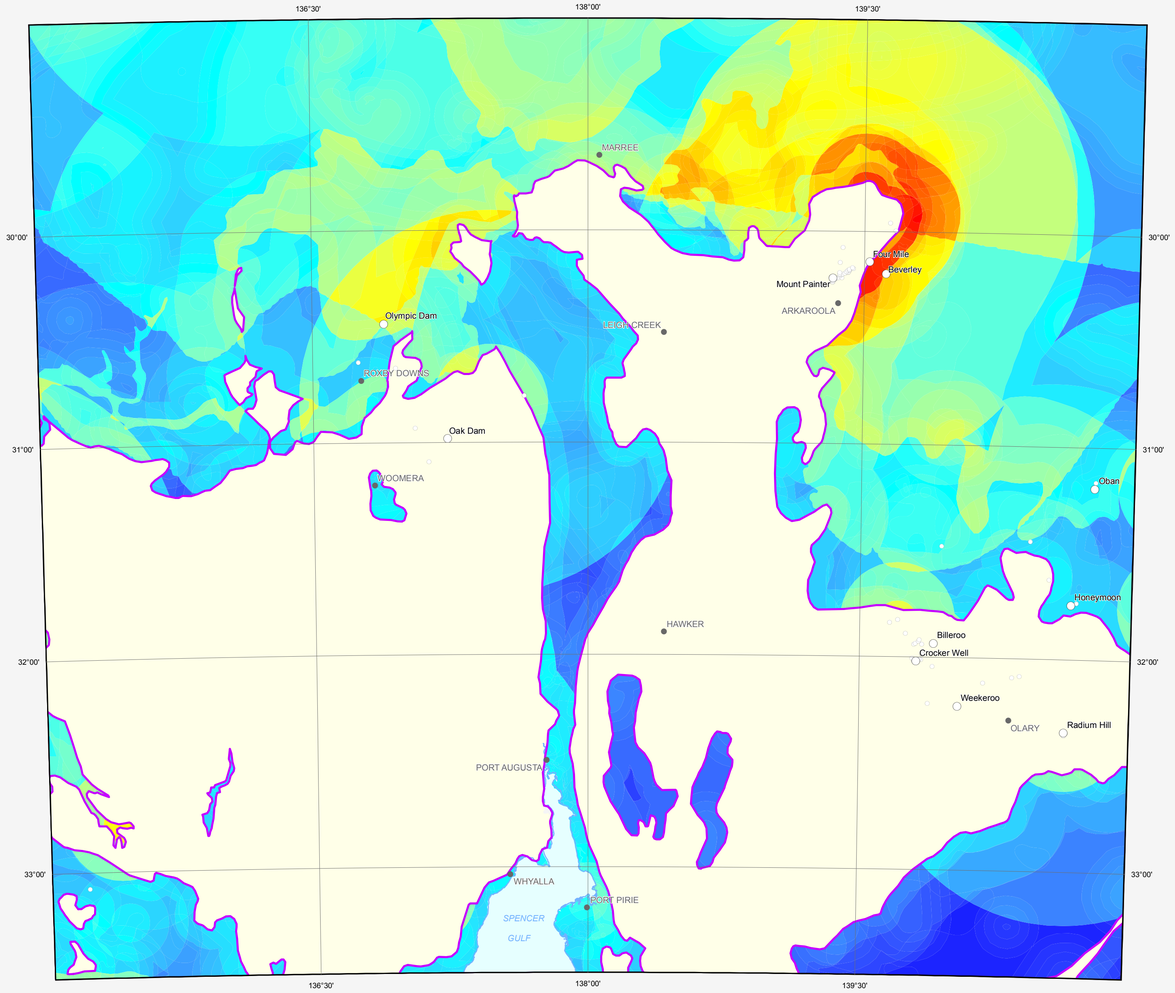
SOUTH AUSTRALIA ENERGY SYSTEMS ASSESSMENT

SANDSTONE HOSTED URANIUM PROSPECTIVITY



Sandstone hosted Uranium Prospectivity

Low — High

Potential for uranium deposits based on summation and normalisation of mineral system parameters shown in inserts. See text for more information and references.

0 — 100 — 200 km

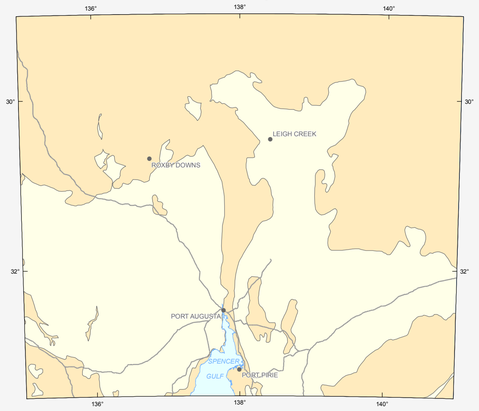
Transverse Mercator Projection; Central Meridian 138° E; Geocentric Datum of Australia (GDA94)

Uranium deposit

Uranium occurrence

Mesozoic and Cenozoic basin boundary

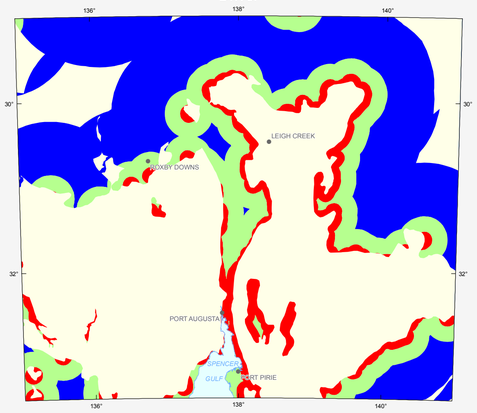
Reliability



Data coverage displaying geographical data completeness. Note: Data coverage is separate to data confidence.

