

NISGA'A FISHERIES PROGRAM 2005

The Nisga'a Approach to Salmon Management

Nisga'a Lisims Government

Healthy Stocks and Sustainable Fisheries !

Nisga'a Fisheries Program

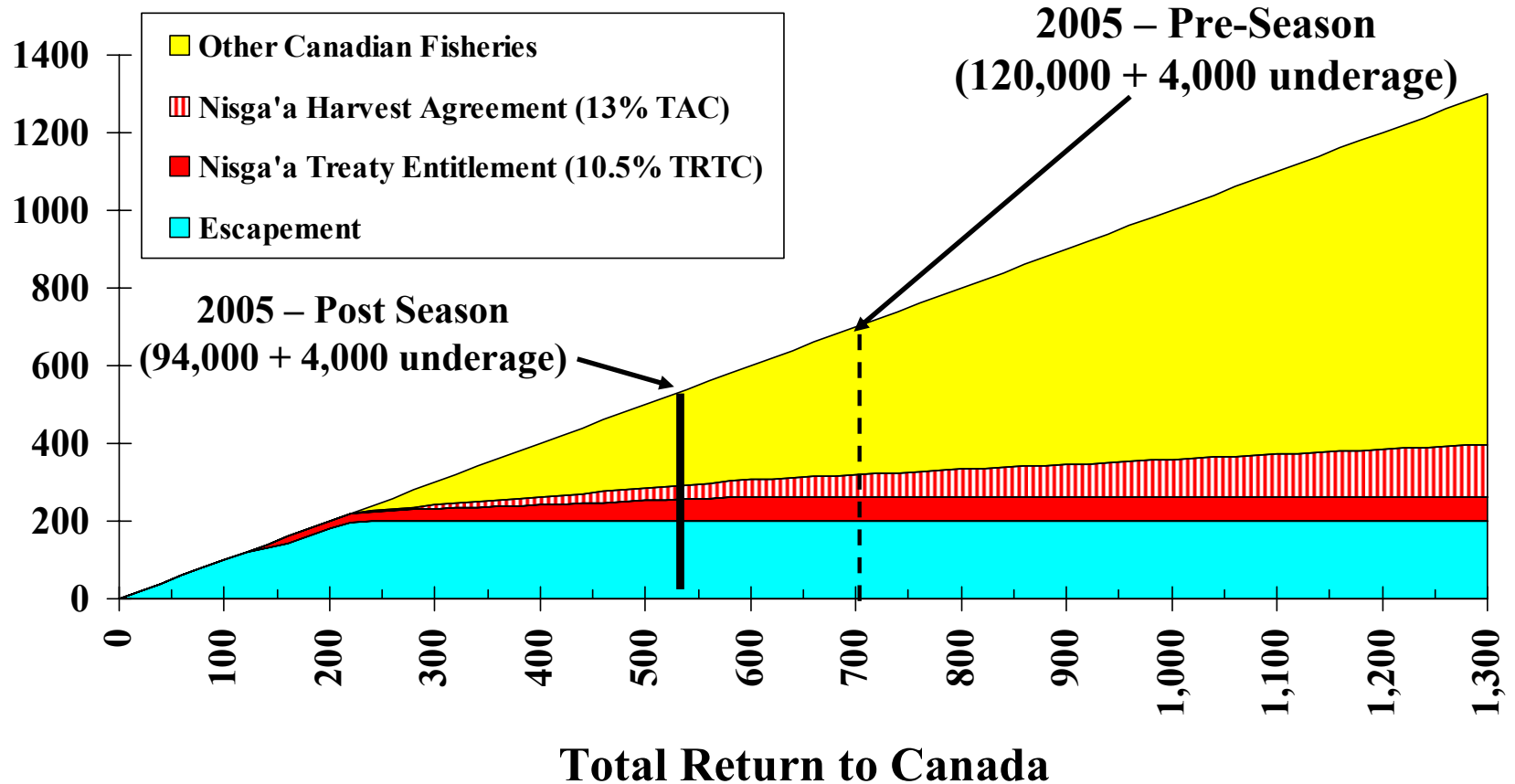
(Goals & Principles)

- **Better information for management**
 - **Define escapement goals**
 - **Timely catch and escapement estimates**
 - **Identify factors limiting production**
- **Invest in people, technology and training**
- **Build a sustainable fisheries mgt. system**
 - **Multi-species**
 - **Integrate harvesting and stock assessment**
- **Joint Fisheries Management**
 - **Cooperative planning**
 - **Post-season review & catch audits**

