With the discovery of rich oil fields around the Falkland Islands there is the potential for a substantial offshore hydrocarbon industry to develop. The Falkland Islands is a frontier area in many respects, especially in terms of our knowledge of the marine environment.

There is an enormous desire within the Falkland Islands Government, the local community and the petroleum licensees working in this region, to develop an industry that is not only environmentally responsible, but a world leader in this regard. In order to achieve this ambition, the Gap Project was conceived by the Falkland Islands Offshore Hydrocarbon Environmental Forum.

The Gap Project will collate, create and analyse the data needed to underpin strategies that will inform and help monitor potential impacts of the hydrocarbon industry on the marine environment. In the early stages the project is focusing on the highest priority areas that have been identified as essential for the current environmental management, but for which there are significant gaps in our understanding.

Priority research that will be addressed by the project has been organised into two core components. The first covers marine higher predators and is being managed by Dr Megan Tierney. This will focus on penguins and seals, which are considered to be amongst the most susceptible of these groups to oil spill contamination. The second component of the project, managed by Dr David Blockley, is looking at the environment of the deep sea floor and the local oceanography (i.e. currents and circulation patterns). In addition it will address potential interaction of local pelagic fisheries with the hydrocarbon industry.

Megan has a PhD in Antarctic Marine Ecology and spent 10 years working with the Australian Antarctic Division developing protocols for detecting and minimising impacts of environmental change and resource exploitation on Southern Ocean ecosystems.

In 2010 she joined the World Conservation Monitoring Centre, the biodiversity assessment and policy support arm of the United Nations Environment Programme. Megan’s work included developing indicators used to assess global biodiversity loss, overseeing the implementation of national ecosystem assessments, and developing regional capacity building programmes.

She has also spent a number of years leading ship-based adventure-tourism expeditions to both Polar Regions, around the UK Isles, Norway, Greenland and eastern Canada.

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David worked for ten years as a marine ecological researcher within universities in Australia. David’s PhD and subsequent area of research was on the impacts of human built structures in coastal areas, particularly urban development around coastal cities. He worked with government agencies, engineers and construction companies in developing methods to build structures that enhance the biodiversity they support.

After this, David worked as a consultant monitoring environmental impacts from activities associated with the offshore hydrocarbon industry and port development on marine ecosystems in Western Australia.

David has always had an interest in the interaction between the human activity and the marine environment and methods by which impacts can be mitigated or reduced.

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Upcoming Activities
- Penguin tracking
- Taxonomic exploration
- Engagement with industry and research experts

For more information, visit the project website
http://www.south-atlantic-research.org/research/current-research/82-gap-project