

Eagle Lake Fishing Information & Network

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pH vs. Eagle Lake Trout and problems associated with catch and release.

Being a natural lake, Eagle Lake's water level is dependent on snow pack from Lassen Nation Park's Thousand Lakes area as well as the many springs that feed it. The elevation of the lake varies from 5097 ft. (recent past low water of 1992) to a "recent" past "historic" high of 5125 ft. and it's directly affected by drought cycles. The lakes recent high water of 1993 was around 5108' to 5109'.

When the lake is below 5106 ft. elevation the pH increases dramatically during the hot summer months when the water temperature. When the pH rises above 9.2 the Department of Fish and Game posts a "Voluntary Catch and Keep" recommendation. Generally, it is posted in late June or early July it depends on the water temperature and pH level. In years of low water we have seen the pH rise to 9.7 at the north basin. (however in history it has been slightly higher)

When the pH is above 9.2 it becomes a caustic solution. This "caustic solution" erodes the mucous membranes covering the gills of the trout. These membranes protect the gills and **in an eroded condition the gills cannot transpire the gases and oxygen the fish needs to survive** after the lactic acid build up in its muscles and stress **from the fight**. Without the protective mucous membranes, the gills begin to bleed at the capillary level and "the fish will surely die within 24 to 48 hours".

Some fish that do survive being released during that time usually have some symptoms of strawberry disease which is attributed to stress conditions. Strawberry disease is only a dermatological condition; the meat is not affected. The symptoms are that of a red "rash" on the skin of the fish.

This recommendation is not typically posted in years of good water quality when the lake is at the optimum elevation of 5109 ft.

I have personally seen the affects of releasing during the summer months when the water temperature is above 65 degrees. Having fished this lake over 45 years I have seen many "cycles" of the lake and understand the importance of this recommendation. We are avid catch and release anglers but we have seen first hand how these trout are affected during the heat of the summer. We are in full support of this recommendation when it is posted.

Some folks still don't adhere to this recommendation however the **recommendation has come about through scientific study**.

You will see the sign below posted at all the launch ramps and campgrounds when the pH rises too high to safely release the trout. **Please be a part of the solution rather than a part of the problem**. If you only catch and release fish, please wait until fall when the recommendation is lifted or in spring before it is posted. More and more folks on pond realize this problem and are known for reminding others of the recommendation. However, it is completely voluntary. SEE CDFG REQUEST BELOW

ATTENTION ANGLERS

Please do **NOT** practice “catch & release” angling at Eagle Lake until further notice.

The current drought condition has increased the alkalinity of the lake and, when combined with high summer water temperatures and low levels of dissolved oxygen, releasing trout will only result in their unnecessary death within a 24 hour period.

Please practice “catch & keep” until conditions improve, usually in the fall each year. Your cooperation will insure that there will be sufficient numbers of carry over fish to provide for quality angling in the future.

Limit: 2 fish per day, 4 fish total possession per angler.

Thank you for helping to protect this trophy trout fishery.

