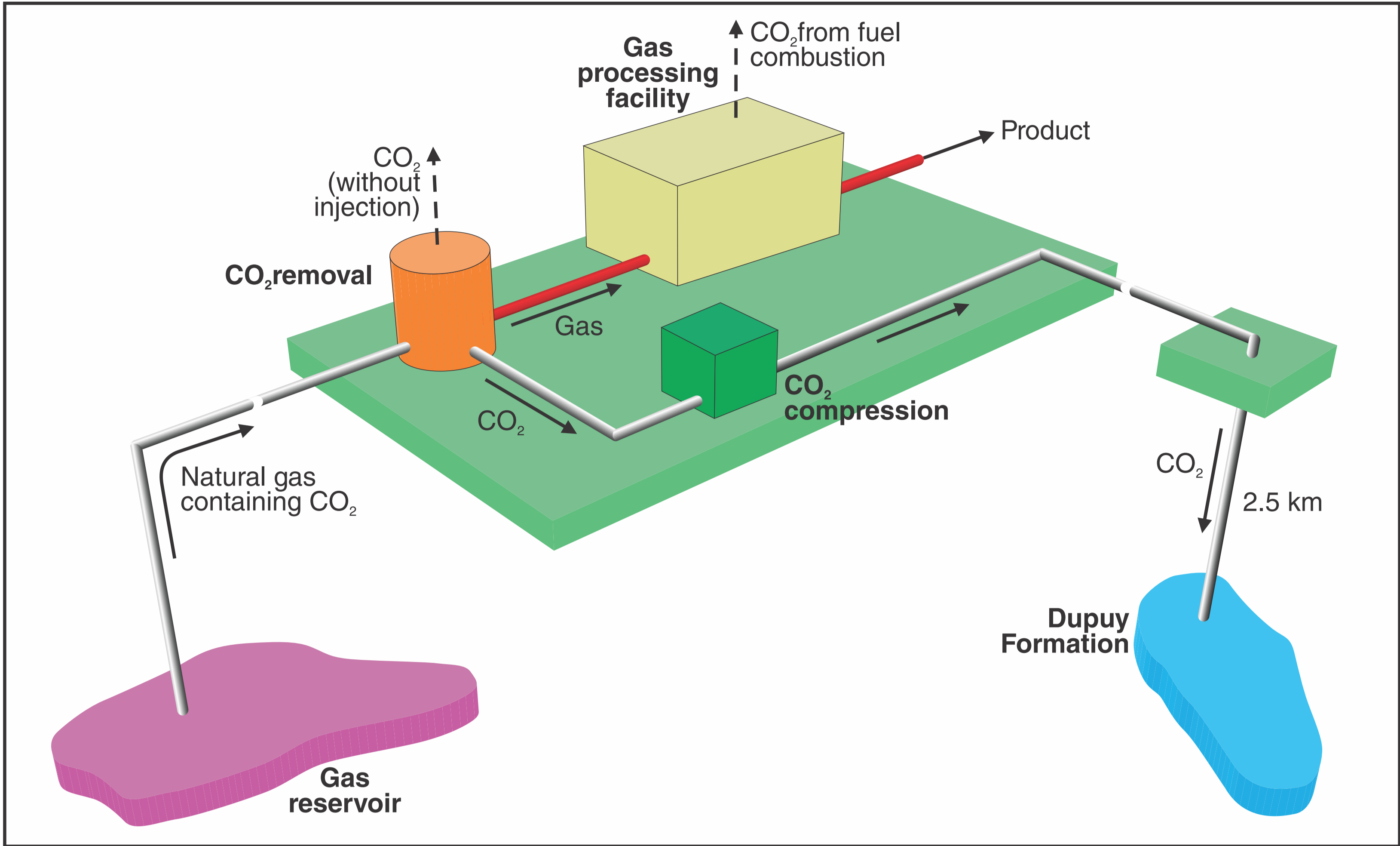


GORGON CO₂ INJECTION PROJECT

The Gorgon CO₂ Injection Project will be the world's largest greenhouse gas mitigation project undertaken by the private sector. The Project plans to store reservoir CO₂ extracted as part of gas processing operations on Barrow Island, in a deep geological formation (Dupuy Formation) over two kilometres beneath Barrow Island. Construction is well progressed and injection operations should commence within the next 12 months

