

# Salmon Production Cycles

# **Production Planning**

- 5 years for Broodstock requirements
- 2 ½ years for anticipated smolt input numbers
- Fresh water timeframe 8 12 months
- Seawater grow out time frame 16 month

### **Key Goal - Year round consistent supply**

- Photoperiod manlipulation
- Temperature linked to development
- Smolt input linked to farm location, timing, pen availability
  - limited options for some smolt

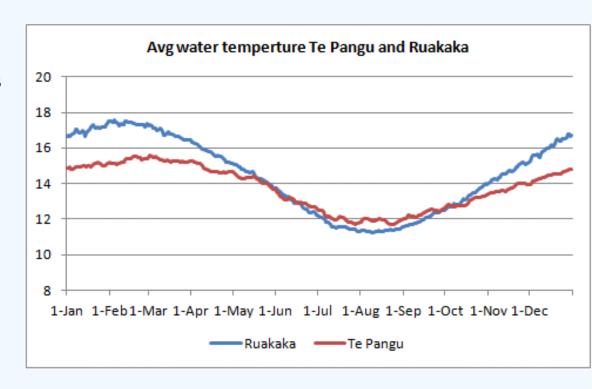


# Growth projections and Modelling

- Highly variable
- Environmental differences between sites and years

### It's a jigsaw

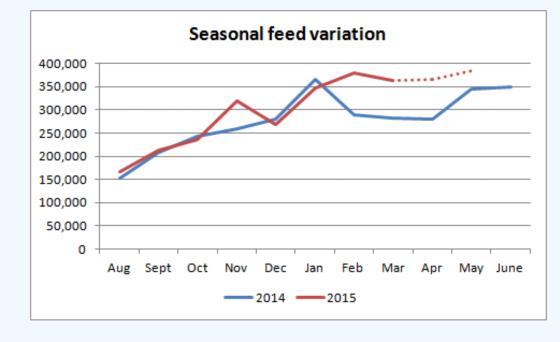
 Need to align harvest and sales to ensure no long term issues





# Feed Planning

- Largest cost
- linked to consents
- Influenced by many factors
  - Diet Quality and Composition
  - Environmental factors
  - size and growth rate
  - Stress factors
  - Harvest planning and alignment

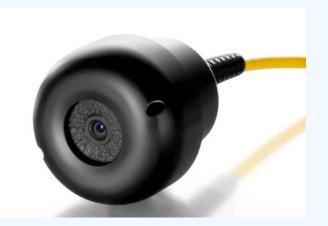


Highly Variable and very difficult to get right each year

# Feed Management

- Modern systems
- Closely monitored cameras on every pen
- Variations automatically flagged
- 99.9% consumed
- Pellet detection software trials
- Trial pens for research and development
- Feed caps verses BMP guidelines





# Potential new sites

- Staged management and possible overlap
- Infrastructure replacement
- Feed caps and development
  - Overly conservative and not practicable
  - Very long times and small increases
  - 2 staged development and linked to BMP





# Conclusion

- Planning is multifactorial and involves very long lead times
- There is significant natural variability in the the processes we undertake
- Feed is very managed tightly but highly variable due to many factors
- Feed caps are a poor form of regulation
- New sites need to be implemented carefully and overlap may be required due to infrastructure issues

