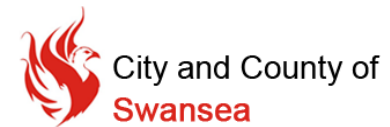


# Smart Coasts Sustainable Communities



Environmental Protection Agency

IRELAND WALES  
2007 – 2013



Preliminary Report  
Swansea Bay



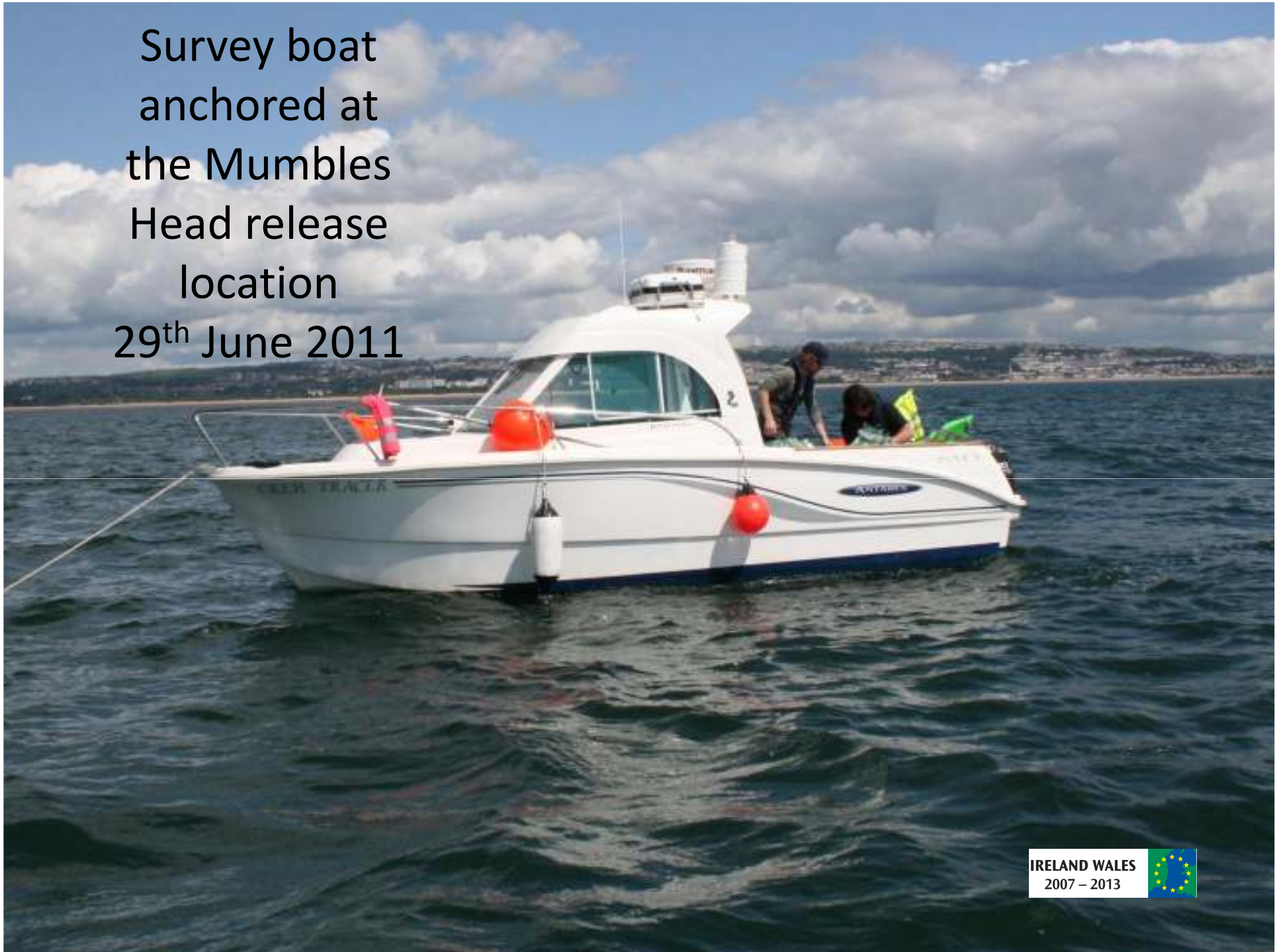
Drogue Releases Summer 2011



Ireland's EU Structural Funds  
Programmes 2007 - 2013  
Co-funded by the Irish Government  
and the European Union



