

# Moose Recovery Plan for the Nass Wildlife Area

– Update –



Nisga'a Fisheries & Wildlife Department

April 2013

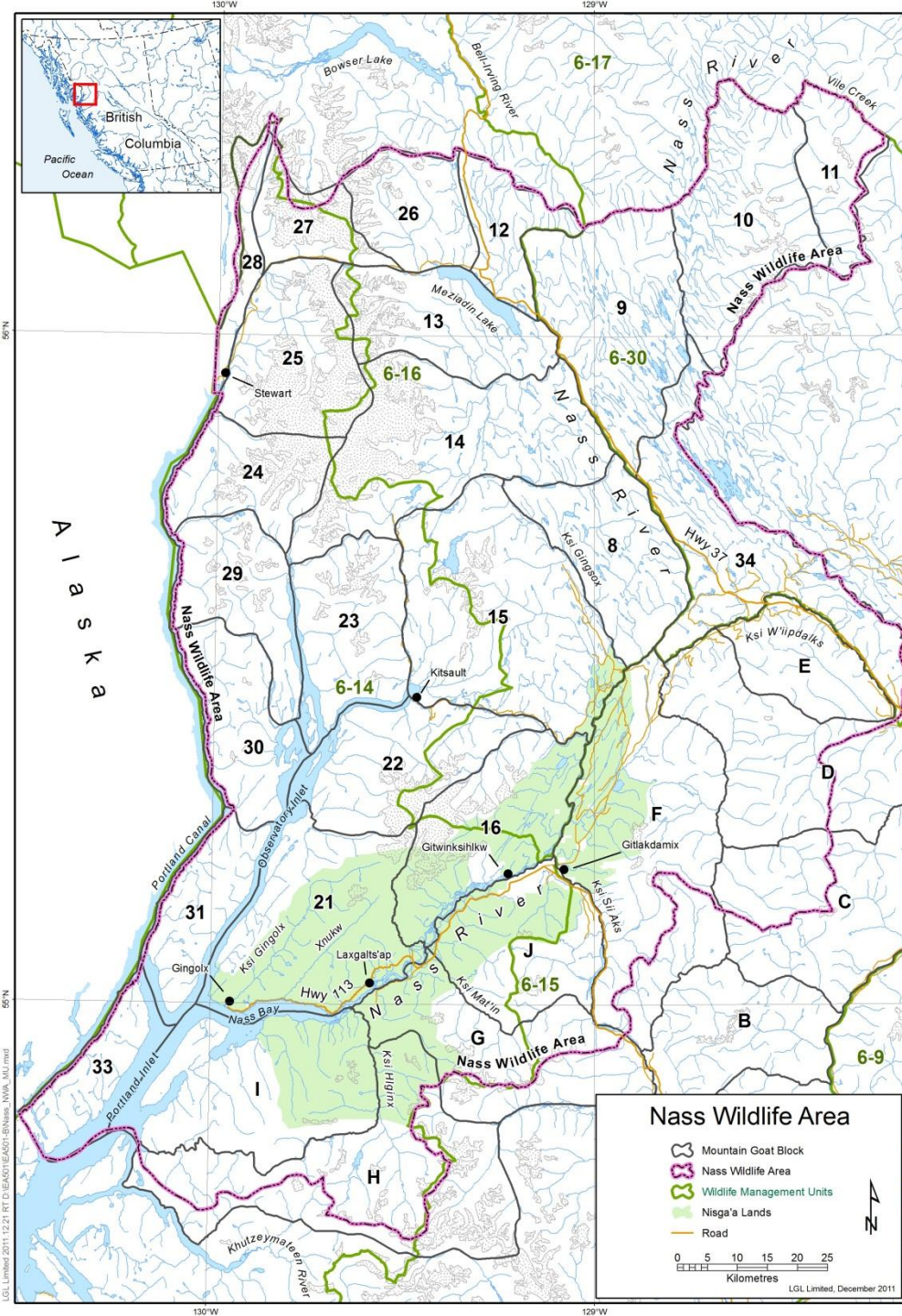
# Wildlife Management Post Treaty

- Nass Wildlife Committee created by the Nisga'a Final Agreement
- Only wildlife co-management body in B.C.
- First Nass Wildlife Management Plan 2001
- Annual management plans since then
- Preparation of a Wildlife Management Policy (draft) in 2012
  - A strategic approach to wildlife management & conservation
  - Designated and non-designated species

# Wildlife Management Post Treaty

- Ongoing participation with regional (Nass Area) initiatives (e.g. SRMPs, Ungulate Winter Range, cumulative effects assessment)
- Incorporation of wildlife conservation matters and Nisga'a interests during industrial developments (e.g., through Nass Area Strategy Working Group)





