

# Rehabilitation of Industrial Cutaway Peatlands

David Fallon

Bord na Mona Ecology Team

03/10/2019

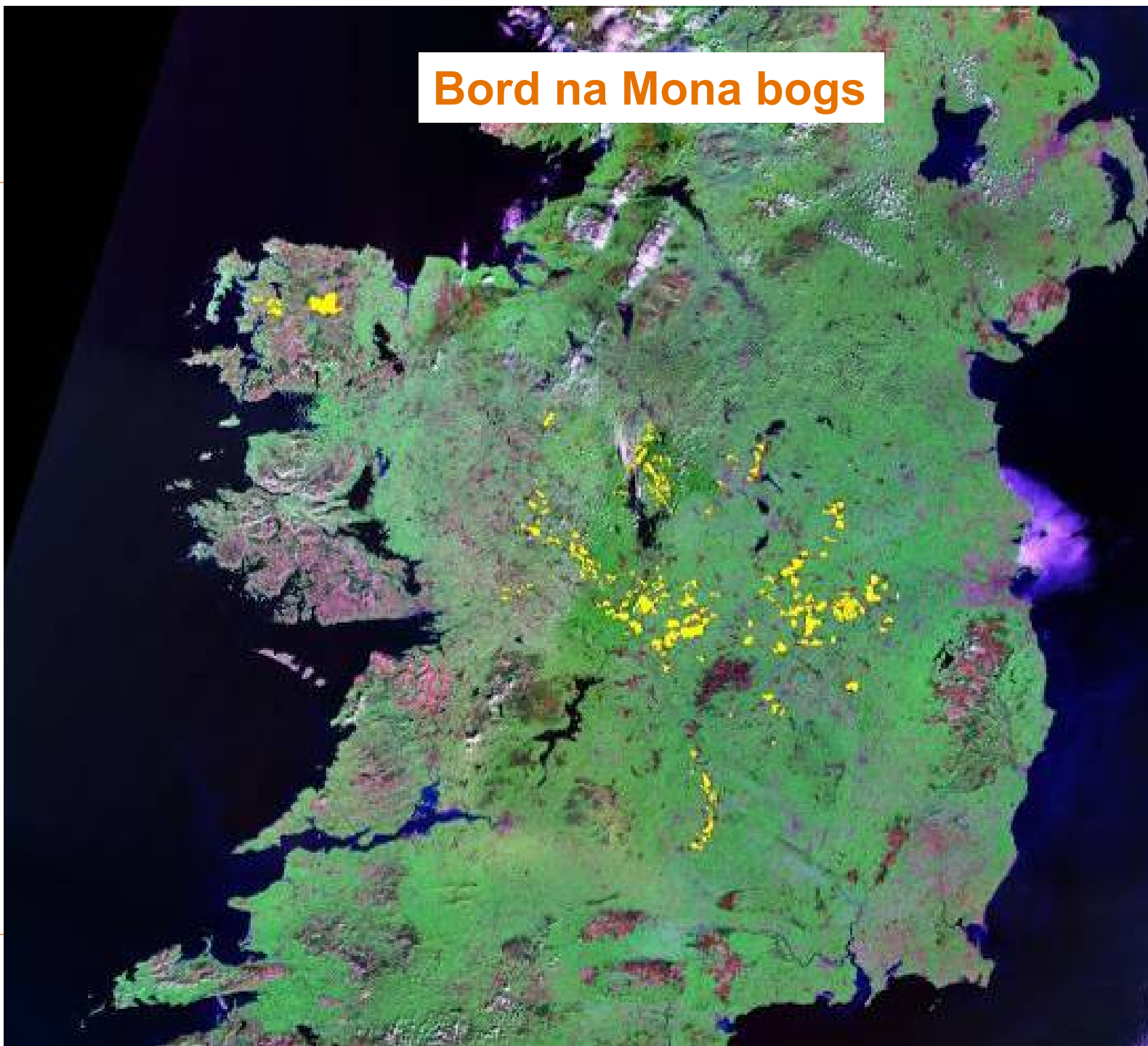
# Rehabilitation of Industrial Cutaway Peatlands

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## Overview -

- Introduction to Bord na Móna
- Explanation of cutaway bog
- Rehabilitation methods
- Bog restoration

