### EGB Reporting

### New England Fishery Management Council April 23, 2013

## Overview

- Concern that cod catches in EGB are being reported as WGB cod
- Incentives exist to misreport due to low EGB cod quotas
- Wide range of data searched for evidence of different behavior between EGB and WGB trips
- Results inconclusive

| Cod               |     |                     |       |                          |  |
|-------------------|-----|---------------------|-------|--------------------------|--|
| Fishing Year      | TAC | Catch<br>(% of TAC) | Catch | Discards<br>(% of catch) |  |
| 2004              | 300 | 59%                 | 177   | 23%                      |  |
| 2005              | 260 | 94%                 | 244   | 64%                      |  |
| 2006              | 374 | 90%                 | 335   | 50%                      |  |
| 2007              | 494 | 64%                 | 315   | 67%                      |  |
| 2008              | 667 | 75%                 | 501   | 15%                      |  |
| 2009              | 527 | 89%                 | 467   | 35%                      |  |
| 2010              | 338 | 75%                 | 254   | 6%                       |  |
| 2011              | 200 | 82%                 | 165   | 20%                      |  |
| 2012 <sup>1</sup> | 162 | 28%                 | 44.9  | 53%                      |  |

- FW 42 attributed all cod on a trip to EGB if that trip fished at all in EGB, for quota monitoring purposes.
- In recent years, vessels report fishing in more areas on a trip. This may be a function of changes in regulations.

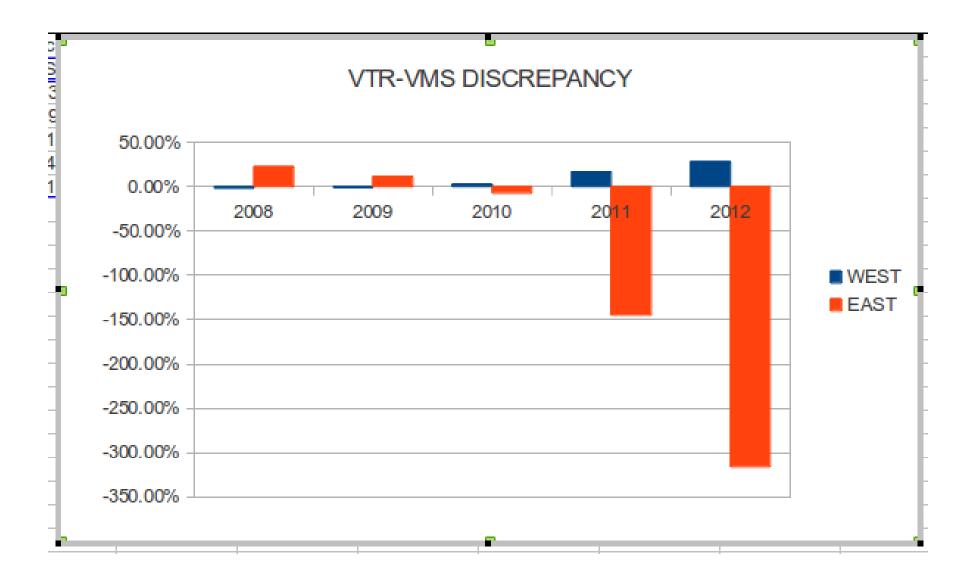
| Percent of cod<br>attributed to<br>EGB that are<br>from EGB<br>561/562 | 89% | 30% | 12% |
|--|-----|-----|-----|
|--|-----|-----|-----|

# Analyses by PDT

- Absent direct evidence of misreporting, must infer reason for differences between areas, observed/unobserved trips, etc.
- Twelve different analyses summarize in report
- VMS, VTR, NEFOP/ASM, leasing data

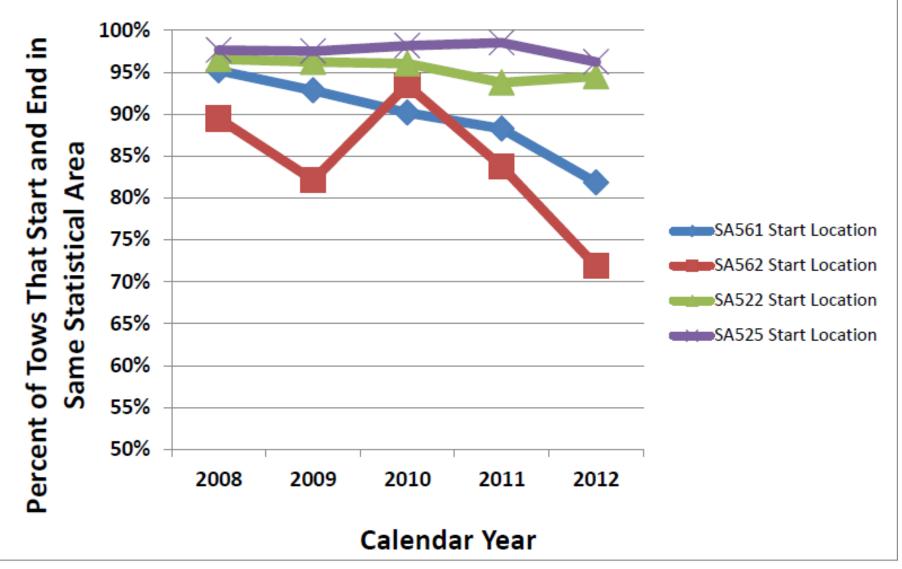
# VMS/VTR/Observer

- On matched trips, VTR was a better match to observer than VMS (11 of 15 instances)
- Difference between VTR and VMS increased 2010-2012 – but which is correct?
- Little evidence presence of observer affects accuracy of catch locations
- PDT concerned over trend in difference between VMS and VTR