# Nass Wildlife Area

16,056 km<sup>2</sup>

# Moose

- One of 3 Designated Species under NFA (plus Grizzly & Mountain Goat)
- Dramatic population decline since 2001
- Demand for moose greatly exceeds available supply
- Harvest reductions since 2007 have not been effective in reversing the decline
- Recovery plan is needed





# Moose Recovery Plan

## Nass Moose Recovery Plan

Prepared by the  
Nisga'a Fish & Wildlife Committee



DRAFT FOR DISCUSSION



Version 1.0 DRAFT March 2013

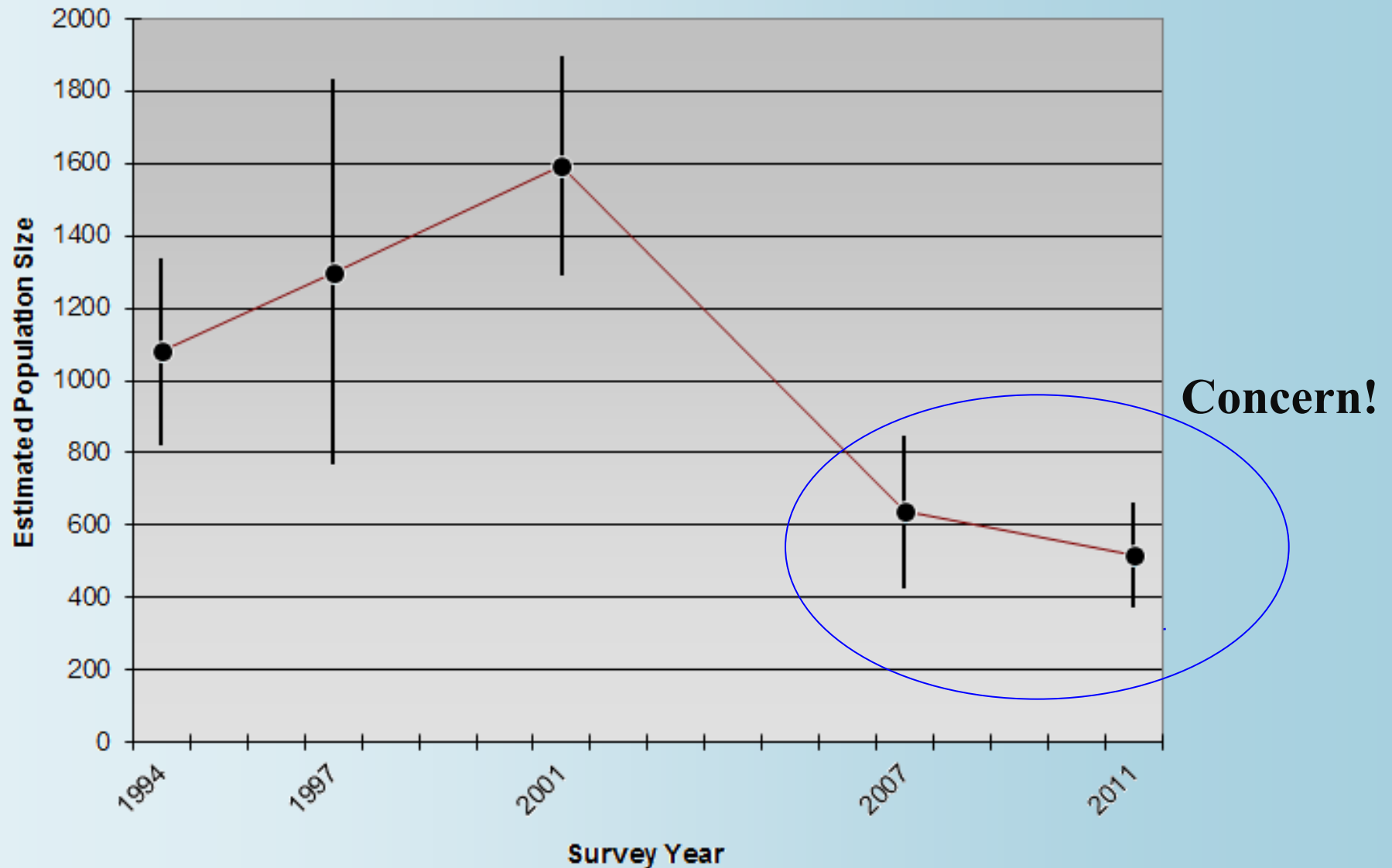
- Draft Recovery Plan has been prepared for discussion purposes
- That document is summarized here
- Funding to develop the Plan was provided to NLG by ***Coast Opportunity Funds***

# Moose Recovery Plan

- Review past and present state of moose population and management in NWA
- Attempt to identify causes of the decline and key factors now limiting the moose population
- Gather community feedback in early 2013 (this meeting)
- Recommend a course of action with the ultimate goal of increasing the number of moose in the NWA that supports a sustainable harvest