## Bord na Mona bogs





## Starting point – raised bog

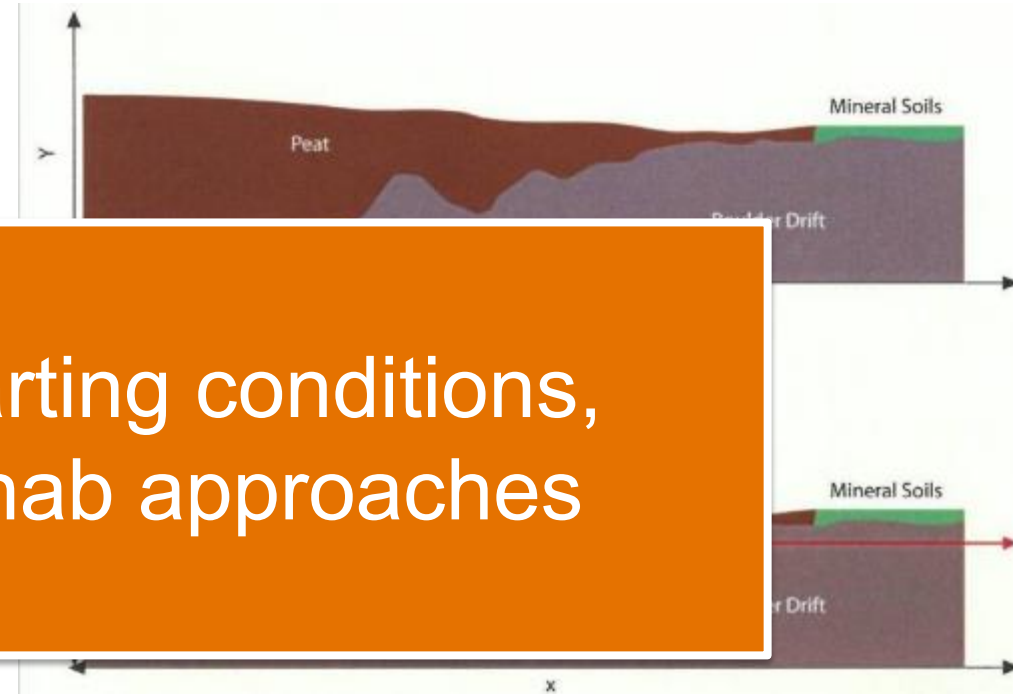




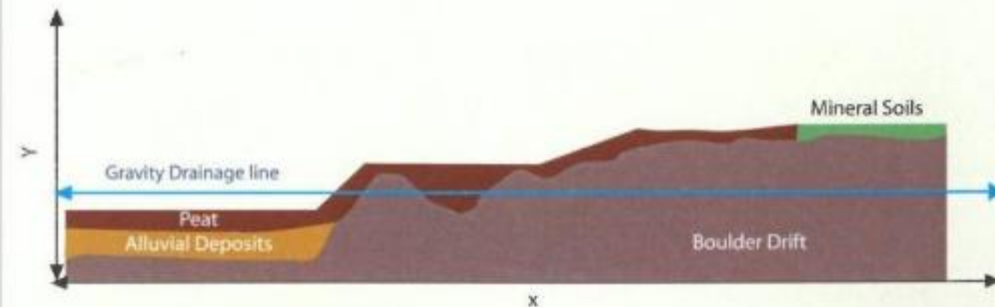
# Development of Bord na Móna production bog and cutaway