0 — 200 km — *Highway* — *Data used in system components* — *Data used in final assessment*

Driver



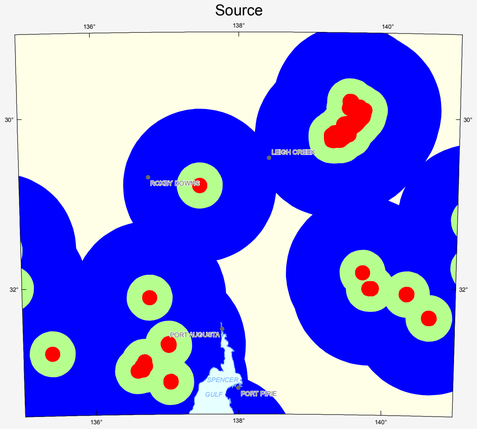
Prospectivity based on energy gradients that will mobilise sufficient quantities of ore-bearing fluids to the site of deposition.

0 — 200 km

Driver Prospectivity

Low — High

Source



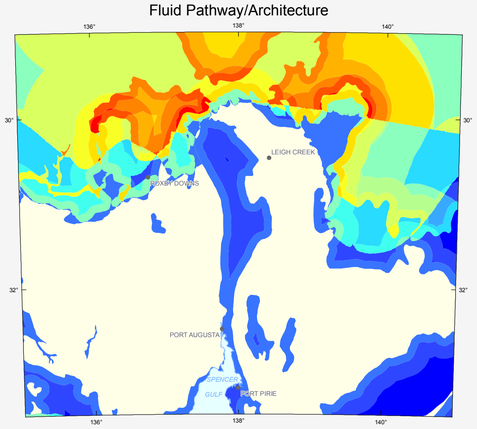
Prospectivity based on sources of uranium, mineralising fluids and other components needed for ore transport.

0 — 200 km

Source Prospectivity

Low — High

Fluid Pathway/Architecture



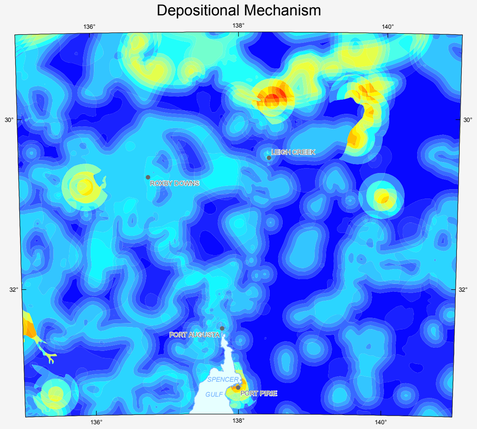
Prospectivity based on favourable lithologies and structures that will enable movement of fluids to the site of ore deposition.

0 — 200 km

Fluid Pathway/Architecture Prospectivity

Low — High

Depositional Mechanism



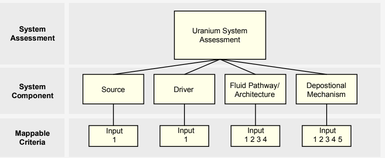
Prospectivity based on favourable lithologies and structures to focus fluids and deposit uranium and other metals via physical and/or chemical processes.

0 — 200 km

Depositional Mechanism Prospectivity

Low — High

Prospectivity Assessment Workflow



Energy Assessment Prospectivity
The uranium system assessment is a function of four key mineral system components a) source, b) driver, c) fluid pathway/architecture, and (d) depositional mechanism. Each mineral system component is comprised of a varying number of inputs specific to the targeted mineral system assessment. This assessment is confined to Mesozoic and Cenozoic basins.

Source
Potential for sources of uranium and other metals, mineralising fluids and other components needed for ore transport. The source weighting is calculated by combining the constituent mappable criteria listed below and normalised to the total number of mappable criteria. The input data are:

1) Presence of uranium-rich rocks as determined from radiometric data

Driver
Prospectivity based on energy gradients that will mobilise sufficient quantities of ore-bearing fluids to the site of deposition. The driver weighting is calculated by combining the constituent mappable criteria listed below and normalised to the total number of mappable criteria. The input data are:

1) Topographic slope in basement as derived from 9 second DEM and buffered into Cenozoic and Mesozoic basins

Fluid Pathway/Architecture
Potential for favourable lithologies and structures that will enable movement of fluids to the site of ore deposition. The fluid pathway/architecture weighting is calculated by combining the constituent mappable criteria listed below and normalised to the total number of mappable criteria. The input data are:

1) Distribution of Cenozoic basins
2) Distribution of Mesozoic basins
3) Distribution of the Algebuckina Formation
4) Distribution of the Cadna-Owie Formation

Depositional Mechanism
Potential for favourable lithologies and structures to focus fluids and deposit uranium and other metals via physical and/or chemical processes. The depositional mechanism weighting is calculated by combining the constituent mappable criteria listed below and normalised to the total number of mappable criteria. The input data are:

1) Distribution of redox gradients in groundwater
2) Distribution of pH gradients in groundwater
3) Location of EC anomalies in groundwater
4) Presence of Uranium rich sediments derived from radiometric imagery
5) Distribution of coal - and petroleum-bearing basins

Reliability Index
Data coverage displaying geographical data completeness. Note: Data coverage is separate to data confidence.

MAP LOCALITY

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SANDSTONE HOSTED URANIUM PROSPECTIVITY

AUGUST 2011

PLATE 3.2