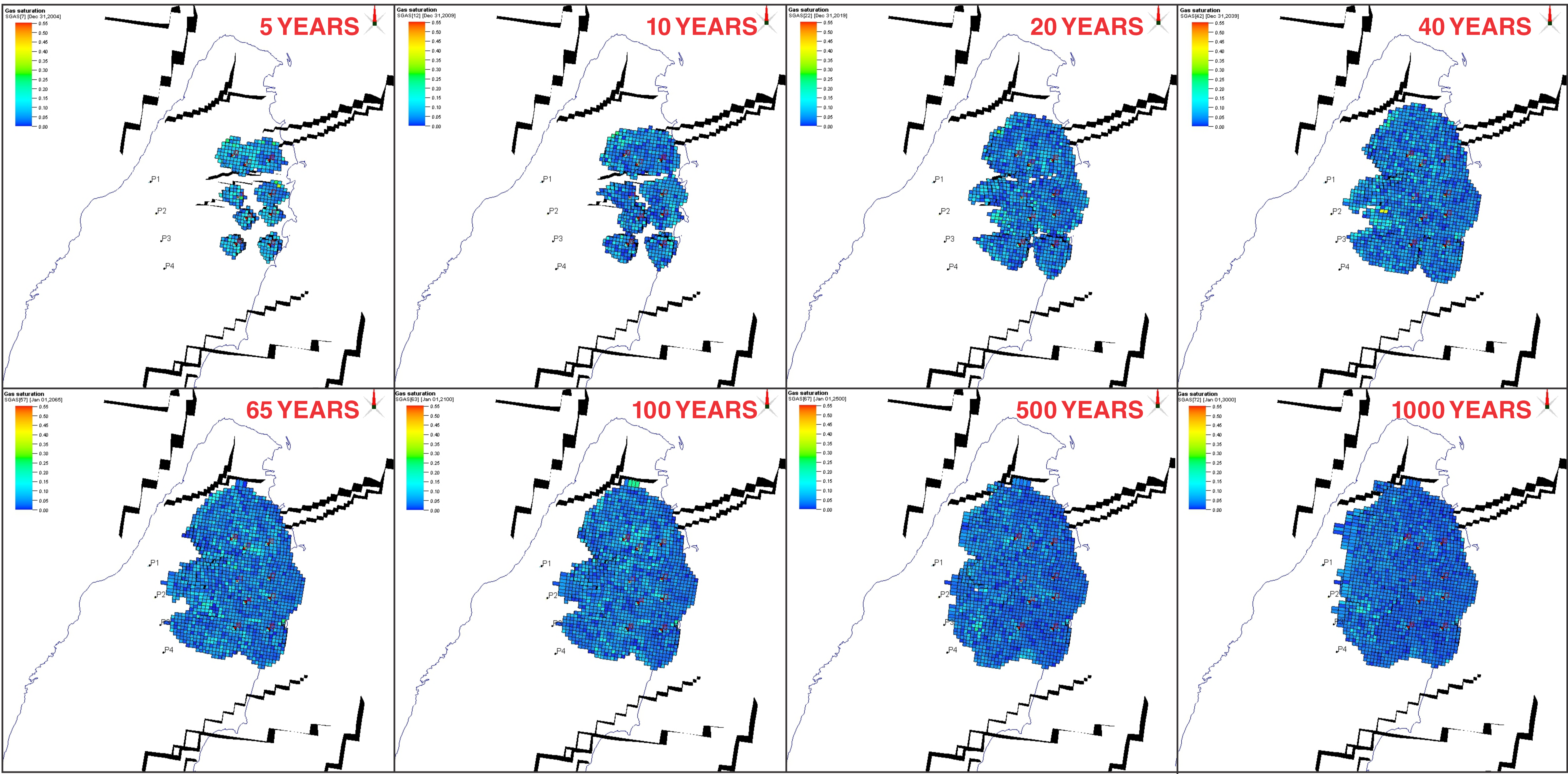
Between 2003 and 2013, the Western Australian Department of Mines and Petroleum (DMP) has, in its capacity as regulator, used independent experts to conduct five due-diligence studies of the Gorgon CO₂ Injection Project to verify the high standards being applied by Chevron (the Project Operator) during the project assessment, appraisal and design phases and to ensure the geological understanding and models were robust

The first four studies enabled the Government in 2009 to grant a CO₂ Approval to Inject under the *Barrow Island Act 2003* to the Gorgon Joint Venturers (GJV). The injection of reservoir carbon dioxide will reduce greenhouse gas emissions from the Gorgon Project by approximately 100 million tonnes CO₂ equivalent

