



# An overview of salmon data management at DFO

International Salmon Data Laboratory Workshop  
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Somewhere in the NE Pacific Ocean. Bruce A. Patten

# Presentation Outline

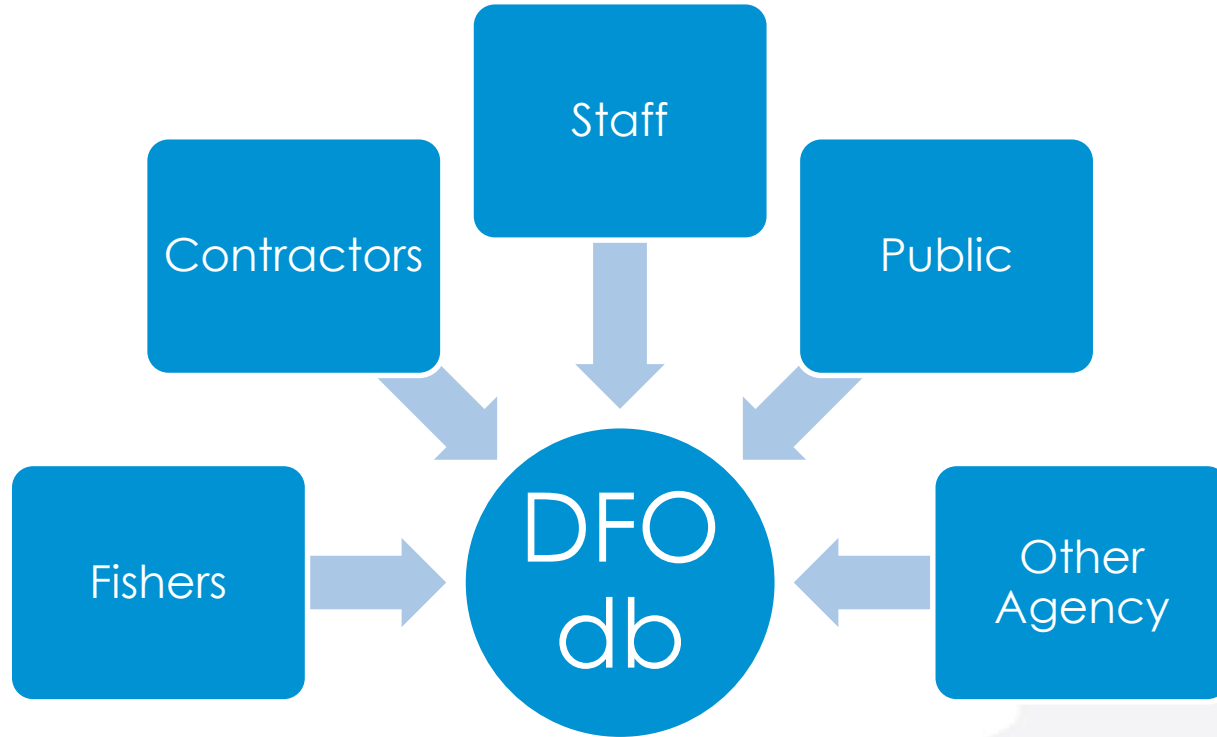
- Data Types / Topics
- Data Inflow – Who and How
- Activities / Deliverables
- Data Uses
- Drivers for Change
- SWOT
- Vision for Future