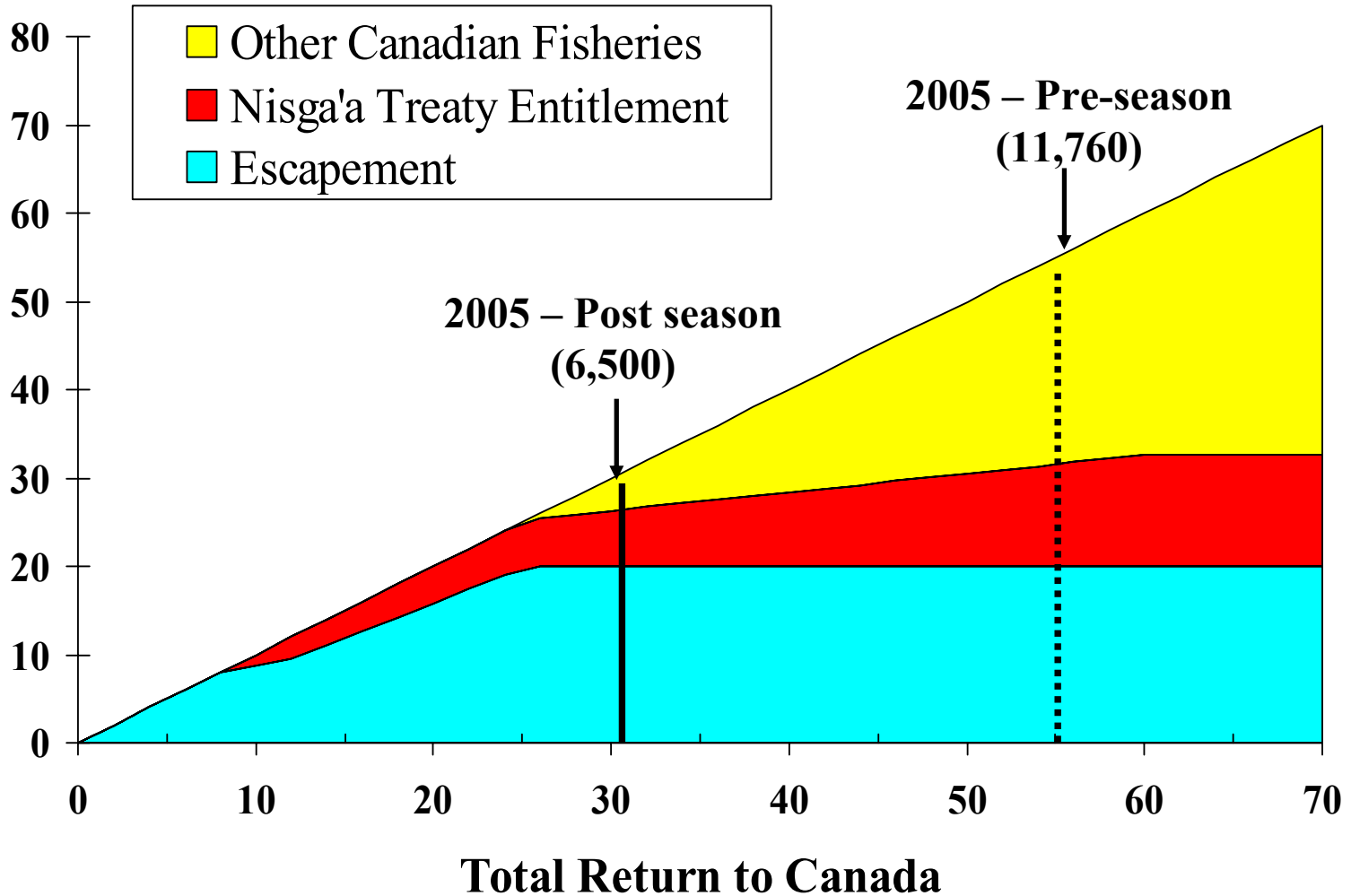
Management of Nisga'a Fishery

- Three types of Nisga'a fisheries
 - **Domestic (FSC)**
 - **Communal Sale**
 - **Individual Sale**

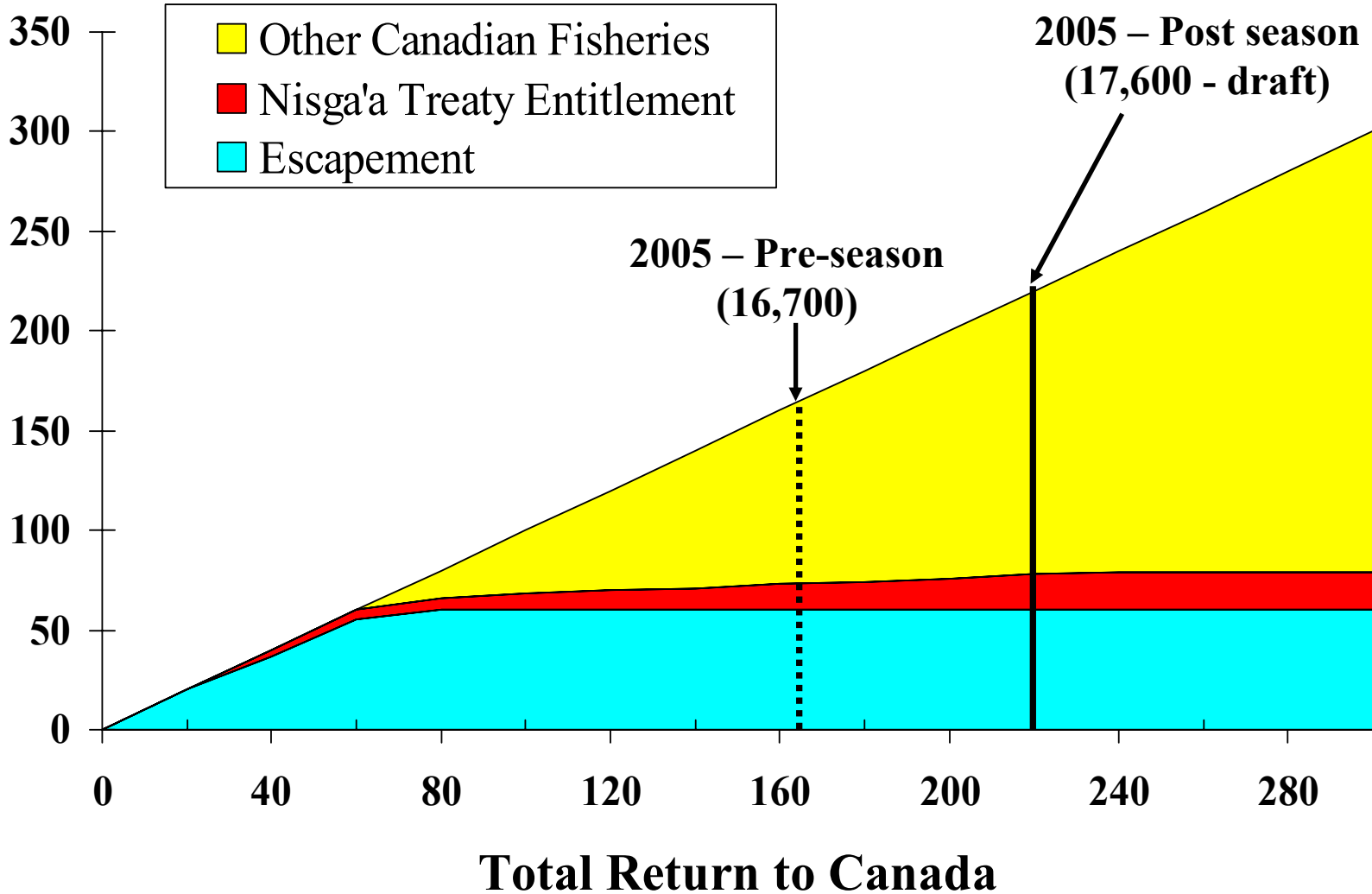
Harvest allocations based on stock size – sockeye allocations



Chinook Allocations (21% TRTC)