Survey boat  
anchored at  
the Mumbles  
Head release  
location  
29<sup>th</sup> June 2011





IRELAND WALES  
2007 – 2013



Drogue Releases off  
Mumbles Head near  
Knab Rock SPS  
29<sup>th</sup> June 2011





IRELAND WALES  
2007 – 2013





A 2metre sail  
depth drogue  
being prepared  
for release



A 2 metre sail depth drogue being released



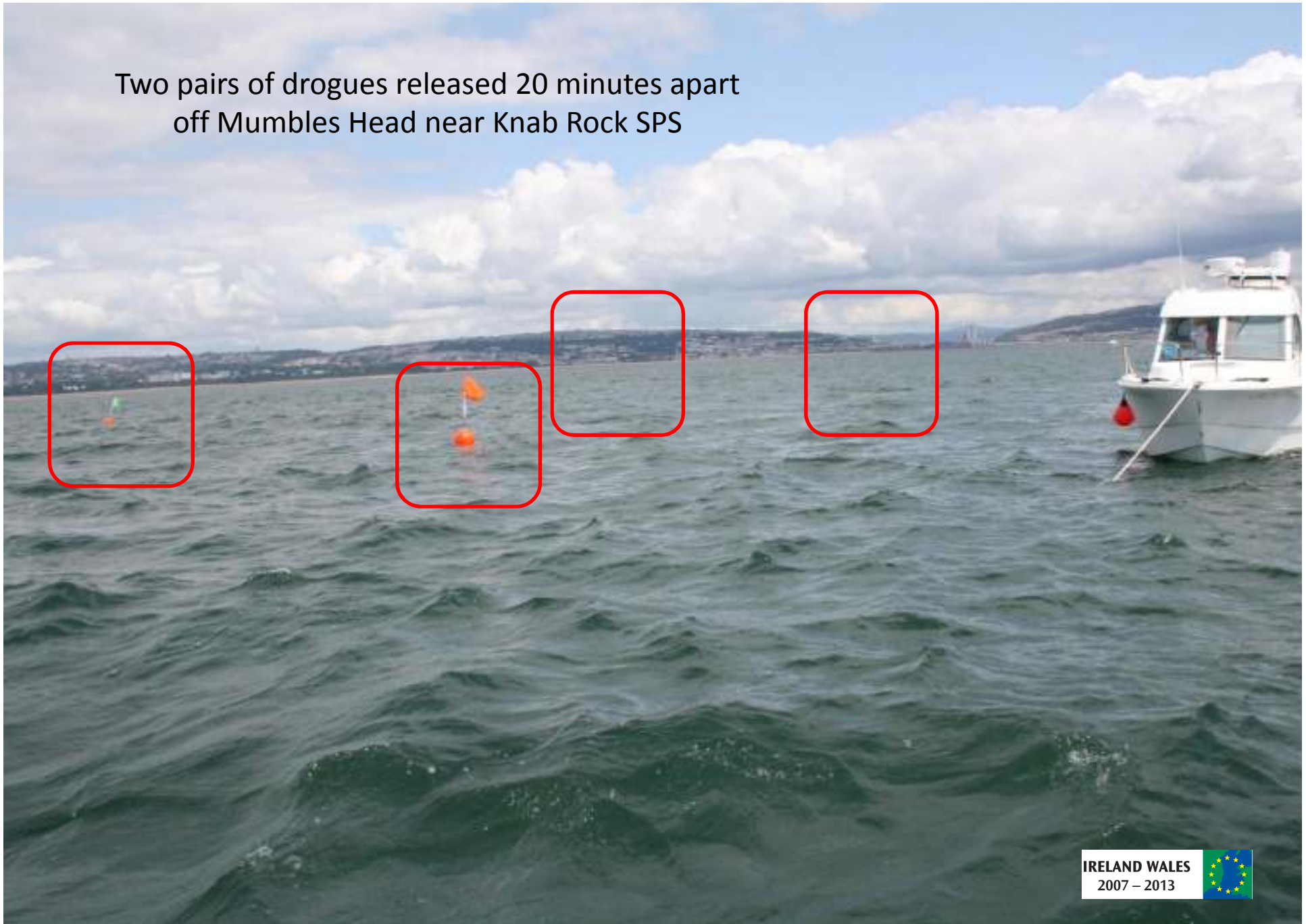




IRELAND WALES  
2007 – 2013

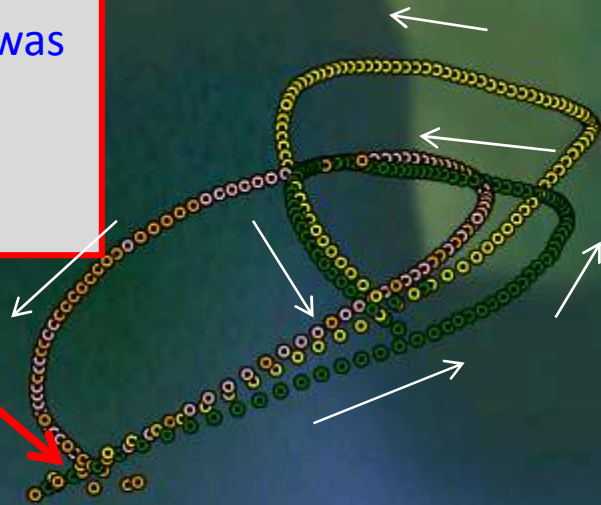


Two pairs of drogues released 20 minutes apart  
off Mumbles Head near Knab Rock SPS





**Drogue Tracks**  
**9<sup>th</sup> June 2011**  
Release point over Swansea WwTW outfall  
High water @ 12:42 BST, the release was timed to characterise maximum flux from the discharge point to the BWD sampling point (DSP)



# Drogue tracks

27<sup>th</sup> June 2011

Release ~3 hours before High Water

Pink and Orange 2m sail depth

Yellow and Green 1m sail depth

Note :

Both 2m sail depth drogues head from the Afon Tawe mouth towards the BWD DSP

Both 1m sail depth drogues head towards Mumbles Head

Pink	2m sail	release	13:23-18:12 BST
Yellow	1m sail	release	13:26-20:24 BST
Green	1m sail	release	13:42-20:26 BST
Orange	2m sail	release	13:45-19:05 BST



