Water Tests

Your Check List for Healthy Salmon

- ✓ Follow water test guidelines
- ✓ Follow Maintenance Calendar schedule
- ✓ Check everyday that equipment is working
- ✓ Record ATU's
- ✓ Make a check list (suggestions below)

Ammonia Guidelines

STAGE	How often to test
Eyed egg	weekly
Hatch - alevin	weekly
Feeding - fry	every 2 days

Ammonia is lethal

Food and feces in the tank will quickly convert to ammonia. Even a low level of ammonia is dangerous for fry, and if left too long is extremely difficult to remove.

Over time, ammonia converts to Nitrite which is very toxic and will quickly kill the salmon fry. Your ammonia test kits will not measure Nitrites, so test for ammonia frequently and take action when ammonia is present before it converts to Nitrites.

Students involved in hands-on care of the fry develop empathy and a stronger stewardship ethic.

If ammonia is present

If a test result indicates ammonia is present ...

1. Change at least 1/4 of the water (5 gallons).
2. Measure ammonia levels again. If it is still present change more water and measure again. Removing 5 gallons of water only decreases ammonia by 25%. In persistent cases the water may need to be changed everyday until there is no ammonia present.

pH Guidelines

1. pH should be between 6 and 7.5 (safe for salmon at these levels)
2. Check levels once a week
3. Use a broad range kit (4.5 - 9)
4. Find a baseline pH
   Check the tap water or other source for the tank.
   Use this to compare with the pH of your tank.

If pH is outside the guidelines

Do not use buffers to raise or lower the tank pH.
Use changes of water to maintain a steady pH.

Tank Check List

Date _____

Water Temp. _____ ATU's _____

pH _____ Ammonia _____

- ☐ Chiller is plugged in/temperature is displayed
- ☐ Thermostat is in the water
- ☐ Filter outflow is directed at refrigerator coils