UTAH DEPARTMENT of ENVIRONMENTAL QUALITY
WATER QUALITY

Rescinding Fish Consumption Advisories

The state of Utah has the responsibility to protect residents from the potential health risks associated with consuming fish with elevated contaminant levels from local waters. Since 2005, the Division of Water Quality has partnered with the Division of Wildlife Resources and Department of Health to issue fish consumption advisories where and when appropriate based on mercury concentration in the tissue. To date, there are mercury consumption advisories in place at 24 locations (6 rivers and 18 reservoirs) in Utah. These advisories are voluntary recommendations issued to help the public make informed choices about the fish they consume.

The front end of the Utah advisory methodology has been developed and improved upon over time, so it is very clear when an advisory will be issued for a waterbody. The method is based upon EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories (EPA, 2000). However, the Utah methodology does not yet address follow up monitoring and criteria to rescind a consumption advisory if tissue mercury concentrations decrease over time at an advisory location. There are many locations in Utah where repeat sampling has been conducted. For some of those locations the mercury concentrations have remained the same, while at others we've measured both increases and decreases in the resulting concentrations.

Materials for Review:

EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories can be found at:

https://www.epa.gov/sites/production/files/2015-06/documents/volume1.pdf

Utah's 303(d) Assessment Methodology can be found at:

http://deq.utah.gov/ProgramsServices/programs/water/wqmanagement/assessment/docs/2015/03Mar/303d_AsseesmentMethodology.pdf (Mercury on page 58)

For discussion:

There is considerable variability among the states and tribes in implementing their advisory programs. EPA conducted a survey of state programs in 2010 asking over 70 questions. One of those was "Once an advisory is issued for a specific waterbody, what must occur for the state to rescind the advisory?" Responses indicated that seven states remove an advisory when levels of the parameter of concern decline below the safe consumption criterion for just 1 year. Twelve states remove the advisory after 2 consecutive periods of values below the criterion, and two states wait for three years of decreased concentrations. All other states responded that they either consider on a site specific basis or have no set time period established.

DWQ, DWR and DOH staff recently met and discussed what method Utah should adopt. Based on variability of mercury concentrations observed in the past, staff decided one year of decreased concentrations is insufficiently health protective. The group proposes that to rescind an advisory, a minimum of two consecutive periods of follow up monitoring with mercury levels below the safe consumption criterion is necessary. The monitoring location will then be prioritized for additional monitoring at least once every five years to watch variability over time.

Results from several sites with multiple years of data post advisory issuance