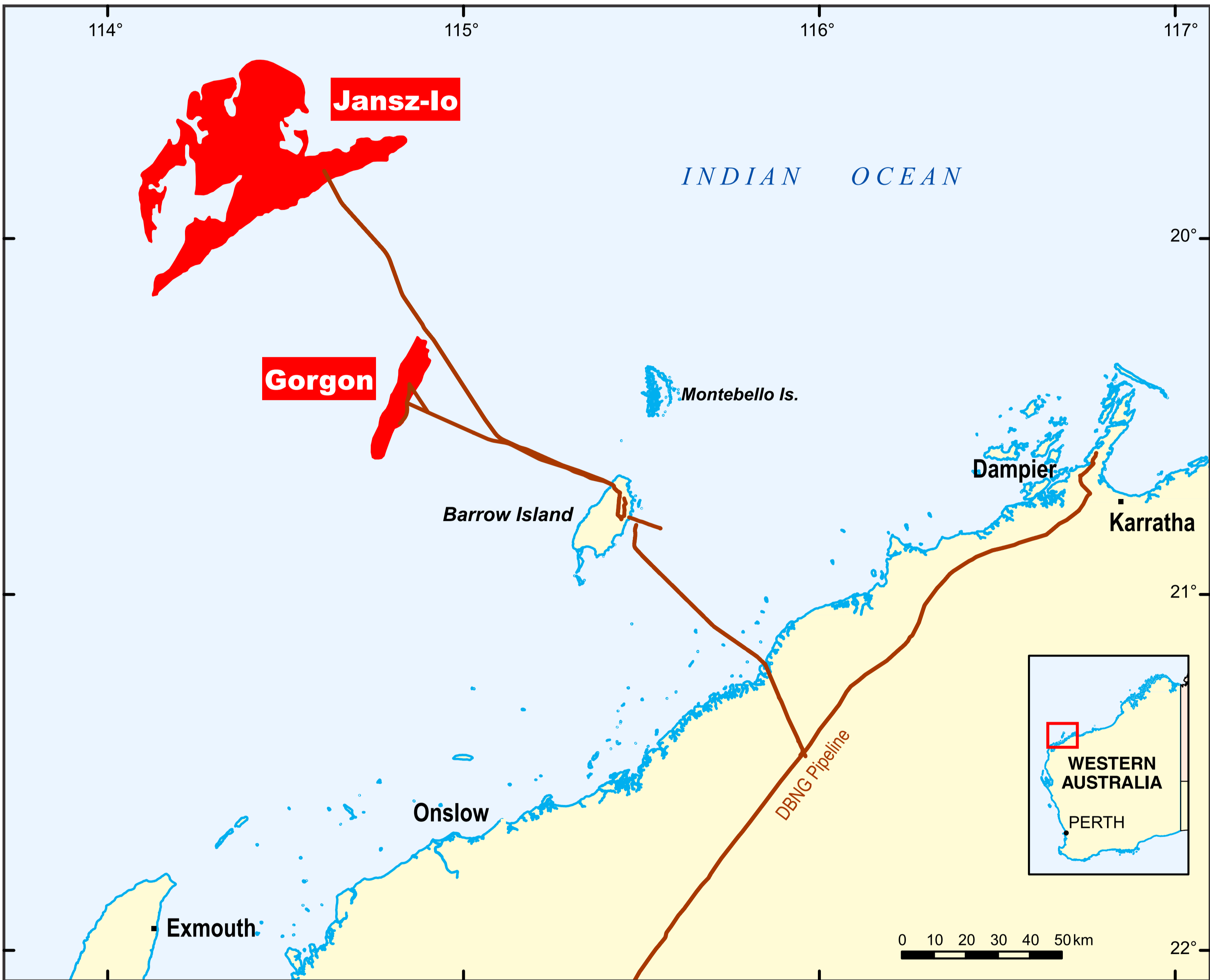


Barrow Island CO₂ storage concept (source: Chevron)

