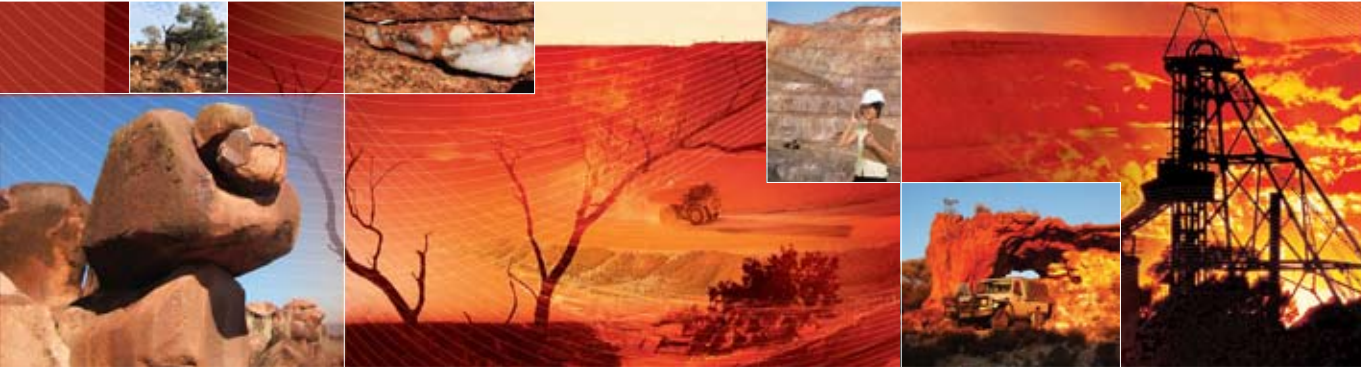




Government of **Western Australia**
Department of **Mines and Petroleum**



ROYALTIES
FOR REGIONS



Exploration Incentive Scheme

Encouraging exploration in Western Australia for the long-term sustainability of the State's resources sector

Developing a sustainable resources future

Exploration Incentive Scheme

The Exploration Incentive Scheme (EIS) is a State Government initiative that aims to encourage exploration in Western Australia for the long-term sustainability of the State's resources sector.

The EIS will help reinforce the image of Western Australia as an attractive destination for mineral and energy exploration investment.

This \$80 million initiative, funded by Royalties for Regions over five years, will stimulate increased private sector resource exploration and ultimately lead to new mineral and energy discoveries. Most of the activities in the EIS are focused in under-explored greenfield regions.

New mineral and energy discoveries in these areas significantly increase knowledge of the State's geology and resources, and will help increase employment opportunities.

One of the key ways to help increase resource exploration expenditure by companies is the provision by government of new, high quality geoscience information in greenfield areas.

The EIS aims to gather an increased amount of geoscientific information in Western Australia, particularly at depth.

The EIS is made up of the following six programs:

- Exploration and Environmental Coordination (\$1.5 million)
- Innovative Drilling including the Co-funded Drilling Program (\$26.9 million)
- Geophysical and Geochemical Surveys (\$32.5 million)
- 3D Geological Mapping (\$13.8 million)
- Promoting Strategic Research with Industry (\$2.3 million)
- Sustainable Working Relations with Indigenous Communities (\$3 million)

It will be managed by the Department of Mines and Petroleum (DMP), the State's lead agency dedicated to servicing the future development of Western Australia's resources industry.

DMP has worked alongside the Department of Local Government and Regional Development in developing and approving the initiative's six programs.

Program One

Exploration and Environmental Coordination

Exploration and Environmental Coordination in DMP

The State Government will dedicate \$1.5 million from the EIS to improving the online mineral and petroleum tenement application processes and making them more transparent.

Enhancements will be made to web-based tenement management systems to help facilitate online applications. These systems will also facilitate approvals tracking.

The enhancements will:

- Integrate the environmental application and approval process into the minerals and petroleum tenement management systems.
- Provide comprehensive tracking of tenement applications through the various approval stages, with online access to metrics by stakeholders.
- Facilitate online lodgement and processing of tenement applications and associated reporting obligations.



Program Two Innovative Drilling

Government Co-funded Exploration Drilling

The co-funded government-industry drilling program will support innovative drilling by companies in greenfield areas.

It is designed to stimulate geoscience-based, targeted exploration and contribute to the economic development of greenfield areas in Western Australia, where additional drilling will potentially lead to new discoveries.

In 2009-10, the co-funded drilling program will preferentially fund high quality, technical and economically based projects that promote new exploration concepts and technologies. Proposals from applicants will be assessed by a panel on the basis of geoscientific and exploration targeting merit.

