full LBD cooperative effort area (CEA), are included in the 2018 Aquatic Resource Monitoring Plan Report.

In 2018, LBD made significant strides in operations, monitoring, and stream restoration efforts. The following is not meant to be exclusive or comprehensive, but to highlight some of the most notable events of 2018 that may have had an impact on water quality.

Climate, Hydrology and Impacts

- Grand County experienced average snowpack, but an early runoff. The April 1st snowpack in the Upper Colorado Basin was close to average and provided a near normal supply for the trans-mountain diversions to the Eastern Slope. However, high temperatures in the spring and summer, as well as below-average precipitation, created challenges across the upper Colorado River watershed that are likely to result in the 2018 water year being remembered as one of the driest years on record statewide.
- By mid-summer, Colorado Parks and Wildlife (CPW) imposed fishing restrictions on streams with measured temperatures nearing levels harmful to aquatic life in Grand County and throughout the state.

Coordination Calls

- 2018 was the third year of holding weekly water coordination calls from June through September. Calls allow LBD partners to be responsive to low flow and high water temperature conditions through coordination of environmental water releases, to provide a forum to discuss conditions and weekly projected operations, and to foster communication, relationships, and trust amongst stakeholders.

Operations

- Windy Gap pumped a total of 26,235 AF, of which 1,000 AF was pumped and stored in Granby Reservoir for Grand County. This is the first time Windy Gap has pumped water for Grand County as a result of the signing of the IGA for the Learning By Doing Cooperative Effort in 2016. The Grand County 1,000 AF was released over 25 days in August at a rate of 20 cfs. Releases were delivered under contract to the Grand Valley Power Plant water right and then to the 15-mile reach.

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- USBR and Northern Water delivered irrigation directly out of Willow Creek Reservoir for HUP delivery/substitution rather than pumping into Granby Reservoir and replacing out of Green Mountain Reservoir, providing flow directly to the Colorado River downstream of Windy Gap.
- Denver Water conducted maintenance on the Moffat Collections System and the Jim Creek diversion from July through September and was able to provide 900 AF of bypass flows to the Fraser River.
- Denver Water, Northern Water, and the USBR exchanged water from Williams Fork, Willow Creek, Granby, and Green Mountain Reservoirs to accommodate lowered Williams Fork dam outflows needed for stream restoration work on the Williams Fork River in September. These exchange flows benefitted the Colorado River from Windy Gap to the confluence of the Blue River during the restoration period.

Restoration Projects

- CPW and Trout Unlimited representatives electro-fished the Hammond Ditch and confirmed fish entrainment. This prompted LBD to move forward with a project to design and implement replacement of the head gate, installing a fish screen, and restoring habitat connectivity in the affected reach of the Fraser River.
- Denver Water implemented the first phase of its Williams Fork River Restoration Project, required as mitigation for its Gross Reservoir Expansion Project. The work included 0.88 mile of aquatic habitat restoration in the Williams Fork River on Denver Water property below Williams Fork dam.

Other Factors Impacting Water Quality

- Grand County received notification from a downstream homeowner that on December 2 (Sunday) prior to 9:00 am, Union Pacific Railroad (UPRR) discharged untreated polluted water from its Moffat Tunnel directly to the Fraser River that once again turned the river black. Effects from this discharge are thought to have had negative impacts on macroinvertebrate and fish populations in prior years.