



Consumption advisory for sucker fish species on Yellowstone River below Billings

Women of reproductive age and young children advised to not consume the nongame fish species

BILLINGS - The Fish Consumption Advisory Board, consisting of representatives from the Montana Department of Public Health & Human Services (DPHHS), Montana Department of Environmental Quality (DEQ) and Montana Fish, Wildlife & Parks (FWP), has issued an updated consumption advisory for fish on the Yellowstone River.

Women of reproductive age and young children (age 0 to 6) are advised to not consume any species of sucker caught in the Yellowstone River from the Highway 212 bridge in Laurel to the confluence with the Bighorn River due to elevated levels of petroleum hydrocarbons. Sucker species common in the advisory area include shorthead redhorse, longnose sucker and white sucker. There are no advisories on using sucker meat from this section of river as bait while angling for other fish species.

The previous consumption advisory for all species of fish on the Yellowstone River from Indian Fort Fishing Access Site (FAS) to the Highway 212 bridge in Laurel has been lifted.

Sampling Results

Following the discovery of various polycyclic aromatic hydrocarbons (PAHs) in fish tissue from sampling in July and August, 2023, FWP crews collected various fish species at three sites on the Yellowstone River from Sept. 27–29 to assess human consumption restrictions.

During the September sampling, longnose sucker, mountain whitefish, rainbow trout and brown trout were collected from Otter Creek FAS and Holmgren Ranch FAS. Otter Creek FAS is on the Yellowstone River just downstream of Big Timber and Holmgren Ranch FAS is on the Yellowstone River between Reed Point and Columbus.

Goldeye, smallmouth bass, channel catfish and shorthead redhorse were collected at Voyager's Rest FAS, located on the Yellowstone River near Worden. Shorthead redhorse collected at Voyager's Rest FAS showed levels of mixtures of petroleum hydrocarbons high enough to warrant the advisory for women of reproductive age and young children. The same fish species were not collected at all sites, as the species present in the Yellowstone River change as the river habitat changes.

Previous Sampling

In July and August, 2023, FWP crews collected fish from the Yellowstone River to assess physical injuries to fishes and potential human consumption restrictions as a follow-up to the June 24 train derailment. Fish collected included mountain whitefish, longnose suckers, shorthead redhorse, rainbow trout and brown trout. Multiple fish species showed elevated levels of various PAHs high enough to warrant advisories to avoid consumption. Previous advisories were issued on Aug. 11 and Sept. 19.

Next Steps

Additional sampling will take place in late June at Otter Creek, Holmgren Ranch and Voyager's Rest FASes on the Yellowstone River to monitor for human consumption concerns.

Because of their frequent movement throughout river systems, fish cannot be used to determine the source of a specific contaminant. The Fish Consumption Advisory Board is currently prioritizing sampling to monitor for human health concerns, not contaminant source assessment. Other testing methods will be needed to determine a source of this specific contaminant in the Yellowstone River. The hydrocarbons detected in the September 2023 fish samples are widespread compounds in the environment, so finding a specific source may be challenging. Some petroleum hydrocarbons occur naturally in the environment, especially in the shale rock common in the Yellowstone River Basin. Petroleum hydrocarbons are also found in products such as oil, gas, plastics, and pesticides—and are produced through combustion of these products.

Petroleum hydrocarbons, such as those detected in September, contain a complex mixture of chemicals. Some of the chemicals can have effects on the blood, immune system, lungs, skin, and eyes. Other chemicals may affect the liver and kidneys. These effects from eating fish have not been recorded in humans. The chemicals that U.S. Environmental Protection Agency and the International Agency for Research on Cancer have determined to be carcinogenic or probably carcinogenic to humans were not detected in fish samples in September. Most of the chemicals in the mixtures detected in the fish samples have not been classified as cancer-causing.

For more information on petroleum hydrocarbons, visit: wwwn.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=75.

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