

Rehabilitation and Restoration of Bord na Móna bogs



Bord na Mona Land Development
Coillte May 8th 2008

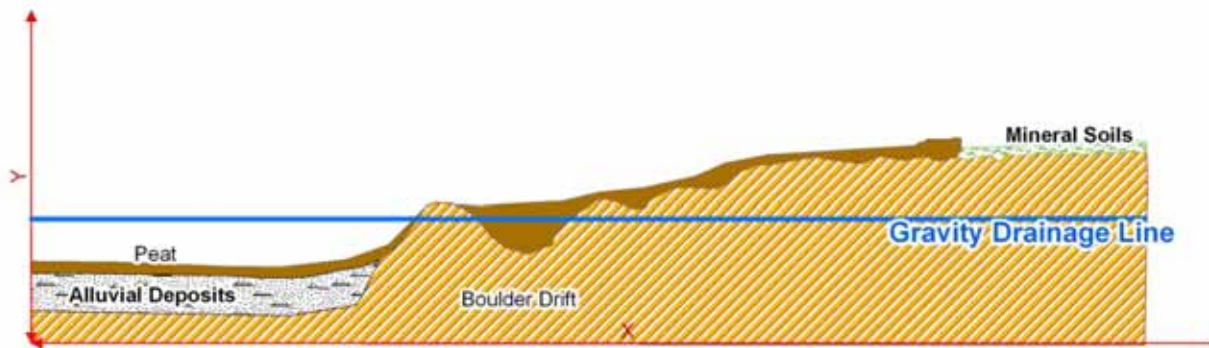
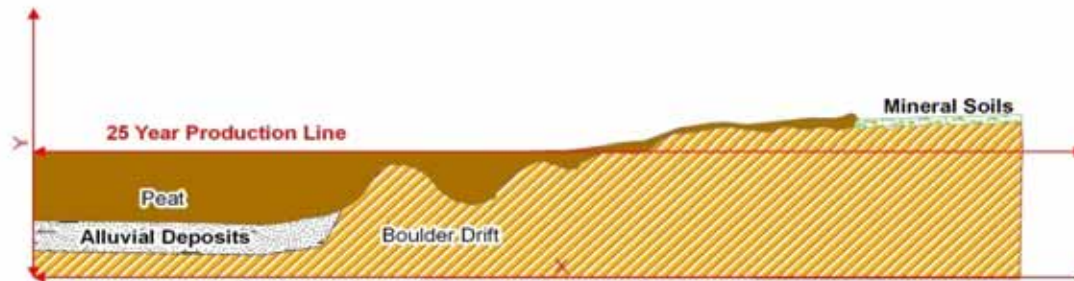
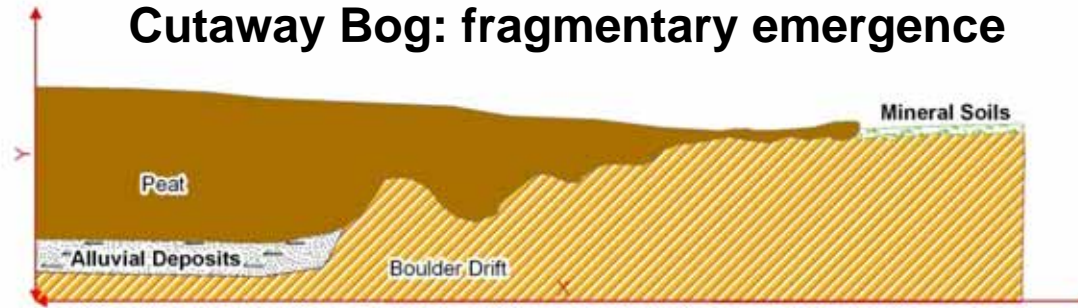




IPPC Licences Ref. 499-507 (80,000ha)

- 499 Littleton
- 500 Boora
- 501 D'greenagh
- 502 Blackwater
- 503 Allen
- 504 Mountdillon
- 505 Oweninny
- 506 Kilberry
- 507 Cuil na Mona

Cutaway Bog: fragmentary emergence



- IPC Licence 505: Condition 10

...plan for permanent rehabilitation of the cutaway boglands

Natural colonisation leads to stabilisation
of peat production areas



Factors Affecting After-use Options

- Land-use in surrounding areas: area designated for conservation and/or agricultural
- Peat type and depth: degree of humification
- Hydrology: pumping or gravity drainage, salmonid habitats
- Climatic conditions and wind regime
- Continuous CO₂ release under cropping

Commercial After-uses

- Grassland: technically successful, 10% area suitable, market price < cost..
- Forestry: need to create growing medium, technically difficult, cost, problems with frost, nutrient, etc (4,000ha +)
- Wind Farms: projects at planning stage, *but small footprint once established*
- Bio-fuels and Biomass: preliminary studies
- Niche opportunities: waste facility at Drenth, sand and gravel (small scale)