# Drogue tracks

28<sup>th</sup> June 2011

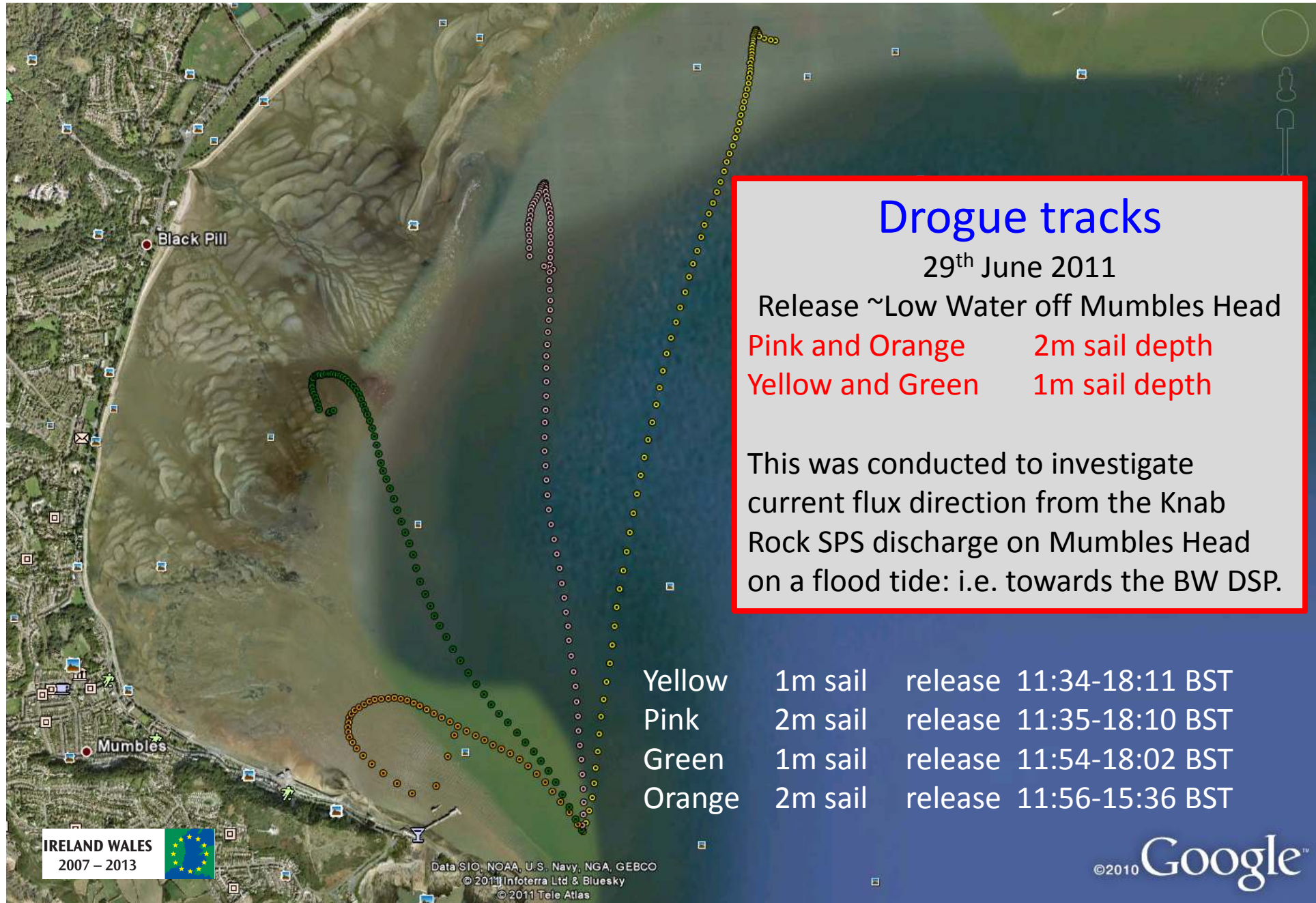
Release ~3 hours before High Water  
Seaward side of Afon Tawe outlet.

Pink and Orange      2m sail depth  
Yellow and Green      1m sail depth

This release was designed to investigate the direction of movement of Afon Tawe water at the time when movement towards the BWD DSP might be expected. It was undertaken to replicate the conditions observed on 27<sup>th</sup> June where 1m and 2m drogues moved in different directions

Pink	2m sail	release	14:13-19:20 BST
Yellow	1m sail	release	14:15-20:29 BST
Green	1m sail	release	14:32-20:34 BST
Orange	2m sail	release	14:33-19:23 BST





## Drogue tracks

29<sup>th</sup> June 2011

Release ~Low Water off Mumbles Head

Pink and Orange 2m sail depth

Yellow and Green 1m sail depth

This was conducted to investigate current flux direction from the Knab Rock SPS discharge on Mumbles Head on a flood tide: i.e. towards the BW DSP.

Yellow	1m sail	release	11:34-18:11 BST
Pink	2m sail	release	11:35-18:10 BST
Green	1m sail	release	11:54-18:02 BST
Orange	2m sail	release	11:56-15:36 BST