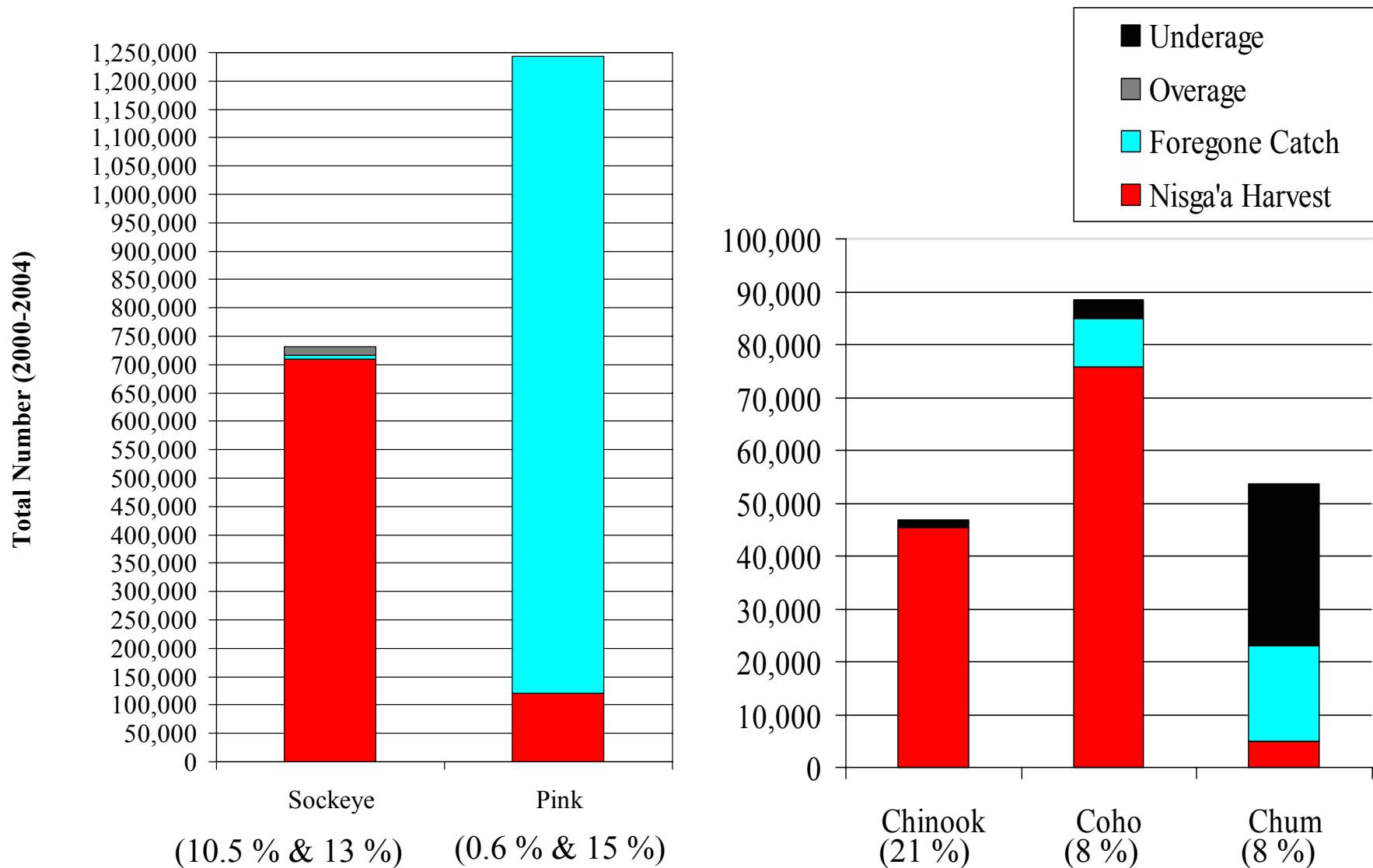
Coho Allocations (8% TRTC)



Management of Nisga'a Fishery

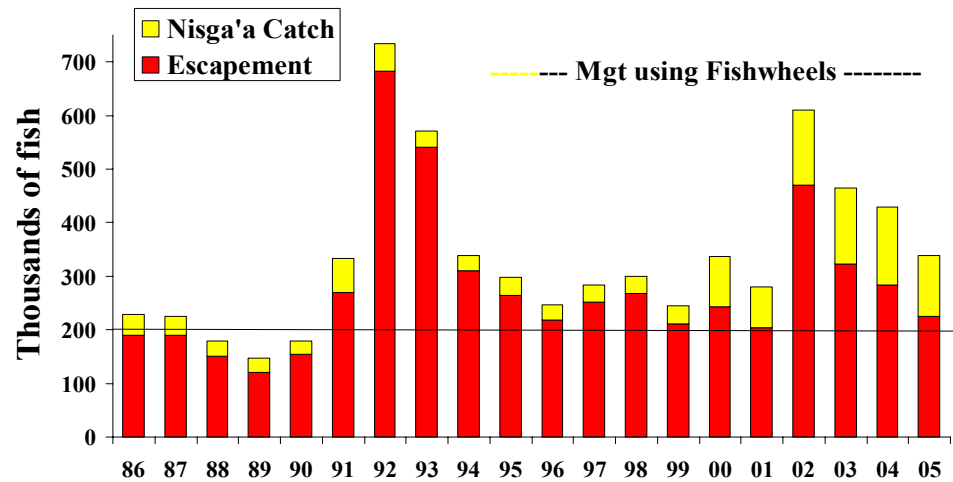
- ✓ **Cooperative and efficient planning process**
 - NAFP approved as proposed
- ✓ **In-Season management**
 - orderly fishery – few violations
 - daily escapement estimates
 - weekly catch reports
 - frequent communication
- ✓ **Post-season review & accounting**
 - no disputes between parties