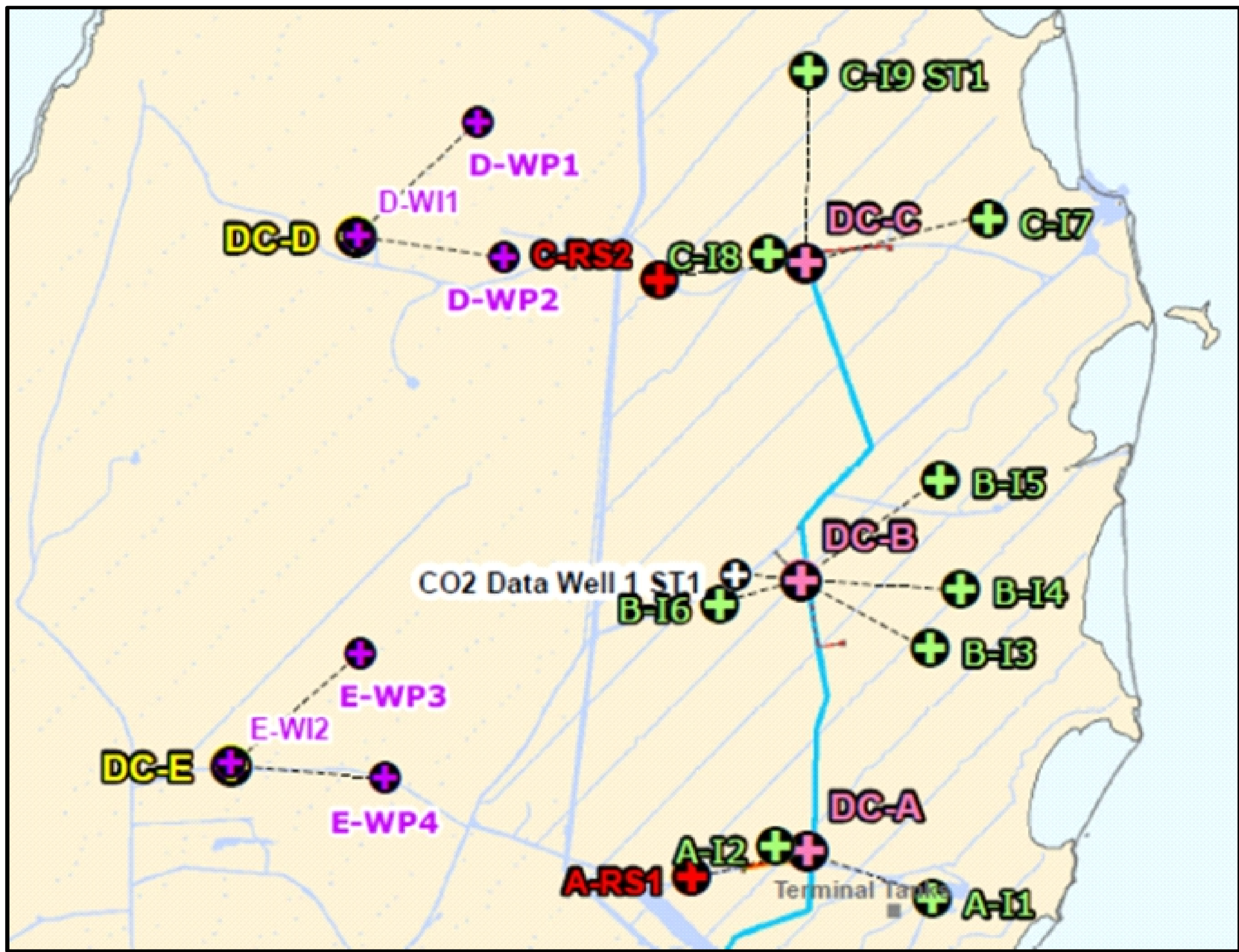
CO₂ PLUME MOVEMENT (gas saturation versus time)



Predicted movement of injected CO₂ in the Dupuy Formation (DMP in-house model version based on Chevron Gen 7 model)



