BC Individual Vessel Quota Experience:

What Can We Learn?
Why Look To the North?

- BC trawl fishery similar to west coast
  - Similar species, gear, markets
- Prior to IVQs, fishery faced many of the same problems now plaguing west coast fishery
  - Overcapitalization
  - Bycatch/discard concerns
  - Unprofitable fishery
  - Poor data collection and monitoring
  - Market concerns
  - Uncertain future
Why Now?

• Moratorium on IFQs has been lifted so individual quota management now a viable option for US fisheries
• Council has identified IFQ management as intermediate to long-term strategic goal
• Recent Sacramento Bee article indicated that IVQs have improved sustainability and economic viability of BC fishery
• Industry interest in IFQs increasing
The BC Meeting

Who

West Coast Participants:
- Trawl vessel owners from 3 states
- Environmental Defense staff/consultant
- Council economist

BC Participants:
- Vessel Owners
- Processor
- Government Managers
- Union Rep
- Industry Organization Leaders
- Quota Brokers
The BC Meeting

What: Meeting to learn about IVQ program and lessons for west coast groundfish fishery

Where: New Westminster, BC

When: June 24, 2003
Pre-IVQ Management

- Monthly trip limits
- Individual groundfish species TACs managed on coastwise basis
- 12 month season, broken into 4 periods
- Vessel and gear restrictions
- Closed areas
- 100% dockside monitoring
What Was Wrong?

From a Conservation Perspective

• Stock-specific management not possible
• Entire coastwide TAC could be taken out of single area
• Declining trip limits led to higher levels of unreported or misreported catch by area
• Stock assessment capabilities reduced
• TACs being exceeded
What Was Wrong

From an Industry Perspective

- Costs increasing
- Landed value of catch decreasing
- Fishing time decreasing
- TACs declining
- Increasingly restrictive regulations
- Markets being lost
- Long-term planning impossible
- Instability and risk increasing
- Poor earnings for vessel and crew
IVQ Program Development
Key Elements

• Government provided strong leadership
• All interest groups involved in designing program
• System designed specifically for needs of BC trawl groundfish fishery
Concern: Excessive consolidation of quota

BC solution:
Each trawl license subject to:
• total holdings cap
• individual species caps ranging from 4%-10% of coastwide TACs
Common IFQ concerns to be addressed

**Concern:** Quota transferred away from working fishermen

**BC solution:**
- Quota can only be transferred among trawl licensed vessels
- Transferability rules reviewed every 3 years
- Transferability viewed as critical for operational flexibility
Common IFQ concerns to be addressed

Concern: Duration of program

BC solution:
- No sunset, but government has the right to terminate
- Program reviewed every 3 years and modified to improve the program
Common IFQ concerns to be addressed

Concern: Bycatch

BC solution:

• Allocate IVQs for all TAC species, including bycatch species
• Monitor at-sea catch/mortality
• Individual accountability: All vessels must have IVQ to cover bycatch
• If IVQ exceeded for any species, vessel restricted to mid-water fishing until following season or until more IVQ obtained
Common IFQ concerns to be addressed

**Concern:** Monitoring

**BC solution:**

- All trawl vessels required to carry observers on every trip, except when fishing midwater trawl for whiting
- 100% dock-side monitoring
- Hail in and out requirements and designated off-loading locations
- Comprehensive data mgmt program provides quota data on a timely basis
Common IFQ concerns to be addressed

Concern: Effect of IFQs on processing sector and coastal communities

BC solution:

• Reserve 10% of IVQs to be allocated annually as Groundfish Development Quota (GDQ)
• Provide process where processors and vessel owners jointly submit proposals for GDQ
• Amount of GDQ allocated based on amount of fish committed in the proposal, processor production history and proposal rating by Groundfish Development Authority.
GDQ rating criteria

- Market stabilization
- Maintenance of existing processing capability
- Employment stabilization
- Economic development/benefits in coastal communities
- Increased value of groundfish production
- Industry training opportunities
- Sustainable fishing practices
How have things changed?

“When I first saw my quota, I almost puked. I thought I was finished….
Now, my revenues are higher than they’ve ever been.
But what is most interesting to me is when I’m out trawling and I see a school of fish I’m thinking, ‘I know your parents..they did me well..now do me well…Be productive..”

--Brian Mose
F/V Frosti
How have things changed?

*From a conservation perspective*

<table>
<thead>
<tr>
<th>Individual Stock Management</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor: Unable to manage on stock specific basis; many over-harvested</td>
<td>Good: Management of most species on a stock-specific basis; all harvest within TACs</td>
</tr>
</tbody>
</table>
How have things changed?

*From a conservation perspective*

<table>
<thead>
<tr>
<th>Data Collection and Information for Management and Science</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>• No stock specific catch data or at-sea discard info • Stock assessment capabilities eroded</td>
<td>Improved • Reliable stock specific catch, discard and mortality info • Increased research through co-management</td>
</tr>
</tbody>
</table>
### How have things changed?