# NWA Moose Population Estimates





# Moose Harvest Reported by Nisga'a Hunters

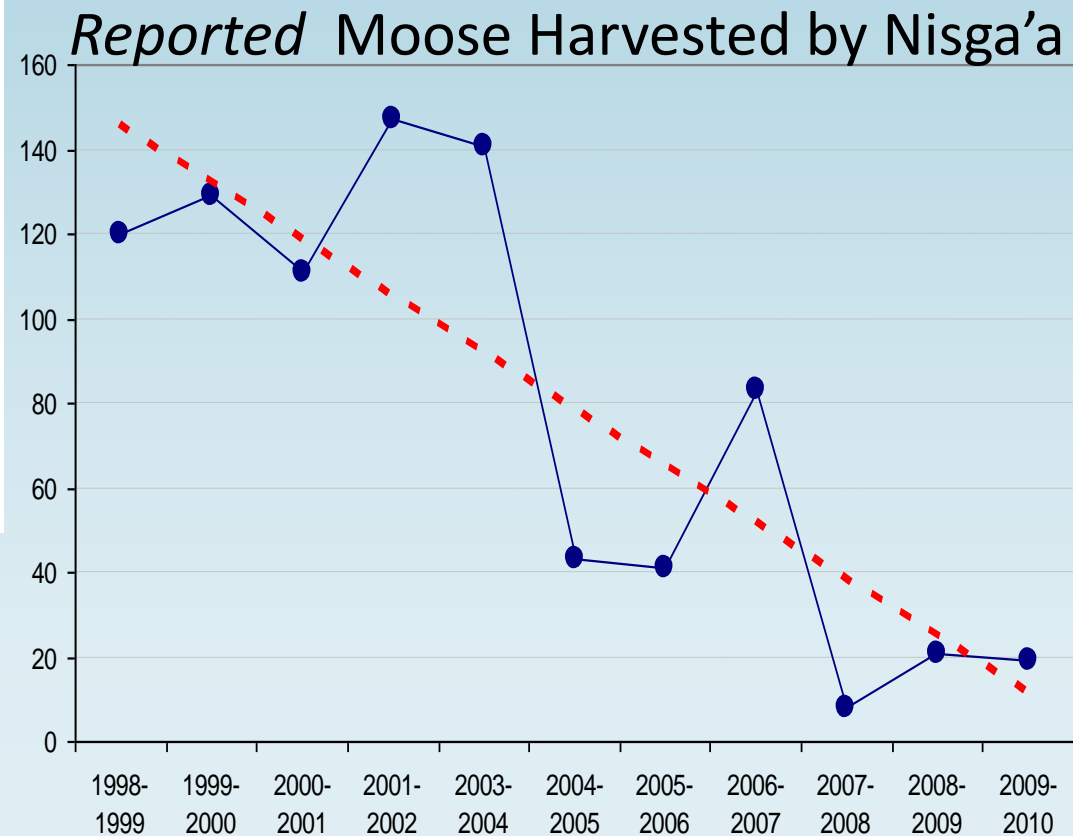
Year	Bulls	Cows	Calves	Total
1998-99	65	32	23	120
1999-00	65	32	32	129
2000-01	57	29	25	111
2001-02	84	33	26	147 <sup>1</sup>
2003-04	110	24	7	141
2004-05	25	8	7	43 <sup>2</sup>
2005-06	18	11	0	41 <sup>3</sup>
2006-07	37	22	21	83 <sup>2</sup>
2007-08 <sup>4</sup>	8	-	-	8
2008-09 <sup>4</sup>	21	-	-	21
2009-10 <sup>4</sup>	19	-	-	19

