MRCDC
PO Box 118
Winnett, MT 59087

Missouri River Conservation Districts Council

Molly Masters, Coordinator
Phone: (406) 454-0056
mrcdc@macdnet.org
www.missouririvercouncil.info

USACE Fort Peck Dam Test Flow Information

Fort Peck Dam History

The Missouri River ceased to free flow in 1934 when the United States Army Corps of Engineers (USACE) began construction of the Fort Peck Dam. Original purposes of the Dam were flood control and irrigation. Since then, **160 private irrigation intakes serving 40,000 acres and two tribal irrigation projects serving an additional 20,000 acres have been completed** that residents have come to rely on, taking the place of riparian acreage that was flooded above the Dam. The Fort Peck Tribes Rural and Municipal water supply that serves the four counties also rely on the Missouri River.

Objective of Test Flows:

Try to avoid jeopardizing the continued existence of the pallid sturgeon from the USACE actions on the Missouri River, and to assist the pallid sturgeon reproduction flows are meant to mimic historical unregulated flows.

National Environmental Policy Act Process (NEPA) and the Environmental Impact Statement (EIS):

February-March 2019 – Scoping period was held regarding Fort Peck Test Flows.
March 26, 2021 – Draft EIS came out with comments due May 25, 2021. Of the 343 comments received, **113 were from irrigators who did not support Test Flows.**
September 21, 2021 – Final EIS was published without any changes regarding comments received.
November 12, 2021 – **Record of Decision (ROD) was signed by Corps of Engineers** Colonel Geoffrey Van Epps implementing Alternative 1, or its variants, when conditions are met.

Alternative 1 Test Flow Information from EIS:

Attraction Flow: Begins on April 16, increases by 1,700 cfs/day until flow reaches 2x the spring release and is then held for 3 days.

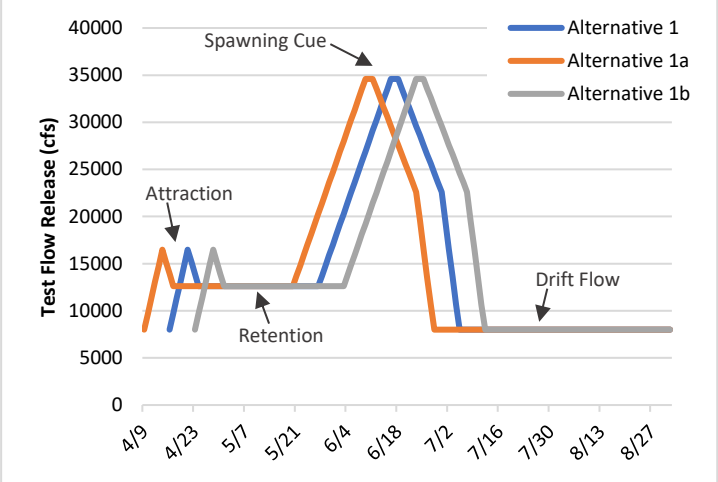
Retention Flow: Flow decreases by 1,300 cfs/day until the flow is 1.5x the spring release, and then held there until May 28.

Spawning Cue Flow: Begins on May 28, the release is increased by 1,100 cfs/day until the peak flow reaches 3.5x the spring release **(Will reach about 35,000 cfs).** This is held for 3 days, then decreases by 1,000 cfs/day for 12 days and then decreases by 3,000 cfs/day until flow reaches 8,000 cfs.

Drifting Flow: This flow is held at **8,000 cfs until September 1,** during prime irrigation season.

Alternative 1 Variant a will begin one week earlier.

Alternative 1 Variant b will begin one week later.



Graph showing approximate Missouri River cfs flow during a Test Flow year beginning in April and ending September 1.

