Bloat (Water Belly)

I. Causative Agent and Disease
This is a non-infectious condition where the abdomen of salmonids is abnormally distended by an enlarged, water-filled stomach. The condition is most often seen in salmonids reared in seawater. The cause of this condition is not well understood, but potential causes may include: a combined failure of osmotic regulation; increased lipids, temperature and stress; increased drinking of seawater and nutrient overloading due to excessive feeding.

II. Host Species
This condition is observed frequently in Chinook, coho, chum and Atlantic salmon and also in rainbow trout. In Alaska, this condition is most common in chum and Chinook salmon.

III. Clinical Signs
Fish with bloat exhibit severe distention of the abdominal wall. Necropsy reveals a massively enlarged stomach with a very thin wall. The stomach is filled with a clear, watery fluid mixed with feed.

IV. Transmission
The disease is non-infectious and cannot be transmitted from fish to fish.

V. Diagnosis
Bloat is usually diagnosed by the presence of excessive amounts of clear, watery fluid in the stomach. The stomach wall is thinned from distension, but other significant histological changes are not present.

VI. Prognosis for Host
Although this condition can cause mortality, affected fish often survive for weeks with the condition. A reduced feeding regime after fish have been starved for several days or changing the composition of the food will reduce the problem in captive fish.

VII. Human Health Significance
There are no human health concerns associated with this condition.
Chum salmon fry with characteristic signs of bloat

Chinook salmon smolt with characteristic signs of bloat