

**DEPARTMENT OF FISH AND GAME**

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**FISH PATHOLOGIST REPORT****Location**

Iron Gate Hatchery

**Date**

June 16, 2010

**Species**

Steelhead fry  
Fall Chinook-09 fingerlings  
(Oct-Nov 2010 release)

**Holding Area**

Hatchery Trough 6  
A series (now in A, C, D, & E)

**Disease Condition**

SH Fry: Fish were placed in troughs and shortly thereafter some losses were noted. Losses now at 30 fish per day of 16K fish (0.2% per day). Moribund fish euthanized and evaluated using light microscopy showed mixed bacteria (*Aeromonad/Pseudomonad*-type) on skin and gill scrapes, and also in intestines. No other pathogens or parasites found.

Chinook Fingerlings: Losses have been around 150 fish per day of 720K fish (0.02% per day). Fish were fin clipped and held in high densities during and immediately after process. Moribund fish euthanized and evaluated using light microscopy showed mixed bacteria (*Aeromonad/Pseudomonad*-type) on skin and gill scrapes. Fish have been thinned into 3 additional raceways.

**Recommendations**

SH fry: Treat with oxytetracycline medicated feed (terramycin) at a rate of 3.75 g of oxytetracycline per 100 lbs of fish, per day, for 10 days. This is achieved by feeding 2% body weight per day if feed has 2 g oxytet per lb of feed, or feed at 1% body weight per day if feed has 4 g oxytet per lb of feed.

Chinook: The lower densities provided by thinning will help a great deal. Treat external bacteria with potassium permanganate (KMnO<sub>4</sub>) flushes. Do three flushes per day, for three consecutive days, at about 30 minutes apart. Use 1.0 oz per cfs on day one, 1.5 oz per cfs on day 2 and finally 2.0 oz per cfs on day 3. Do not feed fish morning of treatment or for several hours after treatment. Salt fish before treatments.

**Comments**

It is the responsibility of Iron Gate Fish Hatchery to comply with any applicable water quality discharge regulations while performing these treatments.

**Submitted By:** Mark Clifford, Ph.D., Associate Fish Pathologist, CDFG