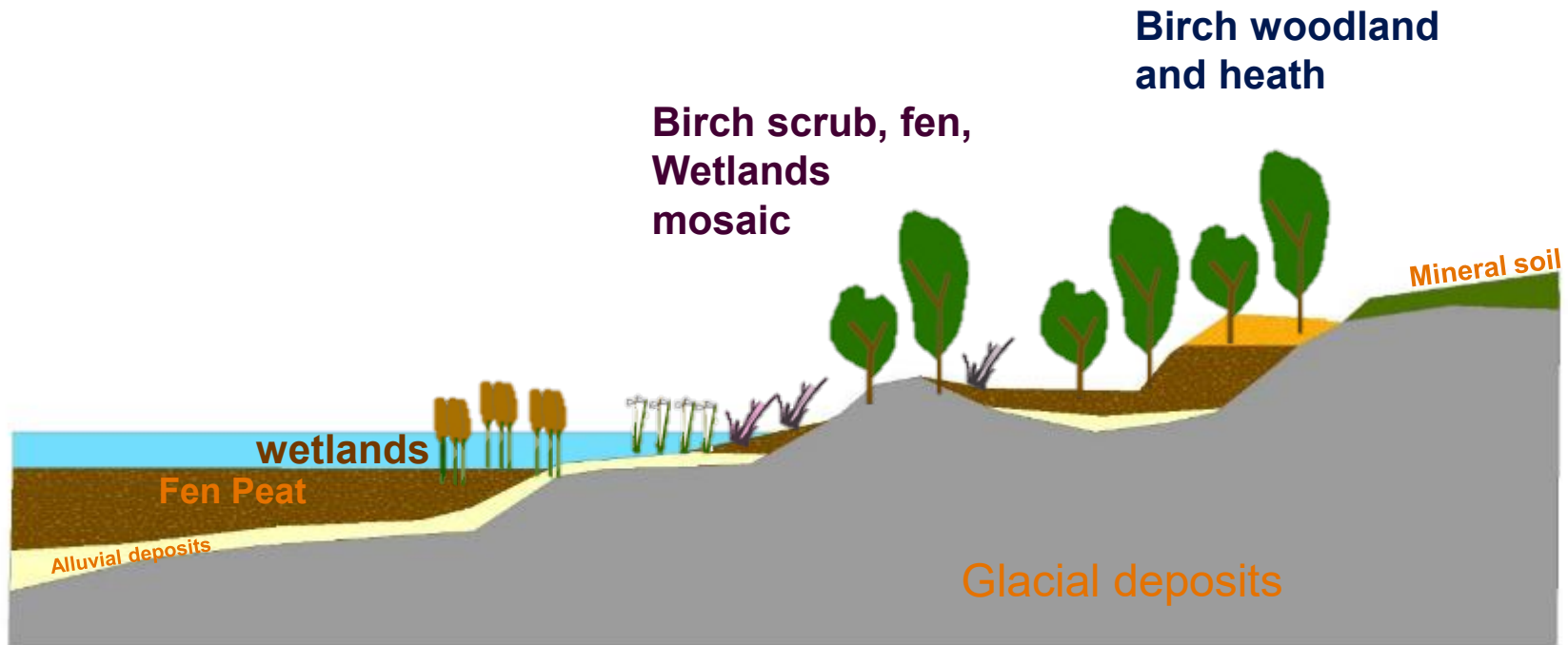
Different starting conditions,  
different rehab approaches



**Fig. B** Typical industrial raised bog after approximately 25 years production (not to scale)



**Fig. C** Typical industrial raised bog following cessation of production (not to scale)



## Development of cutaway habitats & current environment



# Rehabilitation

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- EPA IPC Licences for peat production: Condition 10  
*...plan for permanent rehabilitation of the cutaway boglands ....*
- Rehabilitation plan: a programme to manage a site for its environmental stabilisation (re-vegetation and peat containment)
- Natural colonisation + targeted rehabilitation  
= environmental stabilisation & **sites with biodiversity value**



- Rehabilitation provides space/opportunities for biodiversity
- After-use & future management of cutaway will also affect rehabilitation