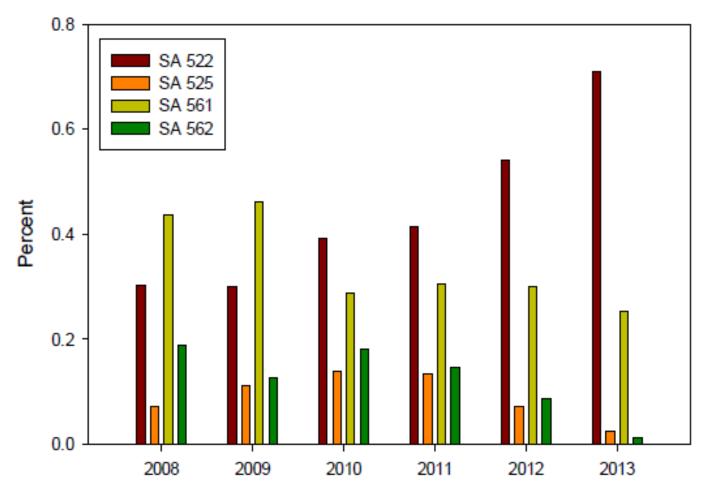


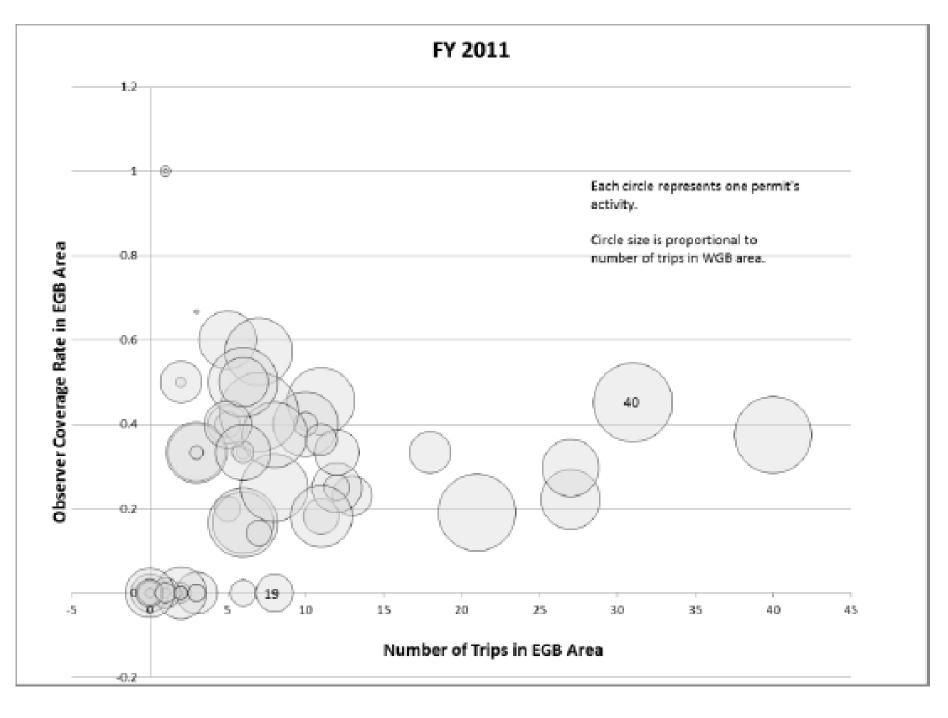
#### US/CA Area

#### **Observed Trawl Tow Start and End Locations**



### Percent of Observed Sub-Trips Landing Cod





| Analysis                                      | Is there evidence<br>of differences by<br>area? | Is there evidence of<br>differences between<br>observed/unobserved<br>trips? | Is there evidence that<br>differences changed over<br>time? |
|---|---|--|---|
| Allocation by<br>VMS/VTR/Observer             | Ambivalent                                      | Mixed  | Yes   |
| VTR Trip<br>Distribution                      | Yes   | No   | No  |
| Observer Trip<br>Distribution                 | Yes   | No   | No  |
| Observer Coverage<br>Rates                    | Yes   | NA   | No  |
| DMIS Trip Area<br>Distribution                | NA  | Mixed  | Mixed   |
| DMIS Catch<br>Distribution                    | NA  | Mixed  | Mixed   |
| Observed catch rates                          | Yes   | NA   | Yes   |
| Observed tow start<br>and end locations       | Yes   | NA   | Yes   |
| EGB/WGB fishing<br>and observer<br>assignment | Mixed   | Mixed  | No  |
| Leasing Activity                              | Yes   | NA   | Yes   |
| Correlation of<br>cod/haddock                 | Yes   | NA   | Yes   |

# PDT Conclusions

- Differences in behavior between EGB and WGB ,and between observed and unobserved trips
- Differences are not all consistent with misreporting hypothesis
- Incentive to misreport is clear
- Some administrative tools might reduce reporting discrepancies