Nisga'a Salmon Cumulative Allocation Summary - 2000-2005



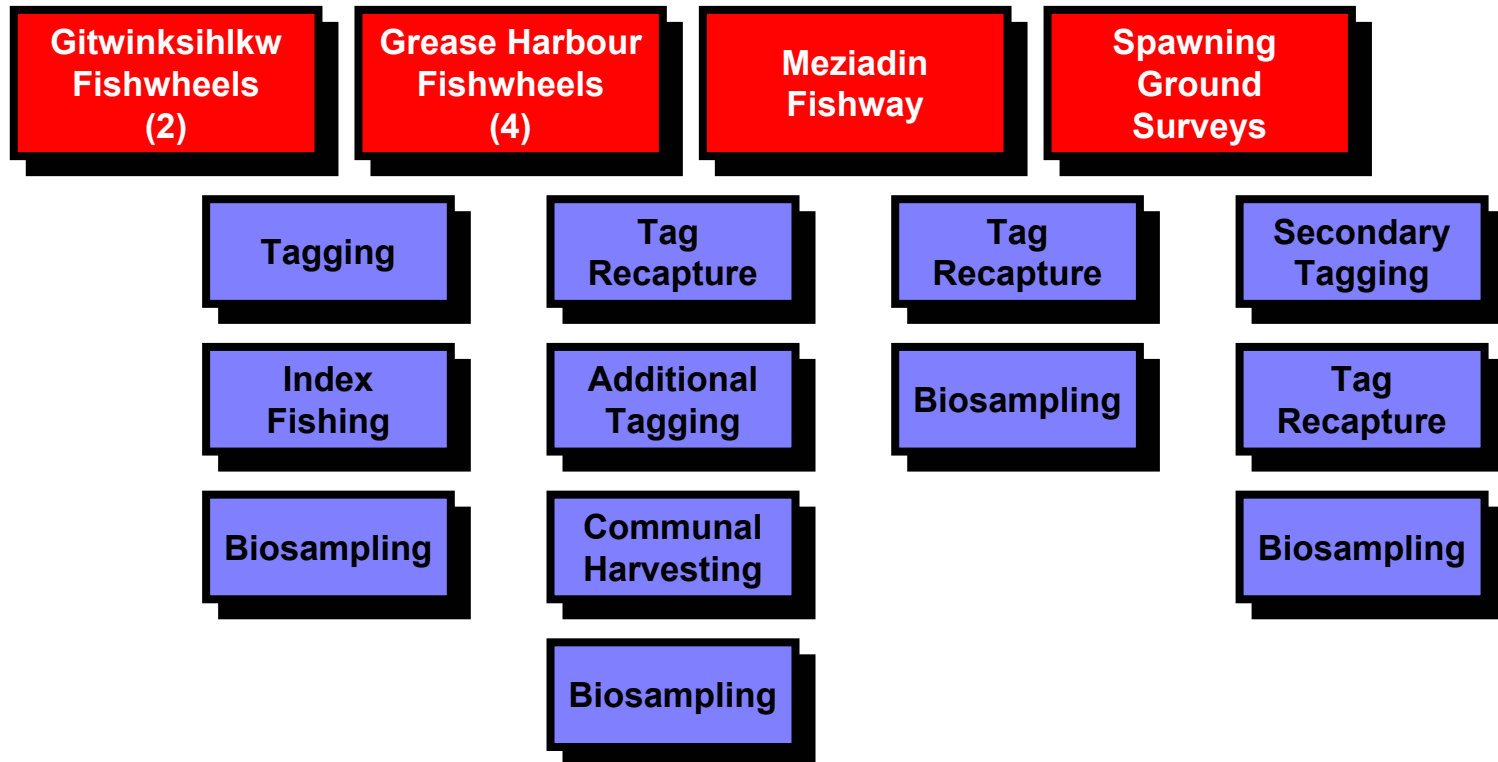
Annual Assessments & Catch Audits

- ✓ Reliable escapement estimates
- ✓ Rigorous stock assessments
- ✓ Complete catch accounting
- ✓ Published reports

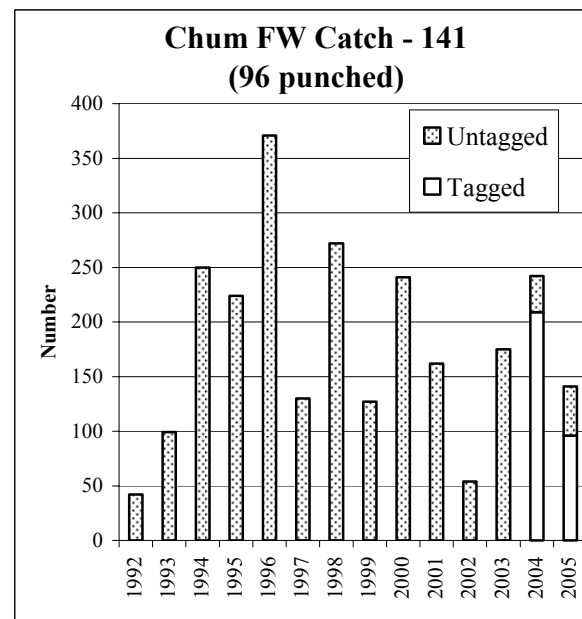
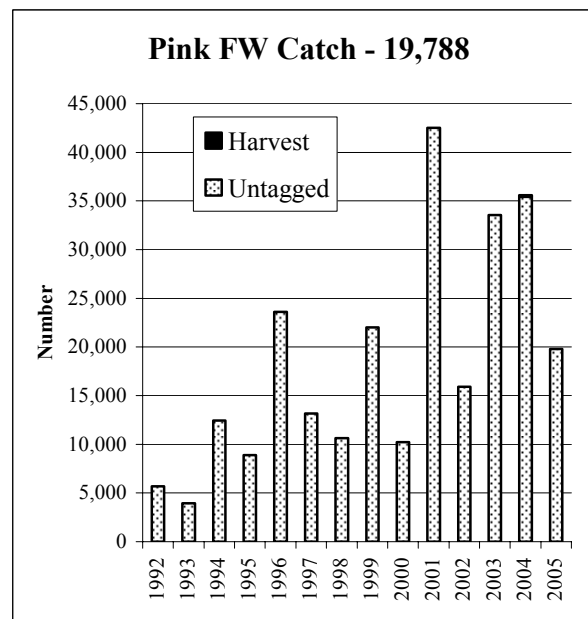
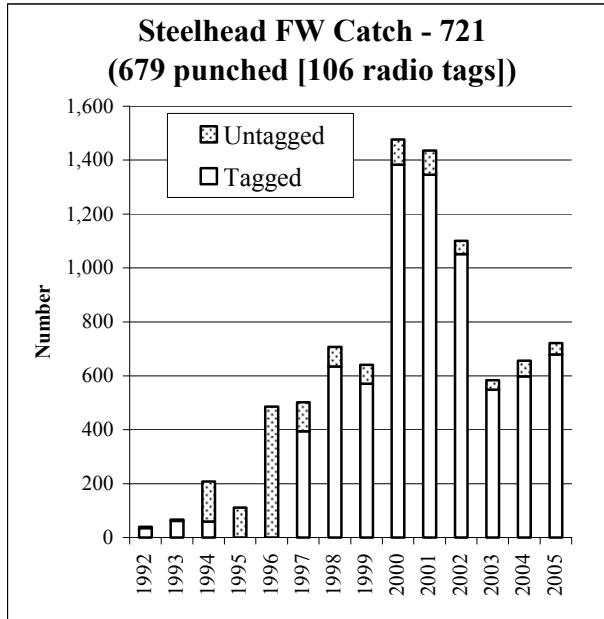
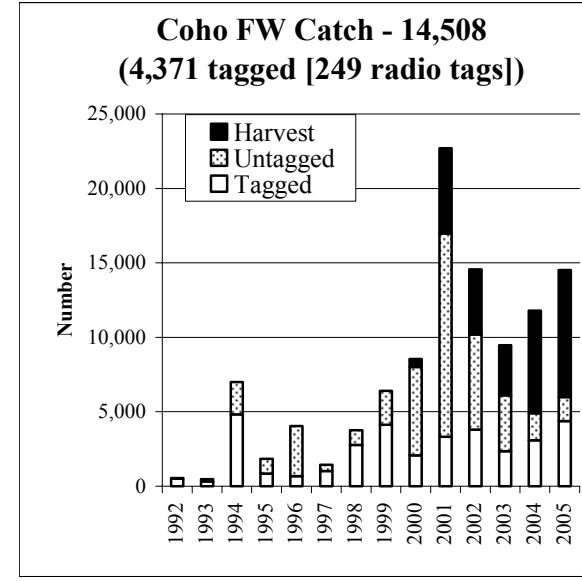
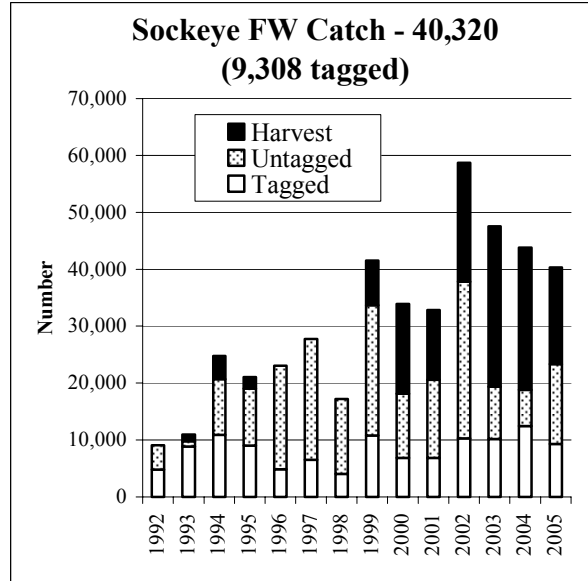
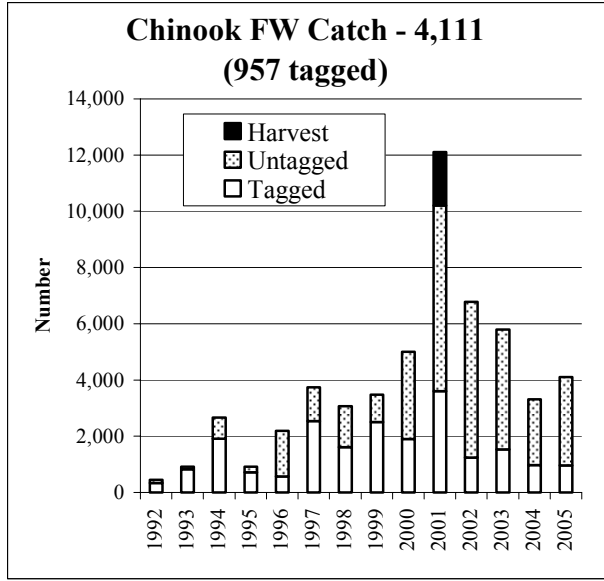