Rehabilitation Projects to date:

c.10,000ha 'new' habitat

- Boora: *Lough Boora Parklands* (grasslands, amenity lakes, wetlands (Turraun, Tumduff)), Clongawney, Drinagh, Derries (3,000ha)
- D'greenagh: Derryarkin, Ballycon, Derryounce (450ha)
- Allen: Lullymore (adj Heritage Centre: 125ha)
- Blackwater: Bog rail tour (50ha)
- Mayo: Oweninny Works (6,500ha)





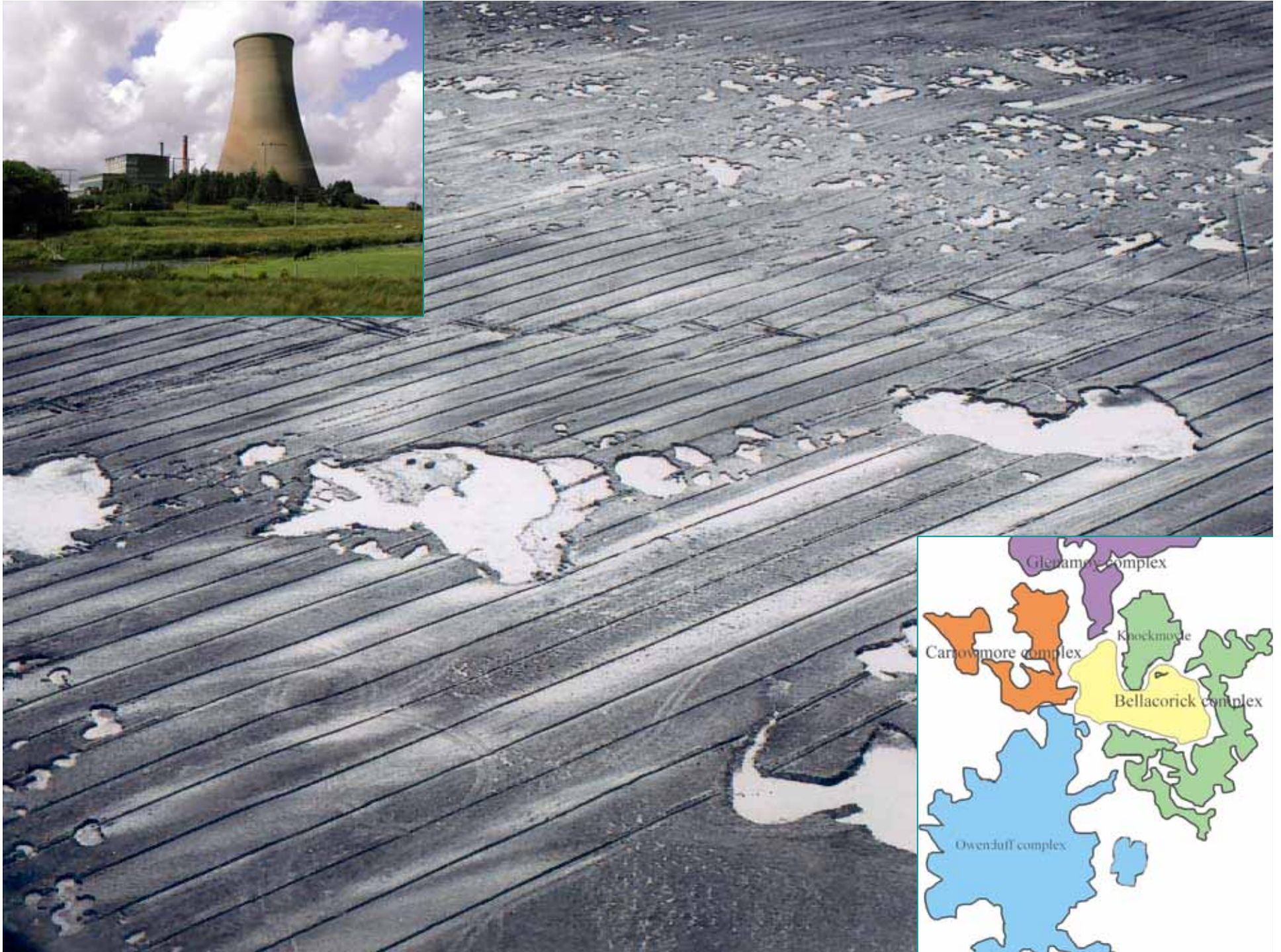




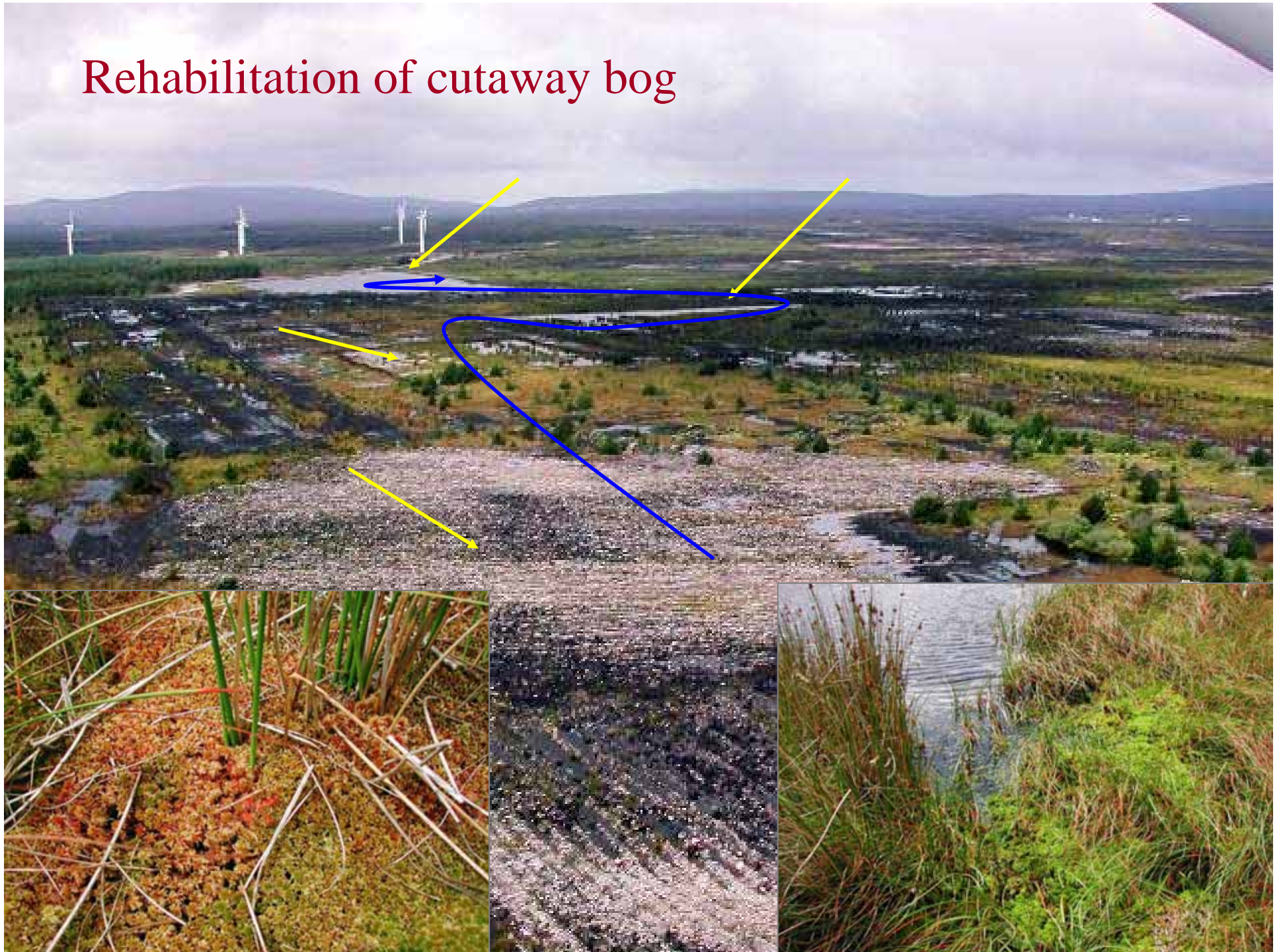
Cladium mariscus fen







Rehabilitation of cutaway bog



Restoration of O'Boyle's Bog: 336ha



Cutaways: Likely Scenario

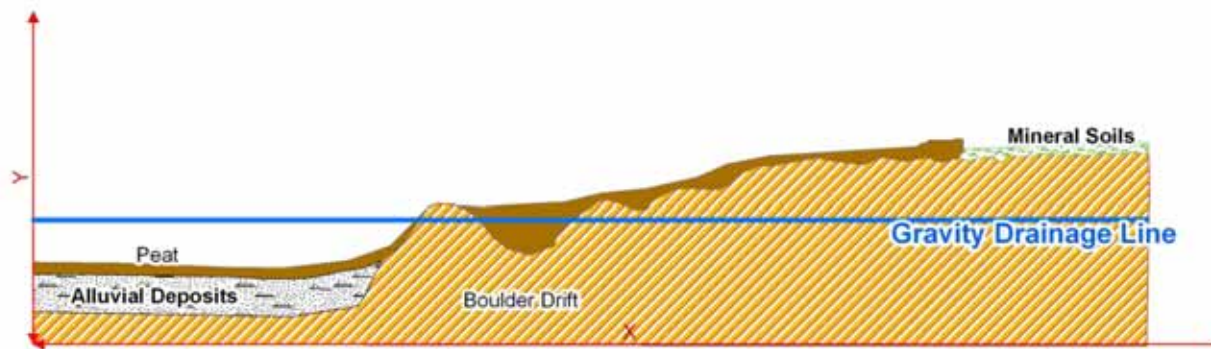
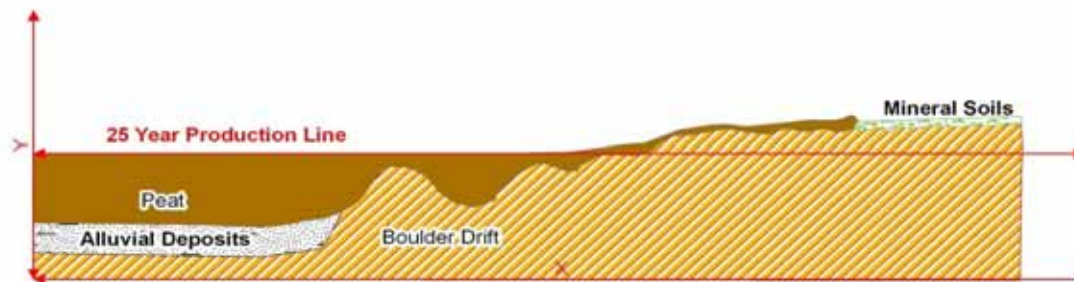
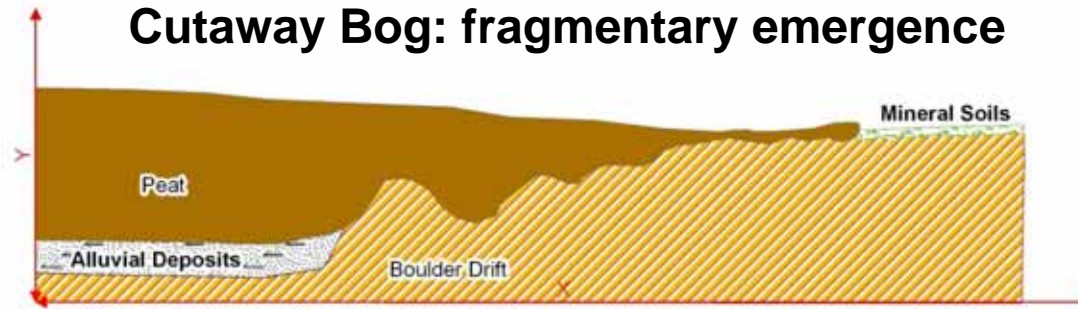
- 60% pumped drained: wetlands
- 20% of remaining unsuitable for commercial or 'other' land-use
- 20% (at max.): commercial ventures, amenity areas, community interest