# Drogue tracks

4<sup>th</sup> July 2011

Release ~High Water over Corus Diffuser

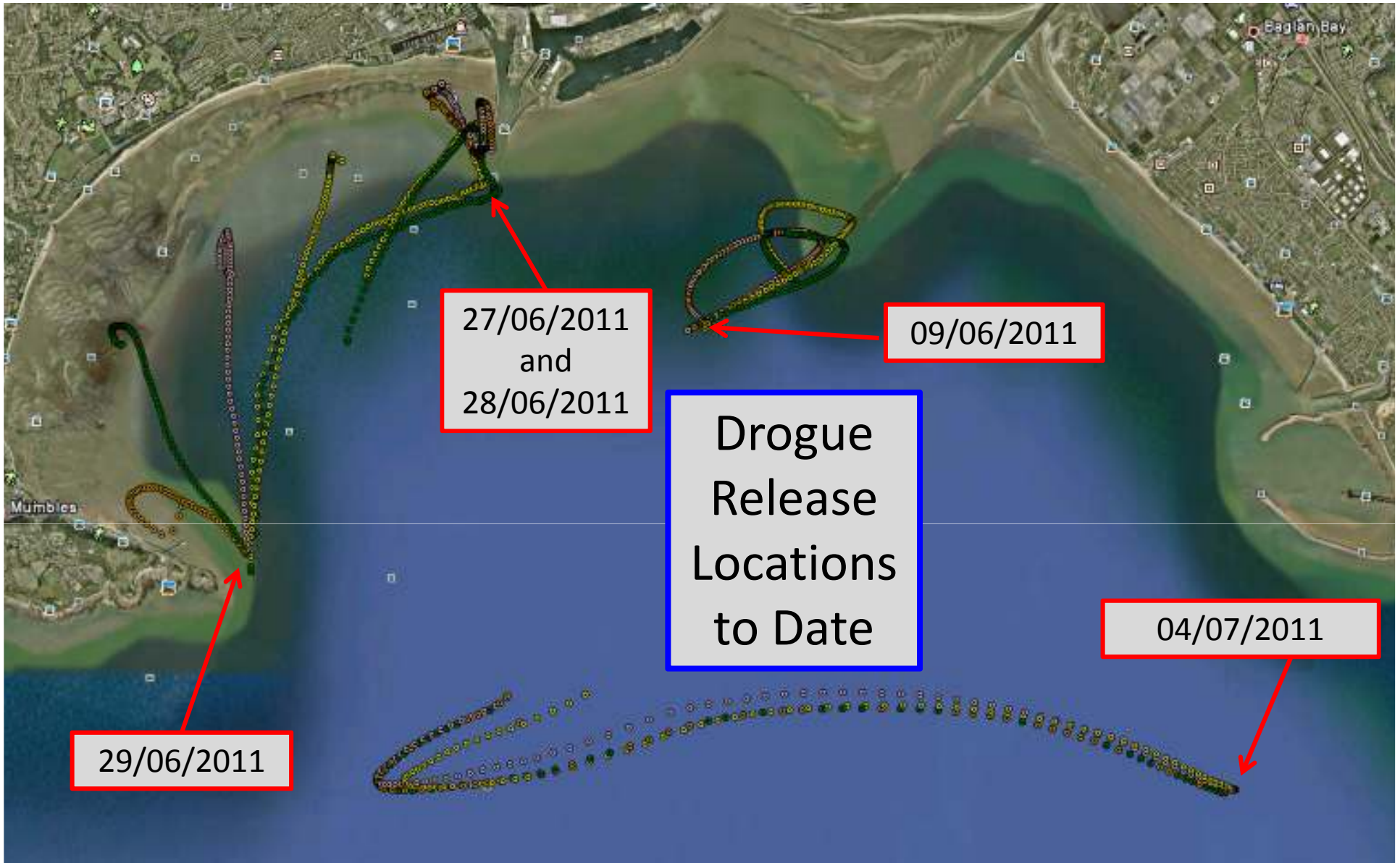
Pink and Orange 2m sail depth

Yellow and Green 1m sail depth

This was conducted to investigate current flux direction from the Corus Diffuser on an Ebb tide: i.e. towards the BW DSP.

Yellow	1m sail	release	09:22-16:57 BST
Pink	2m sail	release	09:24-17:10BST
Green	1m sail	release	09:38-16:53 BST
Orange	2m sail	release	09:40-17:01 BST







Anyone  
seen that  
drogue?