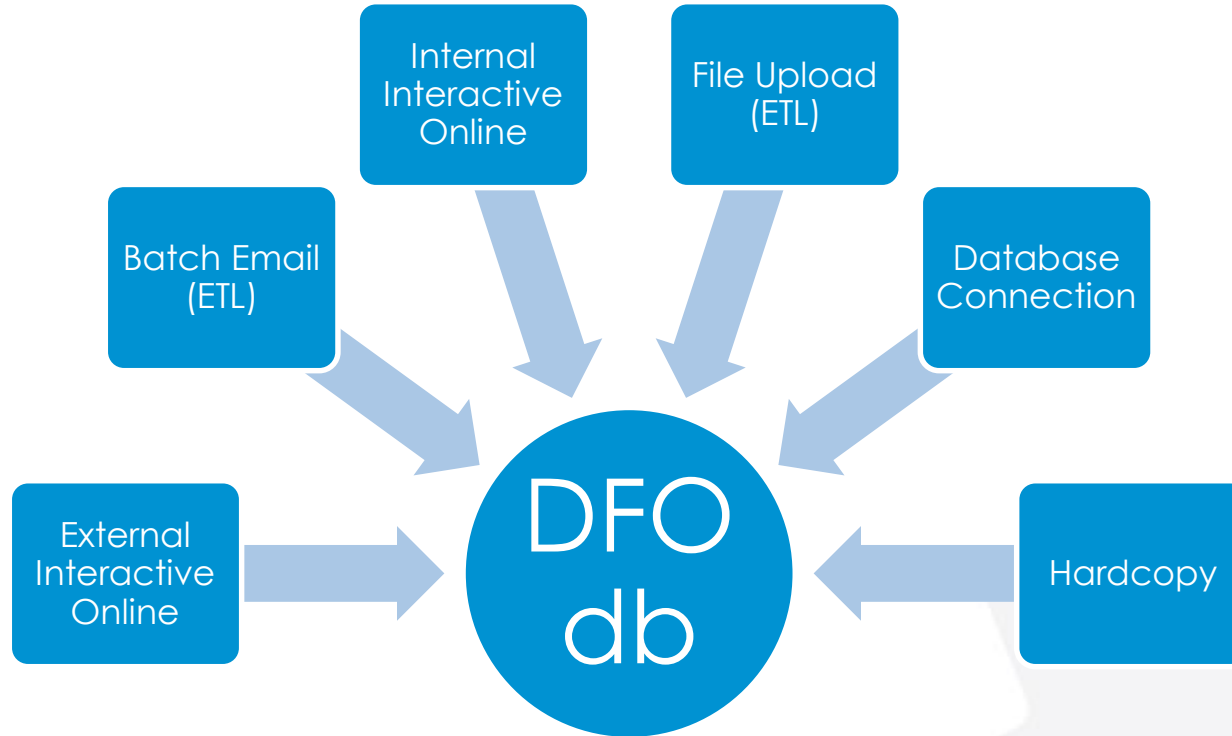
# Data Types / Topics

- Fishery Data (catch, effort, biological traits)
- Escapement Data (in-river abundance, biological traits)
- Mark & Recapture (tag releases, tag recoveries)
- Laboratory Analytical Results (age, genetics)
- Research Data (investigative surveys)
- Imagery (video of fish-counting sonar)

# Data Inflow – Who



# Data Inflow – How

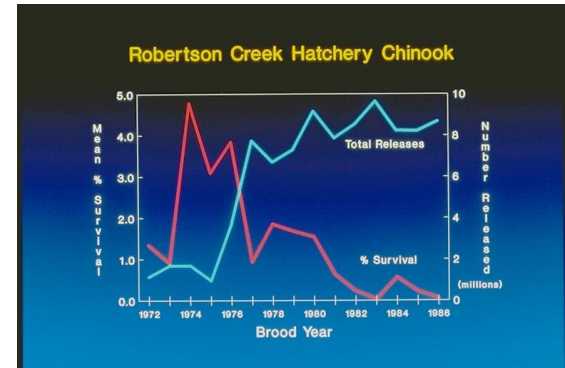


# Data Program Activities / Deliverables

- Data acquisition program management
- Quality control
- Standard reports
- Time-series for analyses
- Data request results provision
- Data interpretation expertise

# Data Uses

- Fishery management
- Stock identification
- Stock abundance estimation
- Stock status determination
- Scientific advice
- New Knowledge generation



# Drivers for Change

- Aging Infrastructure
- Big Picture Issues
  - Climate Change
  - Fisheries Act Renewal
- Whole of Government Initiatives
  - Open Government
  - Consolidation / Centralization
  - Security Concerns



# Strengths (data, people)

- Long time-series
- Consistency
- Stability
- Credibility
- A team with real-world experience



# Weaknesses (infrastructure, people)

- Lack of agility
- Based on old technology (and old expertise?)
- Variety of data designs
- Poor governance / mostly bottom-up
- Lack of metadata
- Lack of data consolidation
- Lack of formal and/or recent training

# Opportunities

- Interest in exploring new approaches
- Renewal projects
- National and international collaboration
- Improved recognition of the importance of data and information to support sound decisions
- Interest in data standardization to support sharing

# Threats

- Staff departures without succession plan or corporate knowledge capture
- Explosion of data volume (large binary files / objects such as imagery and audio)
- Loss of data management autonomy
  - loss of data management features
  - increased issue resolution response times

# Vision for Future

- System renewal and consolidation
- More open access and interoperability
- Better and broader standardization

# Questions