

# WHAT MAKES MIGRATION TOUGH?

Can you find these "factors" in the picture?

- Factory discharges of pollutants.
- Temperatures that become too high due to climate change, clearing of shade trees, cooling water discharges, ponding of water.
- Undersized road-stream crossings which back up streams (like a dam would) and cause habitat to blow out in high water events, downstream, (with culvert acting as a fire hose!)
- Undersized road-stream crossings that are too small and low head dams built in the 1800s to raise water levels to float logs.
- In the estuary, threats include sea lice, predators like loons, and as the fish swim farther out to sea, too little food (where have all the capelin gone?). Changes in ocean currents and predation at sea also make migration really tough.
- Acid precipitation and other atmospheric deposition of chemicals make water too acidic for fish.
- "Kinks" in the stream were created when people wanted to straighten streams out for easier passage of logs.
- Non-point sources of pollution include run-off from streets and lawns, and pastures; cattle allowed to graze in streams may impact stream water quality.
- Hydro-electric power-producing projects typically include a dam and big pond upstream; the dam blocks upstream and downstream migration and fish may be sucked into turbines as they try to swim downstream.

