The Alta River:

- 1. My history with the Alta
- 2. My impressions of the River
- 3. The fragility of its ecosystem are we at the "tipping point"?

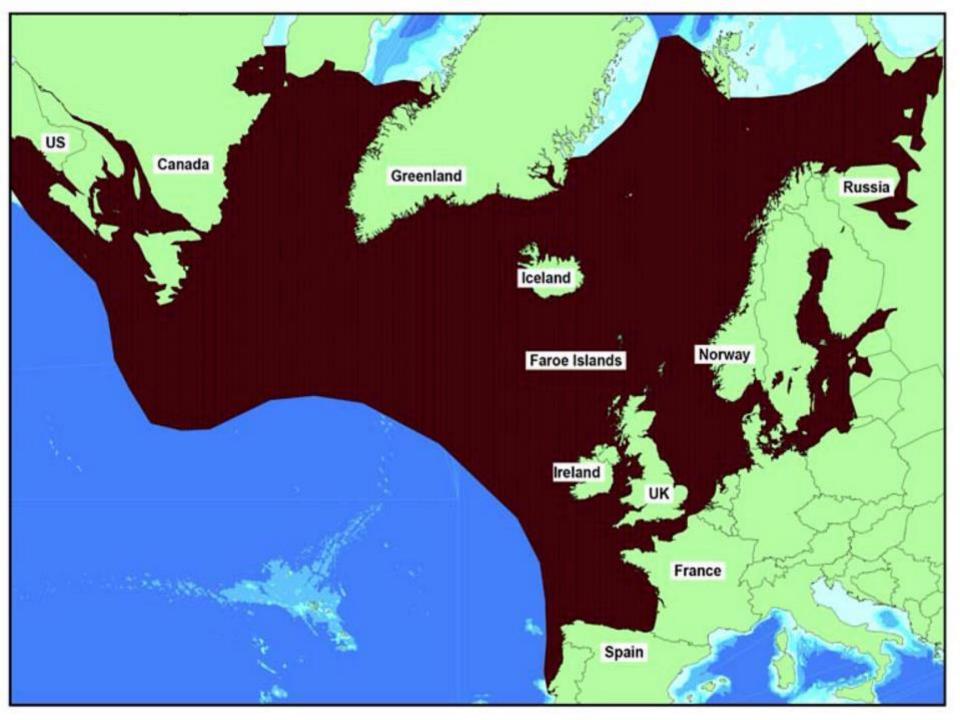
Some Observations:

1. The Important Issues

2. Comparing the Alta with North American Rivers

The Important Issues:

- 1. Open ocean mortality
- 2. Recreational release rate
- 3. Impact of netting
- 4. Impact of aquaculture



Open Ocean Mortality:

1. Value of tagging and tracking

2. Ocean climate studies

Value of the Recreational Fishery – The Gardner Pinfold Study in Canada:

- 1. An economic study of the value of wild Atlantic salmon in Canada
- 2. Released in January 2012; can be found on the ASF website
- 3. Findings:

Annual economic value in dollars Annual economic value in employment

Recreational Release Rates:

 Survival of released salmon: General studies
 Cascapedia and Bonaventure statistics (from Canada)

2. The Canadian experience – growth of the "catch and release" ethic

3. Release rate in Norway

Impact of Netting:

- 1. North America
- 2. Norway

Impacts of Aquaculture:

- 1. Sea lice
- 2. Escapes
- 3. Diseases
- 4. Pollution

Waste accumulating on sea floor Toxicants to control sea lice Antibiotics

Advantages of closed containment:

- 1. None of the above problems
- 2. Capital and operating costs becoming better aligned with net pens
- 3. Survival better
- 4. Faster growth
- 5. Densities greater

Marking/tagging of farmed fish:

- 1. Importance
- 2. Methods:
 Genetic marking
 Coded wire tags
 Fin clips
 Branding

Stakeholders can't have it all ways: decisions and compromises must be made.