The State Government will dedicate nearly \$21 million of the Exploration Incentive Scheme to the co-funded drilling program and efforts to attract additional exploration in greenfields areas.



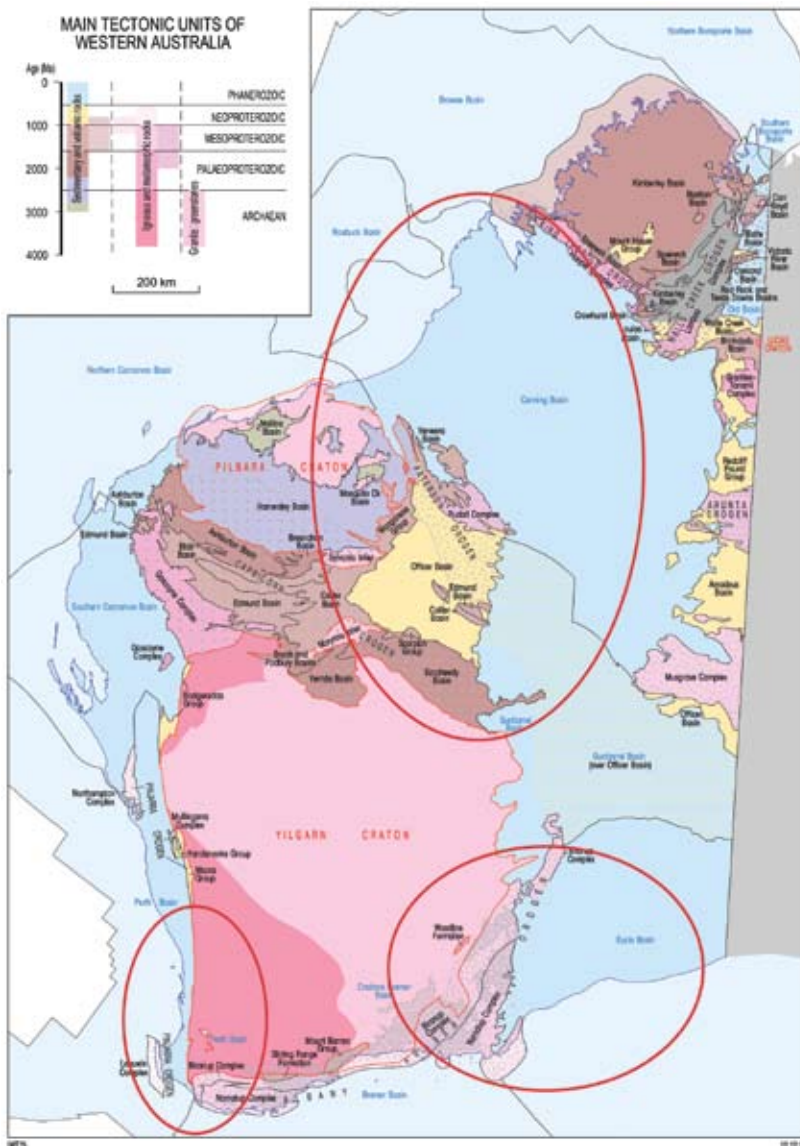
Stratigraphic Drilling

Stratigraphic drilling will be undertaken by the Geological Survey of Western Australia (GSWA).

Stratigraphic drilling validates seismic interpretation and provides excellent pre-competitive geoscience information for use by both petroleum and mineral explorers.

This project will complement other mineral and petroleum drilling programs, and will fund coring of holes in the Canning, Eucla and southern Perth Basins. Drilling in the Eucla will be aimed at identifying the nature of the crystalline basement to the basin.

It will help to provide data to aid interpretation of formations where there is little current information, as well as help to identify potential for hydrocarbons and geothermal energy. In addition, drilling in the southern Perth Basin will test sedimentary units that could be used for carbon geosequestration.



Program Three

Geophysical and Geochemical Surveys

Airborne Magnetic and Radiometric Surveys

Prior to implementing the EIS, only 70 per cent of the State was covered by medium resolution airborne magnetic and radiometric surveys.

New airborne magnetic and radiometric surveys undertaken under the EIS will complete medium resolution airborne magnetics and radiometrics coverage of the State.

Deep Crustal Seismic Traverses

This activity, adding to a network of deep seismic traverses, will improve the understanding of the crustal structure of Western Australia.

Integrated geophysical and geological transects across the West Australian, North Australian and South Australian cratons and their margins in Western Australia, as well as the intervening Neoproterozoic and Phanerozoic Basins, will provide a key to the geological evolution of the Australian lithosphere

over the Earth's past 4 billion years. They will also provide an understanding of the crustal infrastructure hosting large mineral systems.