Irrigation Impacts in EIS Assessment:

High flow impacts were assessed in two different categories, Side Channel Intakes and Mainstem Intakes. There are *31 side channel intakes* that may be impacted by changes in operations and maintenance costs AND changes to irrigator's net income from changes in crop yield. The EIS assumes loss of irrigation for the remainder of the season, assumes each side channel intake irrigates 414 acres, and it does take into account change in gross sales in the region. There are *111 mainstem intakes* that may be impacted by changes in operations and maintenance costs due to damage from high flow events. **The EIS assumes the ability to continue irrigating and no change in crop production for the mainstem intakes as well as no change in employment, sales or income in the region.**

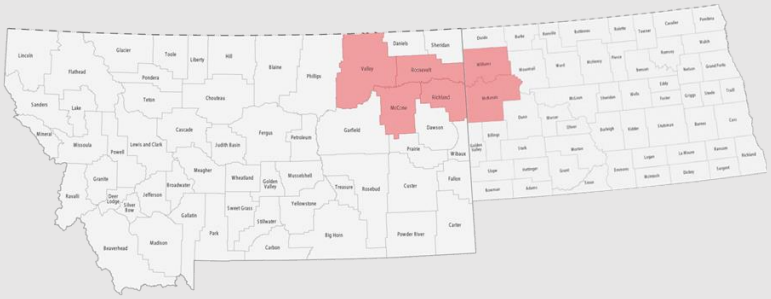
Low flow impacts included an estimated change in net farm income. The change in yield per acre is assumed to be driven by the change in access to water, more days without access will cause higher yield decreases. The EIS does account for changes in regional employment, income, and sales to counties effected by loss in crop production.

Overall Impacts **include a crop loss of $7.5 million and a loss of 80 jobs equaling $4 million, in Montana alone.**

The Rest of the Story – What the EIS Did Not Include

High Flow Issues:

- **The spawning cue and 35,000 cfs flood target is too high** – may flood pumps, electrical boxes, access roads and potentially cropland itself.
- **Impacts to mainstem intakes should include losses in crop production** – there will be substantial loss due to an inability to irrigate after high flows recede.
- Labor and equipment resources to get irrigation intakes back up and running are very limited.
- Riverbed stability after the higher flows recede will be wet, silt ladened and likely not a place or condition a contractor will even want to risk working on.
- High flows erosion impacts were not considered. Loss in riverbank = loss of property.



Montana and North Dakota map showing the six counties that will be impacted the greatest. In Montana they are Valley, McCone, Roosevelt, and Richland and in North Dakota they are Williams and McKenzie.

Low Flow Issues:

- **The drift flow of 8,000 cfs is too low for most pump sites to operate.**
- In 2020, for example, at least 25 pump sites required work to become operable at 7,500 cfs. This work took weeks to accomplish.
- This is a job that many would not be able to do after a July high water test.
- While 8,000 cfs is not a historically low flow, the river has changed dramatically since the 2011 flood. 8,000 cfs today appears to be the lowest some irrigators have seen the river in their lifetime.
- **Most irrigators require 10,500 cfs to irrigate comfortably.**
- The EIS is unclear in that it does not adequately address how many intakes are inoperable at 8,000 cfs.

Left: Side channel intake pump site.

Right: Main channel intake pump site.

Overall Issues:

- Impacts to irrigation are repeatedly described as "temporary" or "short-term" in the EIS.
- **Impacts from low flows occur during prime irrigation season, when temperatures are at their highest and the need for water is the greatest.**
- The loss of one year's crop could put a farmer out of business for good.
- Just one farmer out of business means a financial loss to the county, may mean the loss of multiple students at a rural school, may mean one less volunteer for the rural EMS or Fire Department, etc.
- If the test flow is implemented, irrigators will need enough time to prepare their irrigation intakes and pump sites.
- Impacts to the Fort Peck Rural and Municipal water supply that serves the four counties is not accounted for.
- There may be impacts to Fort Peck Reservation Irrigation projects and Buford Trenton Irrigation.
- Sidney Sugars has been involved in this process. A significant percentage of Sidney Sugars' beet crop comes from irrigated acres along the Missouri River using pump sites. **If the Test Flow causes multiple pump sites to become unusable, it will result in sugar beet crop failure**, which could be the tipping point that causes Sidney Sugars to close. **If they close, 118 full time jobs and 360 seasonal employees, of which 80 are from the Fort Peck Tribe, would be lost.**
- Loss of livestock feed sources for Eastern Montana including irrigated, forage crops and beet pulp from Sidney Sugars.

What now???

Continue work to try stopping the test flows. If this is not possible, how can we mitigate financial damages? Crop insurance will not cover losses because it is a man-made event and USACE say they will not provide any mitigation. How do you compensate for the 478 lost jobs at Sidney Sugars?