Assessment - Mgt. - Harvesting System

Sockeye, Chinook, Coho, Steelhead



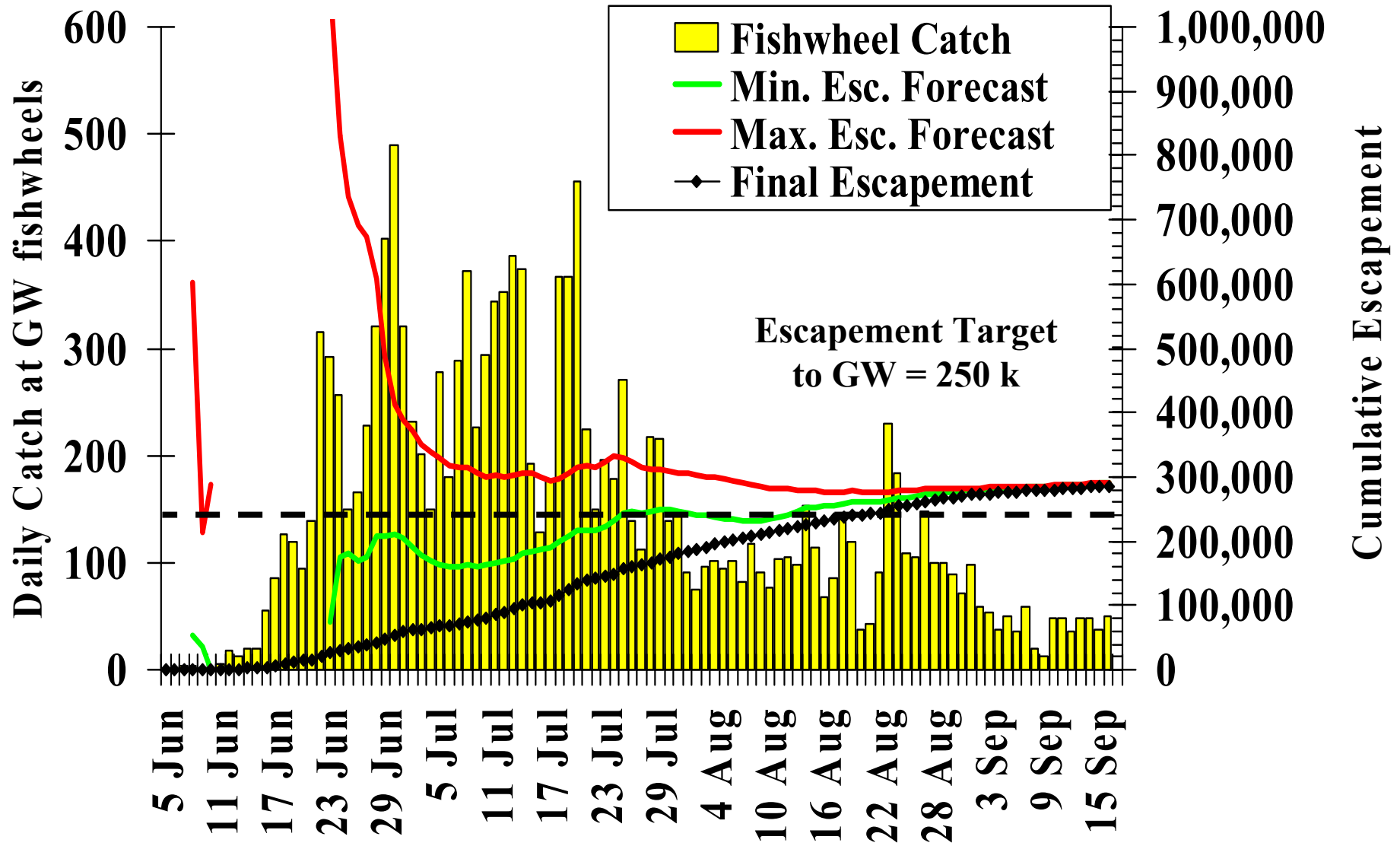
NISGA'A FISHWHEEL PROGRAM - 2005 (6 FISHWHEELS)