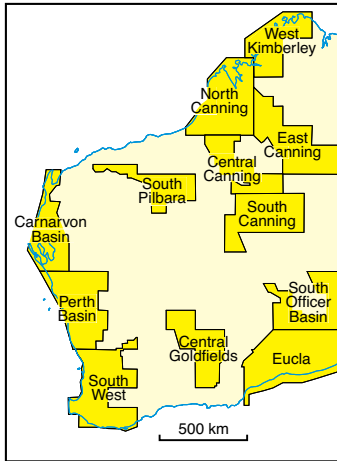
Regional Gravity and Geochemical Surveys

The objective of implementing regional gravity surveys is to provide 3D geological information to complement GSWA's geological mapping programs in selected greenfield exploration areas.

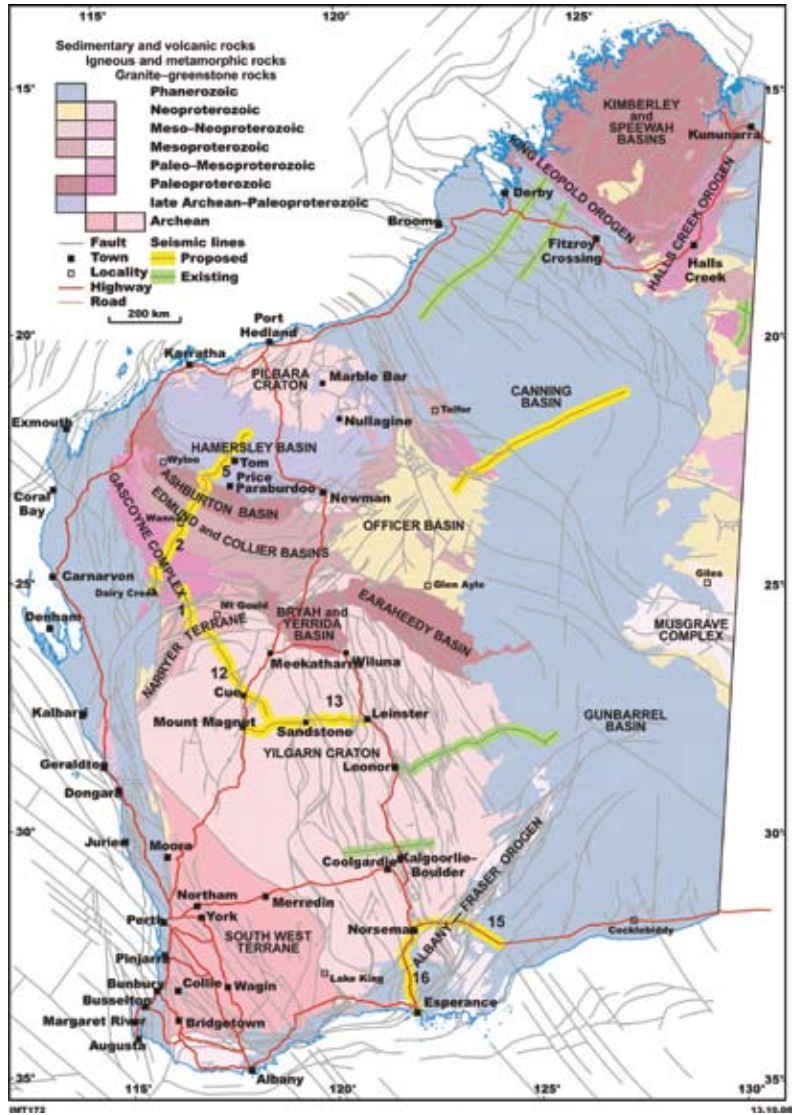
Regional geochemical surveys will provide multi-element geochemical coverage of under-explored parts of the Yilgarn Craton to stimulate mineral exploration.

Data collected from the surveys will then be incorporated into GSWA's web-based geochemical database.

Regional ground gravity surveys and regional geochemical surveys will be completed simultaneously when they cover the same geographic area.



**Planned airborne
magnetics and
radiometrics surveys**



Planned deep crustal seismic traverses

Program Four

3D Geological Mapping

Through the EIS, the State Government will dedicate \$13.8 million to providing an integrated online system that allows customers to create customised geoscience reports and maps.

WA Geology Online

The WA Geology Online project will improve geoscience information services to DMP clients by developing an integrated system that allows all geoscience databases to be accessed seamlessly online.

In addition to better integrating GSWA's online information, the WA Geology Online project will develop and facilitate new databases and services linked to current and future map layers.

Through this activity, GSWA clients will be able to generate customised reports and maps for their area of interest.