- *The above estimate assumes all acidic peat is removed i.e. cutaway to the fen layers*

Rehabilitation and Restoration:

- **Cutaway** (milled peat energy bogs) – natural colonisation (up to **75%** Bord na Mona lands), other uses
- **Superficially drained** (no production) – restoration of bog ecosystem; Derrydoo 250ha, Clara Island 200ha; Abbeyleix



Cutaway Bog: fragmentary emergence



Ongoing Projects

- Offaly Biodiversity plan: an integrated land-use plan for the industrial cutaways and bogs of Offaly (John Feehan)
- Lough Boora Parklands (Offaly CDP)
- Grey Partridge
- Proposal with NPWS for Mountdillon bogs
- Also other interested parties: *National Wetland Wilderness Park* in Longford
- Lullymore Wetland; Butterfly Charity

Future Rehabilitation - Restoration

- Energy peat supply until 2020 and beyond...if so, more extensive areas of acidic, deep peat in situ...restoration?
- Natural colonisation of cutaways will alter vegetation map of Ireland
- The space between for natural processes to act
- Potential for restricted and/or fragmentary habitats to expand their range: woodlands, reedbeds, rare and threatened bird species, butterfly sp., mammals etc.
- Wildlife corridors along railway connections
- Restoration of areas such as Clera Island Bog (up to 1,000ha)
- Need to set realistic aims with NPWS

The Future of Irish Bogs

- Obvious need for restoration in Ireland (Ryan)
- Benefit of experience (Lodge Bog 28ha to Coillte 2000ha to Bord na Mona 10,000ha)
- Using the Scottish and UK knowledge
- Draw together Irish expertise – ‘Restoration in Ireland’
- Future Management Policy in Ireland
- International Peat Congress
- Tuesday June 10th
- Chair: M Schouten
- Speakers: Delaney, Farrell, O’Connell, Ryan, Wilson, Renou-Wilson, etc...
- National strategy on carbon, biodiversity