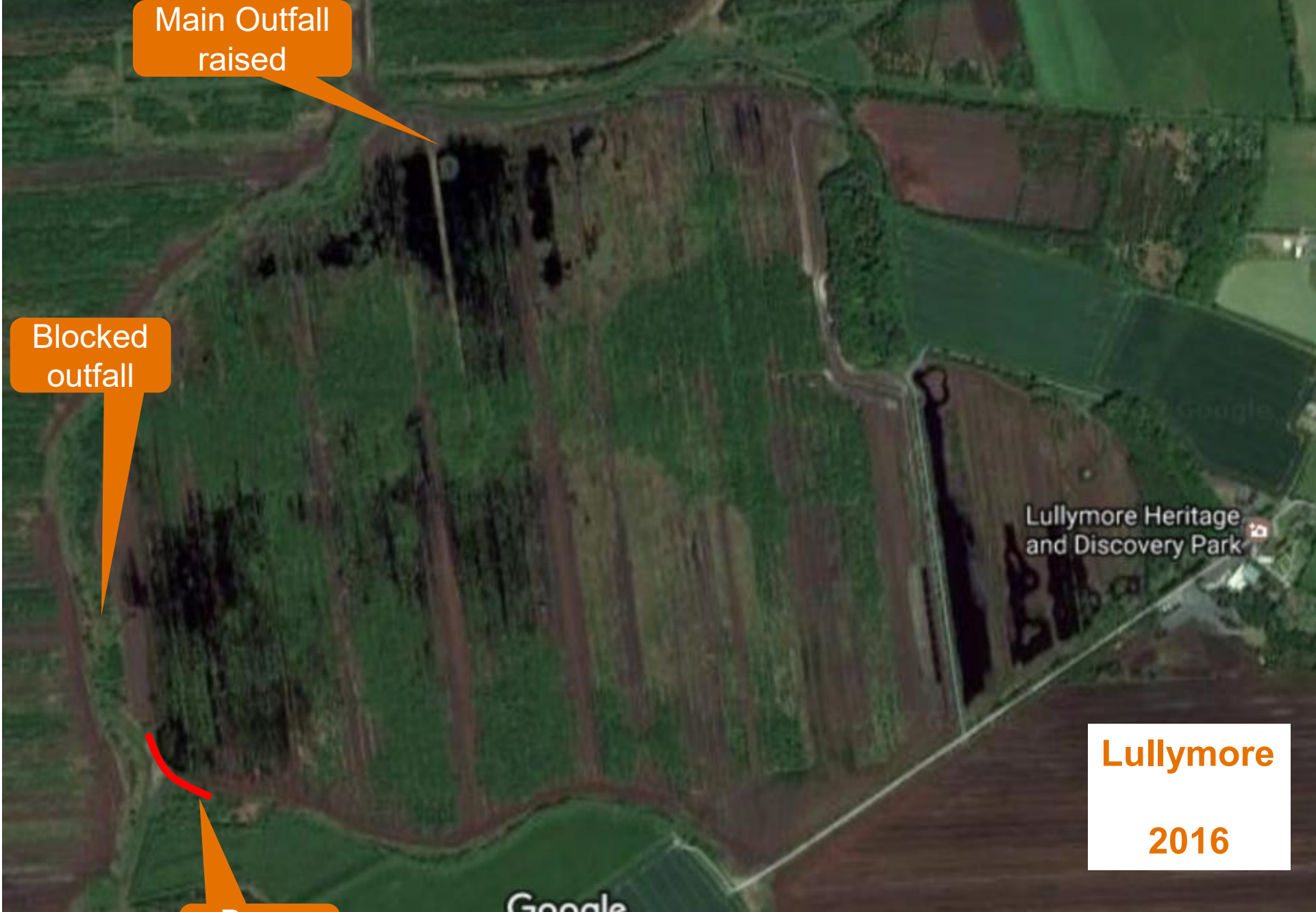
**From this.....  
Industrial scale:  
drainage, milling**

*“Peat must be wet”*  
Hans Joosten

**To this.....  
Industrial scale:  
Rewetting**







Lullymore

2016

# Rehabilitation

2010



Example of targeted management

Fertiliser and lime

100% vegetation cover  
-grasses and rushes  
-some birch and willow

2013





## Rehabilitating sites with multiple land-use and ecosystem services



### Mount Lucas Windfarm 80 MW

Infrastructure 3-4% of site area



## Wet cutaway

Ecosystem services - creating sites with multiple benefits – Biodiversity, Carbon, Future PES?





# Dry cutaway

## Birch woodland

- Re-wet where possible
- Potential to develop native woodland cover
- Speed up development
- Enhance diversity, biodiversity value and GHG mitigation
- Increase native woodland cover in Ireland



- Future PES?



# Bord na Móna Bog Restoration Programme



Drains blocked to raise water levels

re-wetting the bog and

aiding the natural development of *Sphagnum*-rich plant communities (active raised bog) and peatland habitat function.



## Flood attenuation along the Shannon?

**River Suck floodplain**

Garryduff/Kilmacshane/  
Blackwater  
(winter flooding 2009)



# Rehabilitation & After-use amenity, biodiversity, forestry, renewable energy, other commercial development





2019







# Thank You