<sup>1</sup> includes 4 moose of unknown sex and age

<sup>2</sup> includes 3 moose of unknown sex and age

<sup>3</sup> includes 12 moose of unknown sex and age

<sup>4</sup> 5 yr rebuilding plan, harvest of bull moose only



# What Happened?

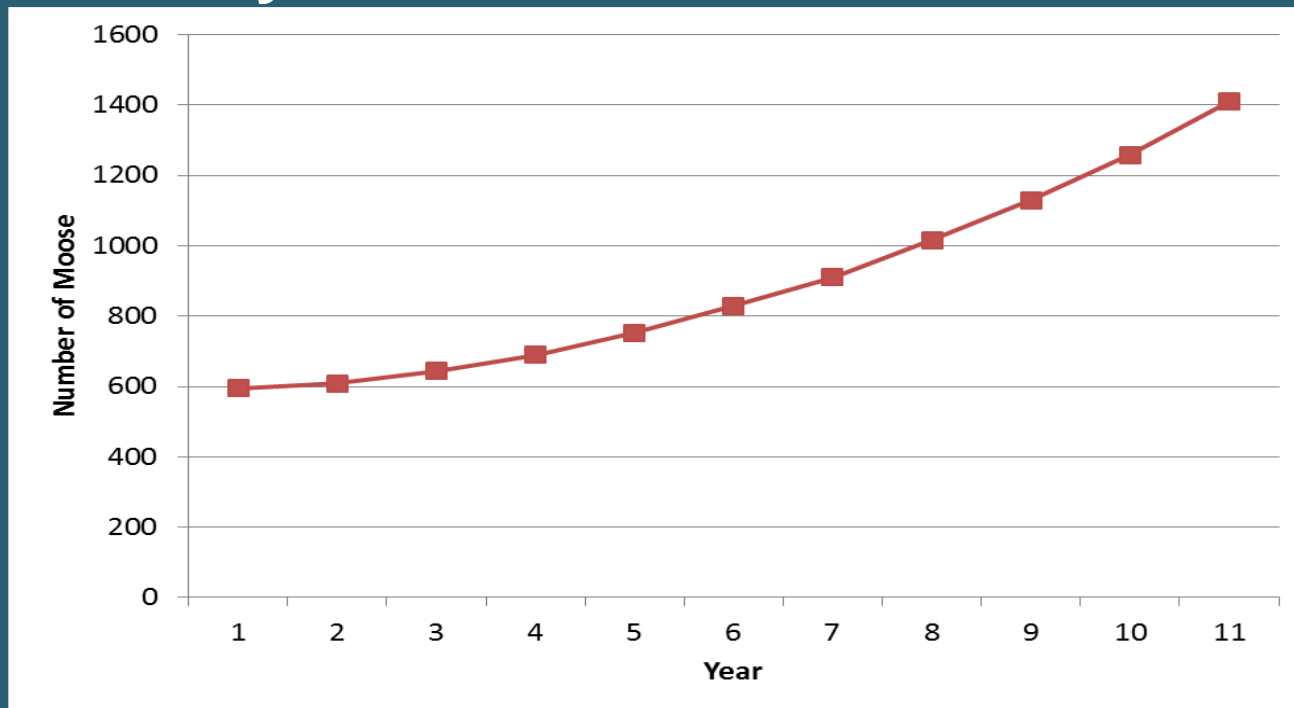
- Estimates of moose production back in early 2000s may have been too high, resulting in harvest rates that were unsustainable
- Unregulated and illegal hunting of moose may have been greatly underestimated
- Likely result was that too many moose were shot in the late 1990s and early 2000s
- Disease, winter severity, roadkill, and habitat supply are not believed to have caused the decline though any mortality they caused would have added to the decline

# Moose Population & Density

- A moose population can increase rapidly if calf and adult mortality rates are low, but if mortality is too high, the population will decline
- Data suggest that the population has declined by 10% each year from 2001-2011
- Hunting in the early 2000s likely sparked the decline by killing too many adult moose
- Moose are now in what is believed to be at a very low population density, termed a 'Predator Pit'
  - That is, wolves and bears are probably keeping moose numbers down regardless of what hunters take

# How Many Moose can the NWA Support?

- Two considerations here: ecological (habitat and moose ecology) and social (human expectations)
- A mean population of 1000 moose has been selected as an interim target
- At a 10% annual growth rate, this could be achieved in at least 7 years if the Plan is effective





# **Moose Recovery Plan – Components**

- **Harvest Management and Enforcement**
  - Total allowable harvest will remain low for now (i.e., Nisga'a allocation 25 bulls; Gitanyow allocation 25 bulls, closed to resident and non-resident hunting)
  - Increased enforcement of laws is required
- **Predator Management**
  - Formal predator control program could be effective, but could be politically difficult to implement
  - Perhaps there are other options to increase hunting and trapping rates on wolves, and increase hunting rates on bears
  - Need a long-term approach; short-term actions are not likely to be effective

# **Moose Recovery Plan – Components**

- **Access Management**
  - Managing human access and reducing road access in and near important moose habitats to reduce moose to illegal harvesting will be important
- **Moose Research and Monitoring**
  - Harvest surveys and monitoring (e.g., tooth returns for aging harvested animals)
  - Population surveys every 4–6 years
  - Winter density surveys every 1–2 years
  - Mortality study on adult moose using radio telemetry

# **Moose Recovery Plan – Components**

- **Habitat Management**
  - Undertake a program to study moose habitat supply and to improve winter range habitat quality over time
- **Outreach and Communications**
  - Information sharing with interested people
- **Collaboration with Others**
  - Successful recovery of the moose population will depend on the coordinated efforts of all parties (Nisga'a, Province, industry, and neighbouring First Nations)

# Plan Implementation and Funding

- Long-term funding commitment is required to implement the Plan and to monitor its success
- Industrial operators may be contributing to a provincial fund that will go toward moose and other species (*Northwest Assessment and Monitoring Trust*)