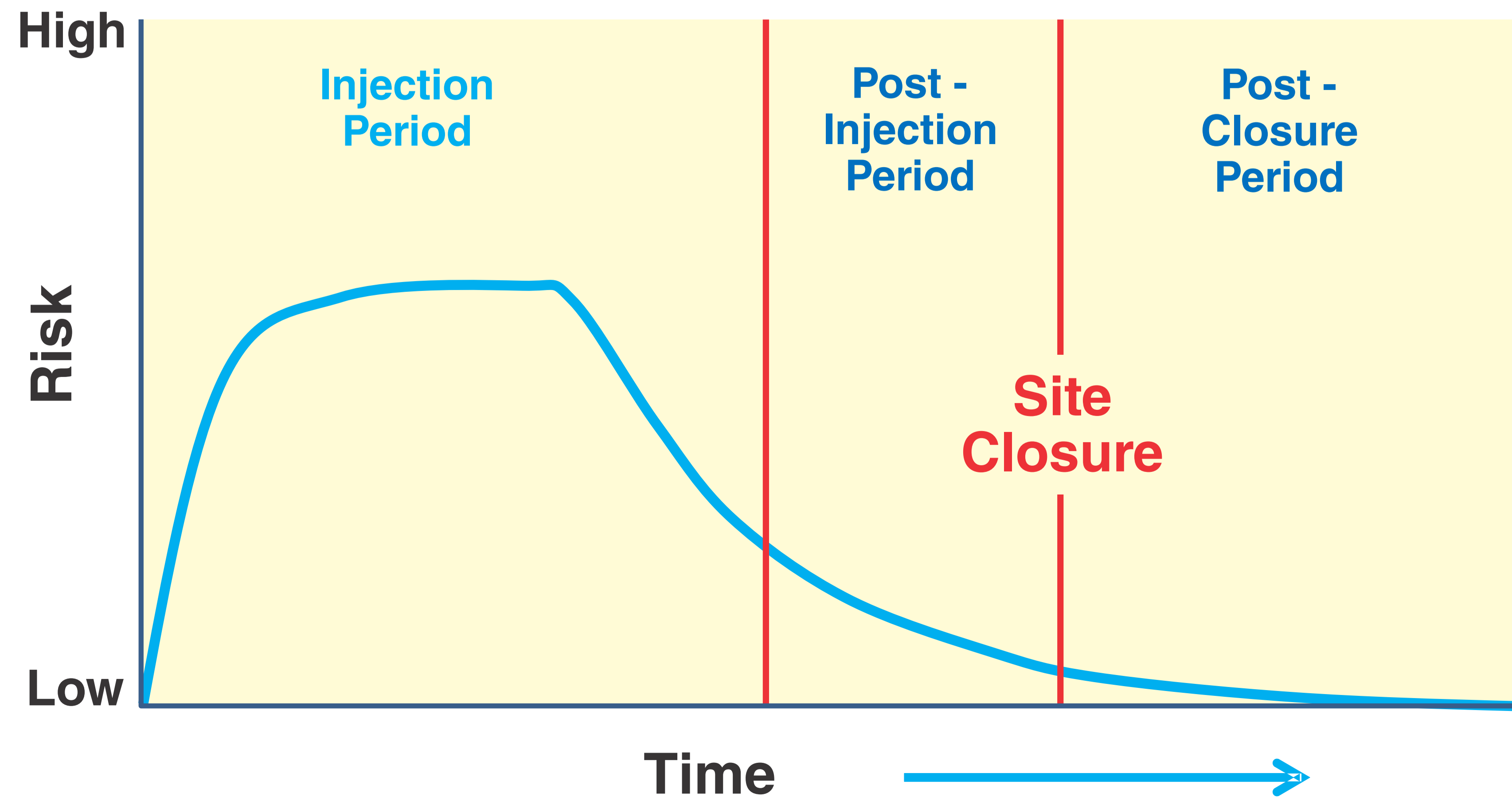
Location of Barrow Island and the Gorgon gasfield



Location of injection, reservoir surveillance and pressure management wells at the Barrow Island CO₂ storage site (source: Chevron)

PROJECT DESCRIPTION

- The reservoir carbon dioxide is separated from the raw natural gas stream as part of the routine gas processing operations
- The CO₂ gas will then be compressed in six, multi stage compressors before being transported via a 7km pipeline to three injection well drill centres
- There are nine directionally drilled injection wells into the Dupuy Formation and six pressure management wells (four water extraction wells, two water disposal wells)
- Monitoring will involve data collection from the injection and pressure management wells; three dedicated surveillance wells, repeat seismic, passive seismic, soil gas and groundwater chemistry measurements
- Monitoring data will be compared with predetermined signposts to assess project performance
- Site closure will occur following an appropriate post injection monitoring period (at least 15 years)