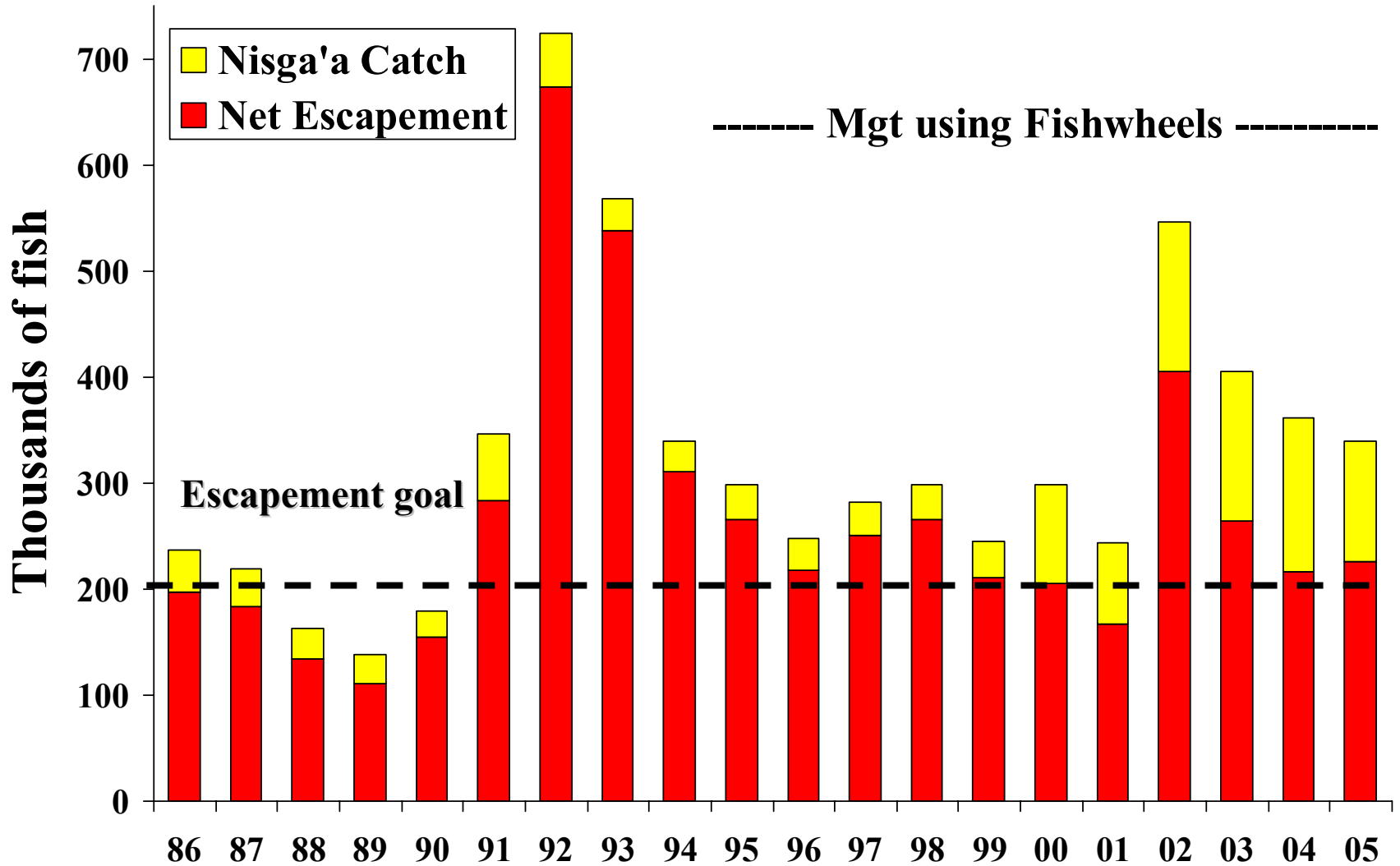
In-season Escapement Monitoring

- **Basis**
 - daily fishwheel catch data
 - period specific catch efficiencies
 - in-season tag recovery data at upper fishwheels
 - historical run timing data
- **Result - daily escapement forecast**