Modernise Petroleum Information Delivery System

Through this initiative, an upgrade to DMP's Western Australian Petroleum Information Management System (WAPIMS) will be completed.

The upgrade will help to provide a more streamlined information submission and release system for the petroleum industry. It will also ensure that the WAPIMS system is interoperable with other departmental computer systems.

3D Database and Modelling Rocks Beneath the Surface

This project will build and maintain interactive 3D geological models, from the prospect scale to the crustal scale, for selected greenfield exploration areas.

3D geological models can be used to test various structural models and interpretations, and to visualise the Earth at depth. They can be used as predictive models to characterise areas of known mineralisation, as well as identify similar patterns to generate new exploration targets.

Once developed, the 3D models will be available to view and download from the DMP website.

Geochemical Information Delivery

The existing GSWA geochemistry database will be upgraded so that it can accept the uploading of digital geochemistry data submitted by companies, as well as the existing GSWA geochemistry data.



This newly designed web-based facility will allow the query and extraction of both open file company and GSWA geochemistry.

Mineral Drillhole Information Database

The drillhole information database project will improve online information services to DMP customers by developing an integrated system that allows all drillhole data, and related geochemistry, to be queried and integrated with other GSWA online data.

These improvements will enable open file company mineral exploration drillhole locations and down-hole geochemistry to be accessible via the DMP website.

Geological Mapping and Interpretation

The project will involve undertaking regional geoscience mapping and the interpretation, from geophysical data, of bedrock under thin soil and sedimentary basin cover.

The focus will be on remote greenfield areas including the basement to the Eucla Basin, the Central Desert, the Kimberley and the Capricorn.

Undertaking this project will also require an expanded program of isotopic dating to provide information on the timing of rock units and specific geological events.

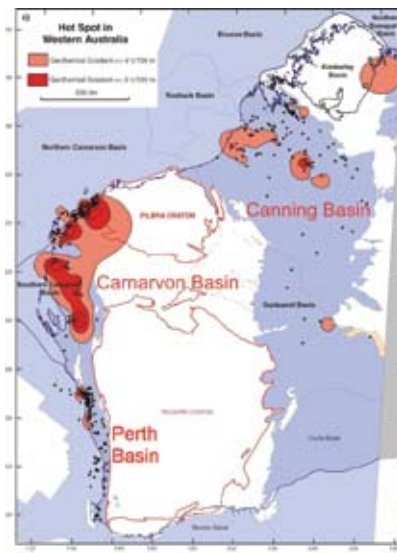
Geothermal Potential, Depleted Reservoir, Tight Gas, Alternative Coal Technologies

Alternative energy sources include geothermal, tight gas and enhanced petroleum recovery from depleted reservoirs.

The national commitment to “clean” energy also provides a requirement to look at coal technologies to reduce the State’s carbon dioxide footprint.

New geoscience information relating to the use of geosequestration to store carbon dioxide emissions is another key aspect of this project.

The geothermal project will review current data for geothermal energy, conduct desktop studies on prospective basins and provide new field data in areas with little coverage.



Program Five

Promoting Strategic Research with Industry

One of the key objectives of the EIS will be helping to promote strategic research with industry. As part of achieving this goal, \$900,000 will be used to develop the Western Australian Regional Researcher Initiative.

The new initiative is aimed at the rapid transfer of new geoscience concepts, skills and technologies into the Western Australian minerals exploration industry.

It will involve the placement of three embedded researchers into company exploration teams focussed on greenfield areas.

The researchers will be employed by CSIRO.

Funding to support these employees will be split evenly between the EIS and the participating exploration company sponsors.

Overall, the Western Australian Regional Researcher Initiative will help promote the flow of information between research teams and industry sponsors, and create a two-way training process for industry professionals and researchers.

Increased funding of \$1.4 million will also be provided to the Minerals and Energy Research Institute of Western Australia to support the mineral and petroleum-related research the organisation funds throughout the State in association with industry.



Program Six

Sustainable Working Relations with Indigenous Communities

The State Government will dedicate \$3 million from the EIS to providing initiatives designed to assist indigenous and environmental approvals for prospecting, geoscience mapping, and mining and petroleum exploration and production.

The strategy and work program will target under-explored onshore areas of the State that have access corridors to major interior basins.

In addition, a model indigenous land use agreement will be developed, which can be utilised where Native Title has been determined, and where it remains as a claim.

Key objectives of this program are to address indigenous heritage, the Future Act process under the *Native Title Act 1993*, and access to the land where exclusive Native Title exists.



For further information on the
Exploration Incentive Scheme
in Western Australia please visit
www.dmp.wa.gov.au/EIS

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