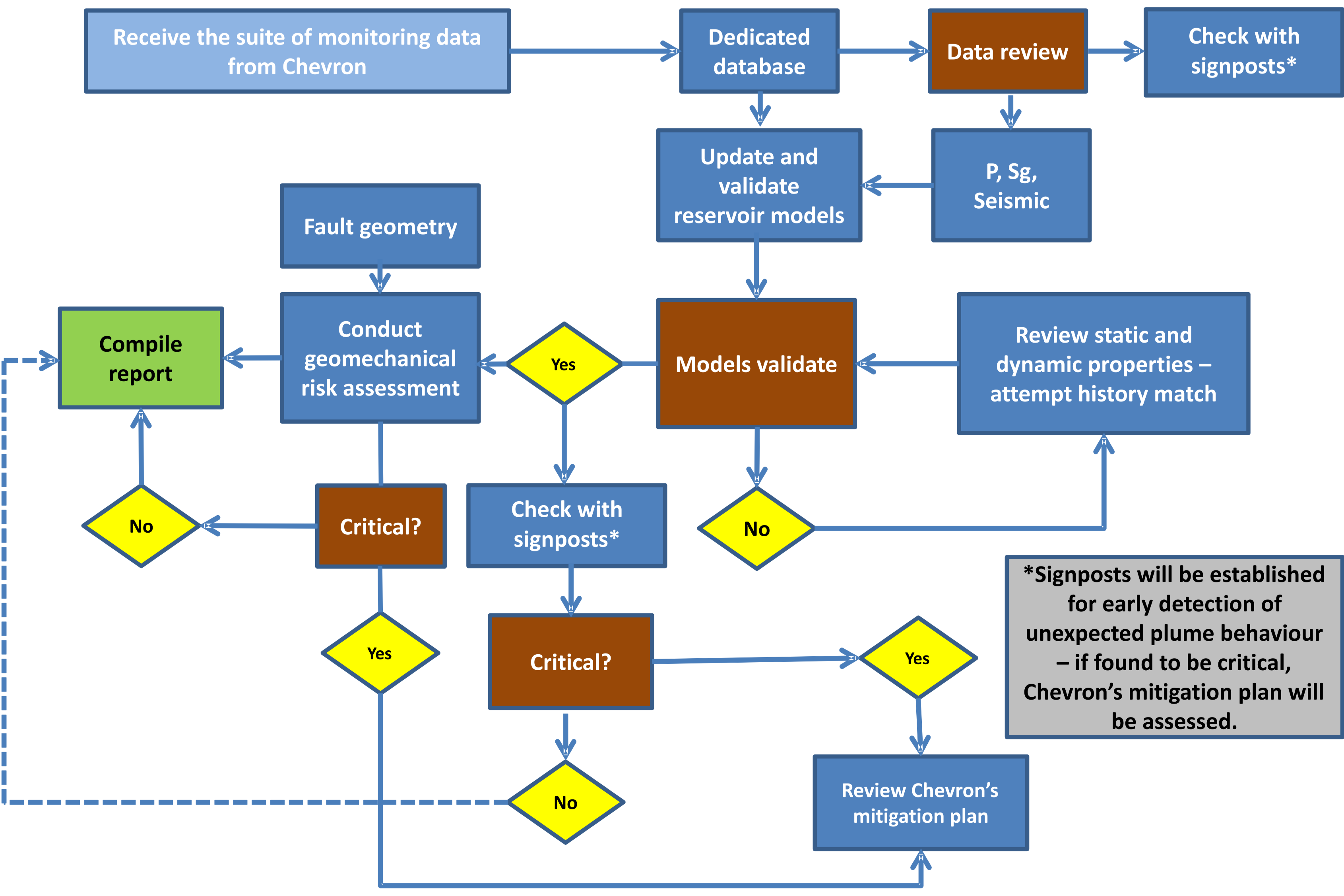
Conceptual risk profile of a CO₂ storage project

PROJECT DUE-DILIGENCE (2015–16)

- During 2015–16, DMP conducted its first in-house due-diligence of the Gorgon CO₂ Project
- The University of Illinois has been contracted to carry out an independent peer review of DMP's due-diligence; outcomes of the due diligence will be known in June 2017
- DMP continued to increase its capability to conduct ongoing due-diligence of this world class project

FUTURE WORK

- In 2016–17, DMP will continue to update the in-house Dupuy Formation CO₂ reservoir models
- A dedicated data management system will be developed to store and visualise data, as well as to facilitate data sharing between the State and Commonwealth Governments
- Once the Gorgon CO₂ Injection Project enters the operational (injection) phase, DMP will carry out a continual review of monitoring data and validation of models



Workflow of activities during the operational period