**From a conservation perspective**

<table>
<thead>
<tr>
<th>At-sea discards and mortality</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing levels of unrecorded discards and mortality as trip limits declined</td>
<td>(halibut bycatch 2million lbs)</td>
<td>Reduced discards and mortality due to individual accountability and at-sea observation (halibut bycatch 300,000lb)</td>
</tr>
</tbody>
</table>
How have things changed?

*From a conservation perspective*

<table>
<thead>
<tr>
<th>Sustainable Fishing Practices</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>More Evident</td>
</tr>
<tr>
<td></td>
<td>“Race for fish” works against sustainable practices</td>
<td>• Shorter tows</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• More selective gear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Avoidance of high bycatch areas</td>
</tr>
</tbody>
</table>
### How have things changed?

*From a conservation perspective*

<table>
<thead>
<tr>
<th>Stewardship of the Resource</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Poor</td>
<td>Improved</td>
</tr>
<tr>
<td>• Attitude: conservation</td>
<td>• Attitude: Desire to improve</td>
<td>someone else’s problem</td>
</tr>
</tbody>
</table>
# How have things changed?

*From an industry perspective*

<table>
<thead>
<tr>
<th></th>
<th><em>Before IVQs</em></th>
<th><em>After IVQs</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Fleet</strong></td>
<td>120-135 vessels</td>
<td>60-80 vessels</td>
</tr>
<tr>
<td><strong>Fishing Strategy</strong></td>
<td>Maximize catch each trip</td>
<td>Maximize value of catch for year</td>
</tr>
<tr>
<td><strong>Efficient and effective fleet operations</strong></td>
<td>Poor: Most vessel fished coastwide for all trip limits available</td>
<td>Improved: Increased specialization and regionalization</td>
</tr>
</tbody>
</table>
How have things changed?

*From an industry perspective*

<table>
<thead>
<tr>
<th>Landed Value of Catch</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Declining due to poor quality, supply gluts, lost markets</td>
<td>Increasing due to improved quality, better servicing of market</td>
</tr>
<tr>
<td>In 1996, 29,000mt worth Can$21 million landed by bottom trawl gear</td>
<td>In 2000, 26,000mt worth Can $34 million landed by bottom trawl gear</td>
<td></td>
</tr>
</tbody>
</table>
How have things changed?

*From an industry perspective*

<table>
<thead>
<tr>
<th>Ex-vessel prices</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor and declining</td>
<td>Improved and increasing</td>
</tr>
<tr>
<td>1994</td>
<td>POP avg. price=Can$0.20/lb</td>
<td>2001</td>
</tr>
<tr>
<td></td>
<td>Lingcod avg price=Can$0.39/lb</td>
<td>POP avg. price=Can$0.61/lb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lingcod avg price=Can$0.76/lb</td>
</tr>
</tbody>
</table>
How have things changed?
From an industry perspective

<table>
<thead>
<tr>
<th>Costs of Operation</th>
<th>Before IVQs</th>
<th>After IVQS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increasing</td>
<td>Increased</td>
</tr>
<tr>
<td></td>
<td>while fishing time decreasing</td>
<td>incremental costs associated with at-sea observers and acquiring quota</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other costs related to race for fish decreased</td>
</tr>
</tbody>
</table>
How have things changed?

From an industry perspective

<table>
<thead>
<tr>
<th>Vessel and Crew Earnings</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining</td>
<td></td>
<td>Increased (over and above increased incremental costs)</td>
</tr>
</tbody>
</table>

| Number of processors | 12 companies buying and processing | 15 companies submitted proposals to GDA this year |
How have things changed?

*From an industry perspective*

<table>
<thead>
<tr>
<th>Servicing Market Needs</th>
<th>Before IVQs</th>
<th>After IVQs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poor:</strong> Markets being lost due to volatile landing patterns and closures</td>
<td><strong>Improved:</strong> Vessels and processors work together so fish is landed when market needs it; reduced processing and handling costs</td>
<td></td>
</tr>
</tbody>
</table>
How have things changed?

“...DFO managers follow precautionary principles …and substantially reduced the longspine thornyhead quota…Before the IVQ system, this action would have caused ill feelings in the industry; however, a collaborative spirit among stakeholders, managers and scientists has motivated a search for new information…”

Lessons Learned

• IFQs can provide real conservation and economic benefits in a multi-species fishery

• In developing an IFQ program it is important to:
  – Design it to meet needs of specific fishery
  – Include all stakeholder groups
  – Have strong leadership
Lessons Learned

• The IVQ program isn’t perfect but it is a significant improvement

• Overall, fishermen, processors and managers all have a positive, long-range view of the fishery.....a far different situation than before IVQs....or our west coast fishery right now
Lessons Learned

What are we waiting for? It is time to appoint an IFQ committee to consider the potential for and design of an IFQ program for the west coast trawl groundfish fishery.