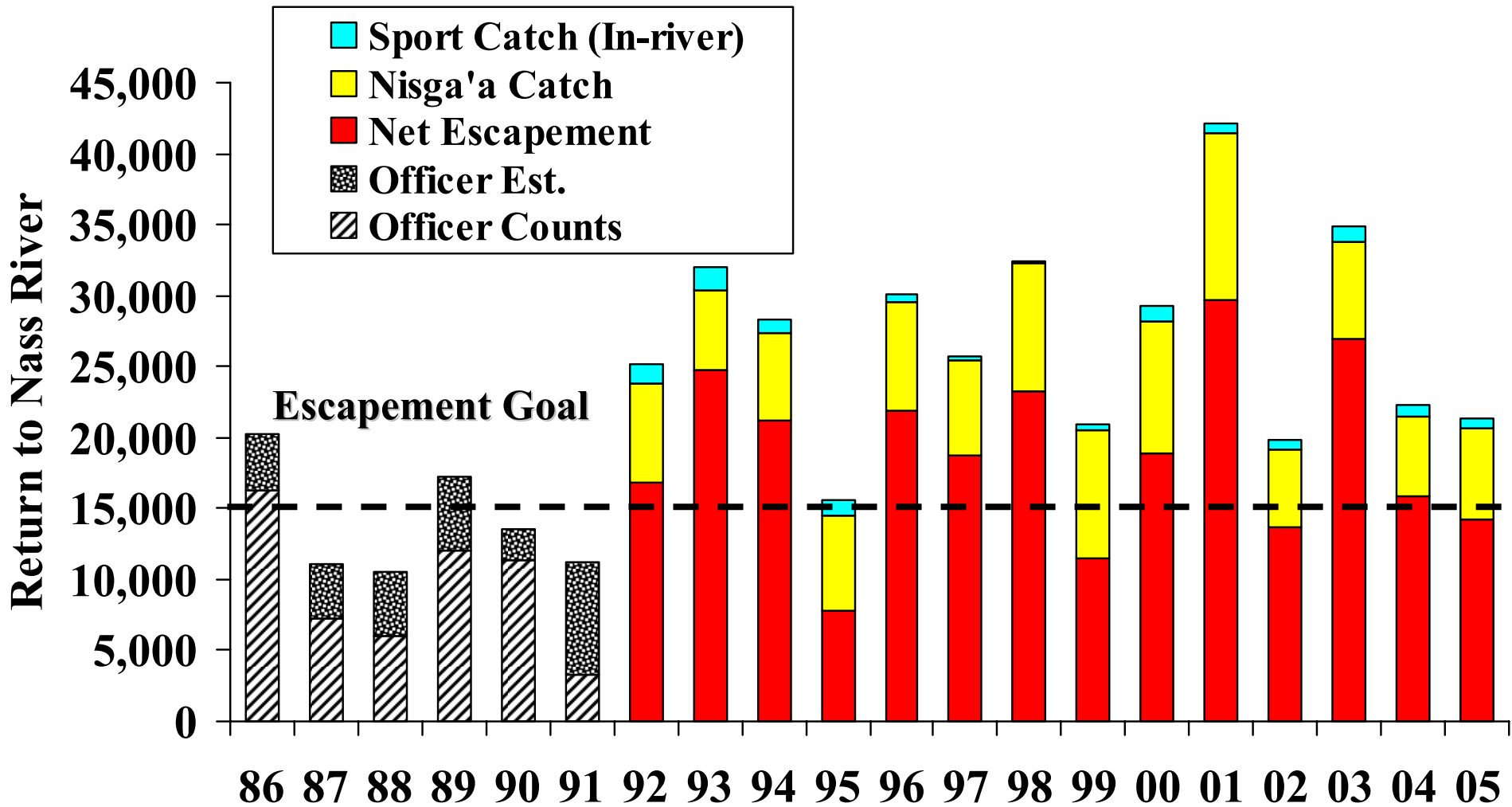
Nass Sockeye Run to GW, 2005



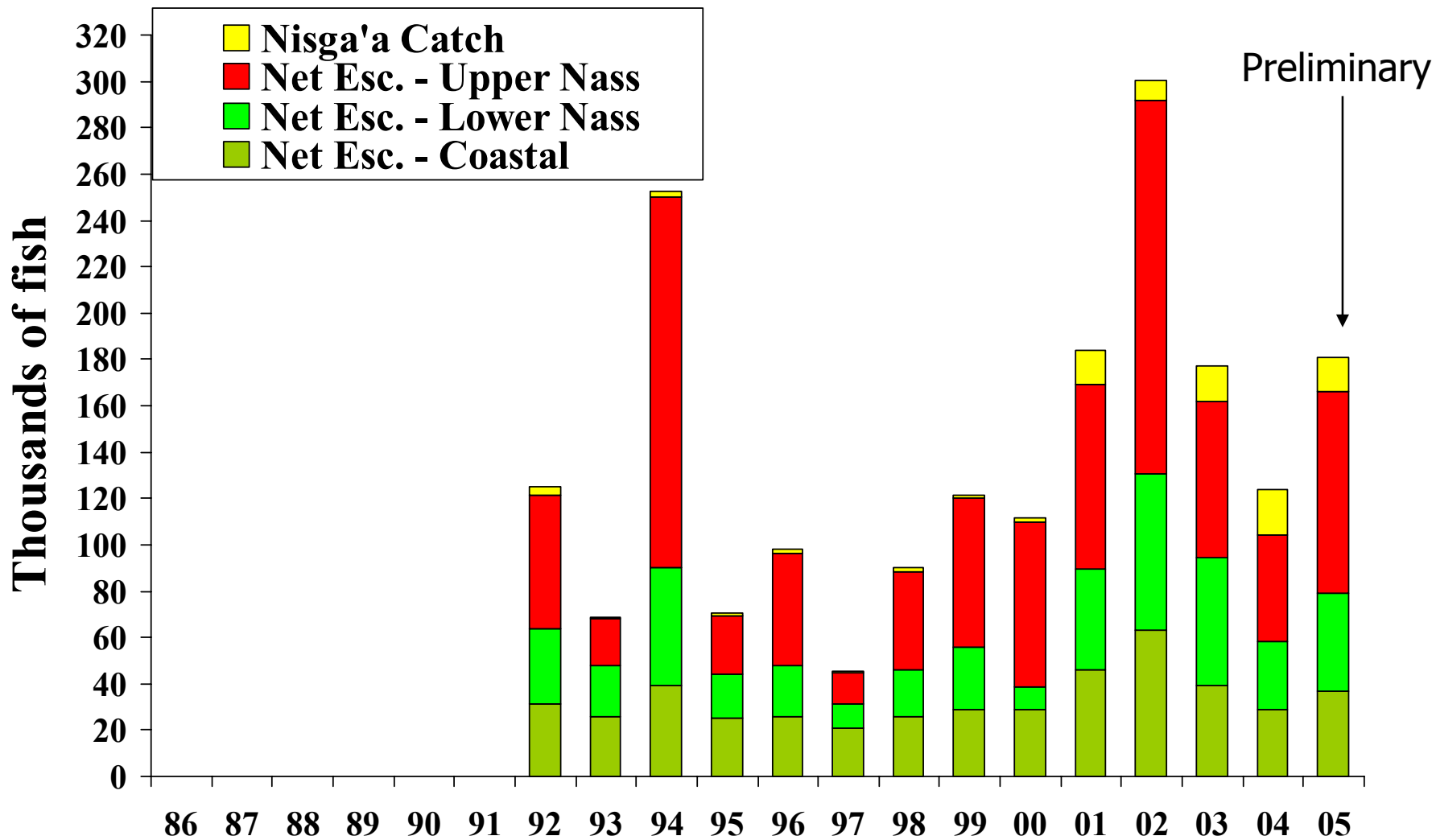
Nass Sockeye Returns



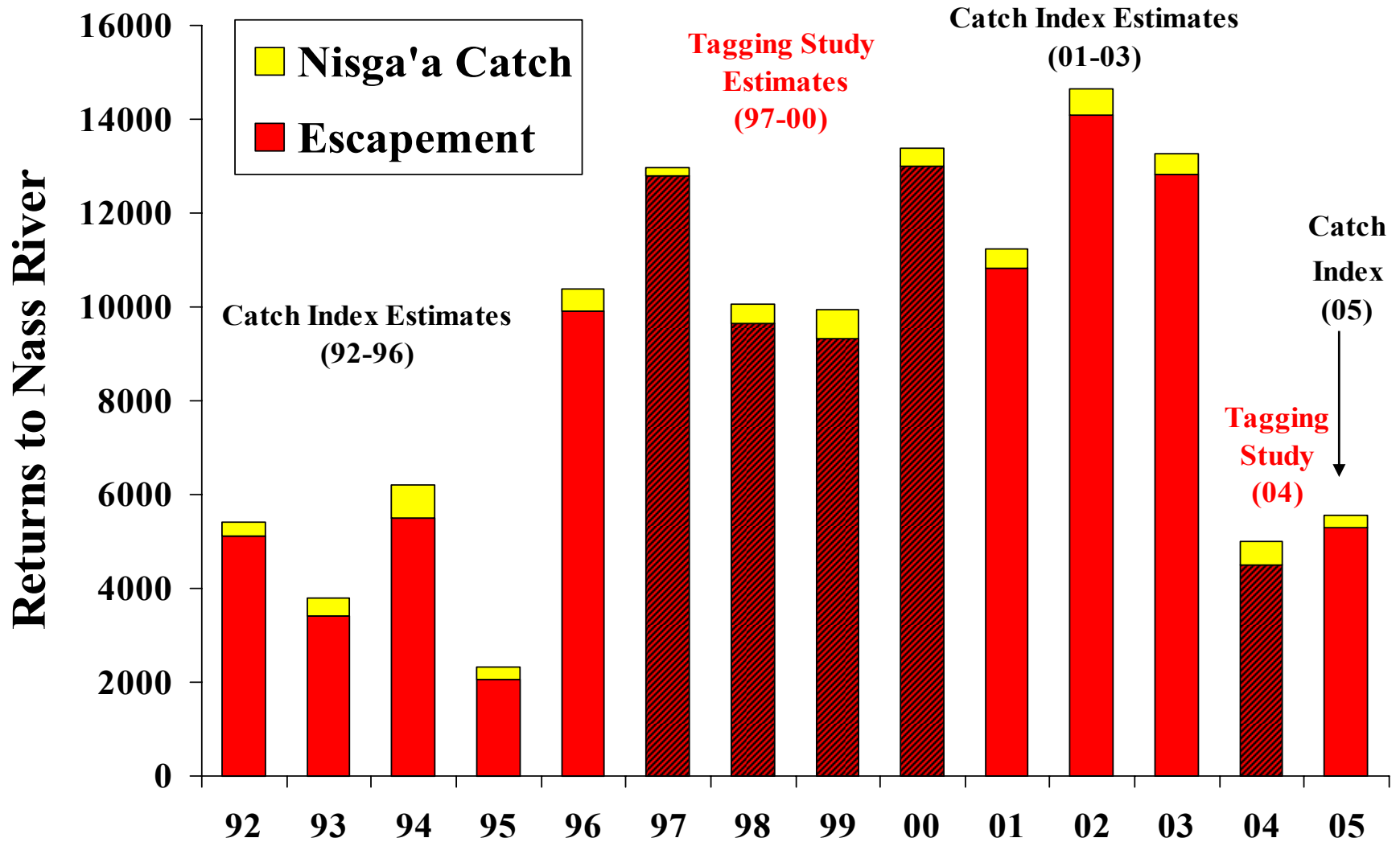
Upper Nass Chinook Returns



Nass Coho Returns



Upper Nass Steelhead Return



Summary - Nisga'a Fisheries

(Working as planned)

- ✓ Escapement goals achieved for Nass Area stocks
- ✓ Allocations harvested from productive stocks
- ✓ Weak stocks protected
- ✓ JFMC – efficient and effective
- ✓ Reliable in-season information for fishery mgt
- ✓ Effective regulations and enforcement
- ✓ Complete catch accounting – no disputes

2005 NASS COHO & STEELHEAD RADIO TAGGING PROGRAM

(FUNDED BY PACIFIC SALMON COMMISSION)

MAIN OBJECTIVES:

- Determine abundance and stock composition of Middle/Upper Nass coho stocks
- Validate historical mark-recapture technique that uses one tributary (Meziadin) for tag recovery (mark rate)
- Validate habitat-based model:
 - DISTRIBUTIONS
 - ESCAPEMENT GOALS

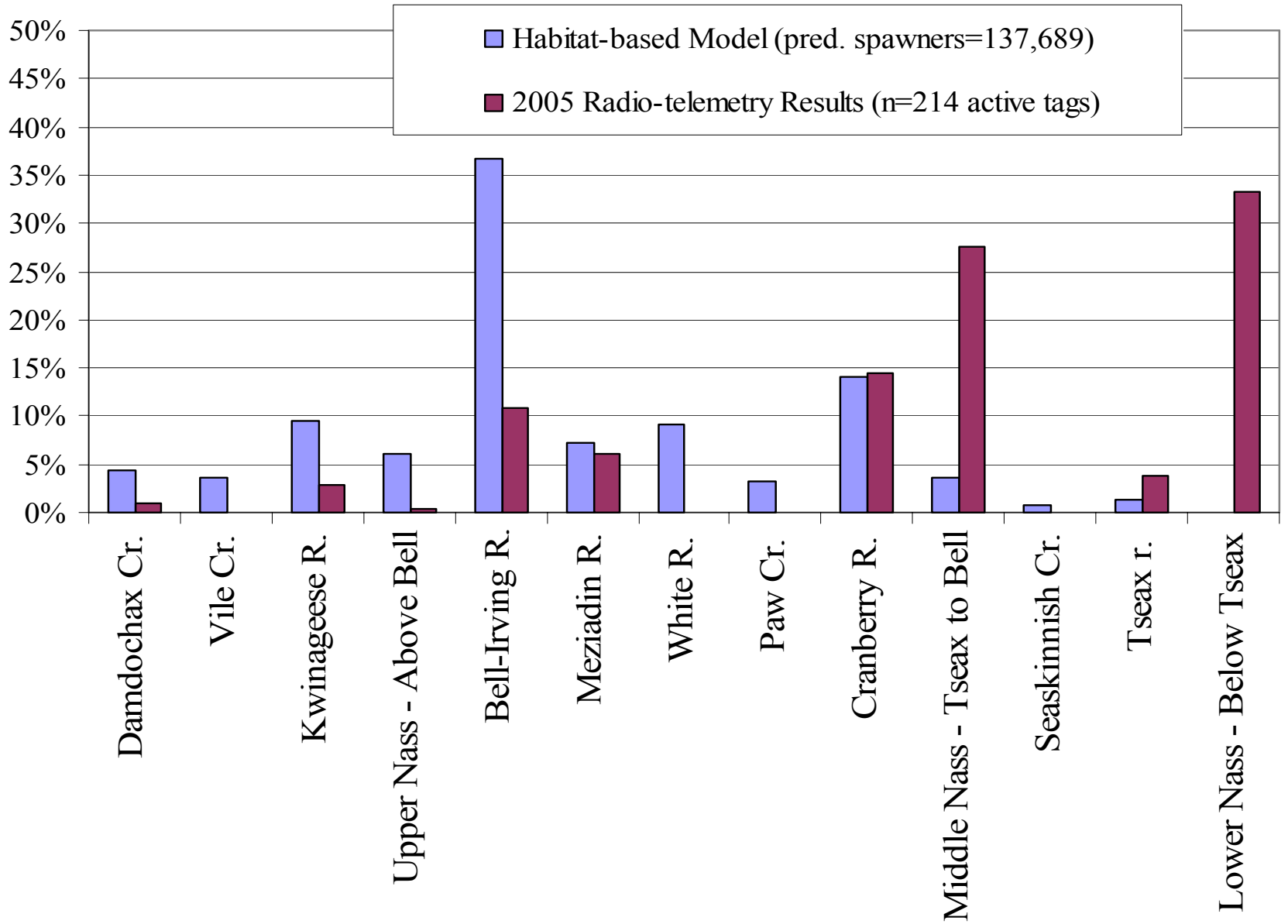
Preliminary Findings to Date

- Differences in Upper Nass coho stock distributions between Habitat-based model and radio telemetry study:
 - Barrier detected at Paw Creek (model predicts 43 km of available habitat)
 - No detections in White River (model predicts 144 km of available habitat)
 - Lower proportions detected in Upper tribs (Bell-Irving, Kwinageese, Damdochax)
 - Similar proportions detected in some Middle tribs (Meziadin and Cranberry)
 - Higher proportion detected in Lower Nass Tribs
- Lower Nass stocks are caught at Gitwinksihlkw fishwheels and contribute to past estimates of Upper Nass coho escapement
- Significant holding in the mainstem may play a factor in Upper Nass mark-recapture estimates

Paw Creek – falls
detected 600 m from
mouth

Upper Nass River - Coho Stocks

% of Upper Nass Spawners



Upper Nass River - Steelhead Stocks

