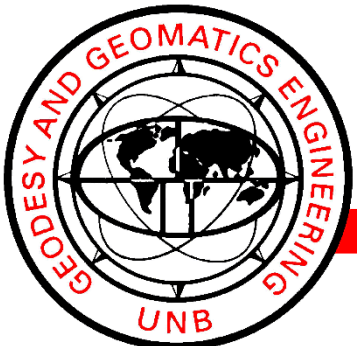


# CANADIAN MARINE CADASTRE: BUILDING ON LESSONS FROM THE US GULF OF MEXICO

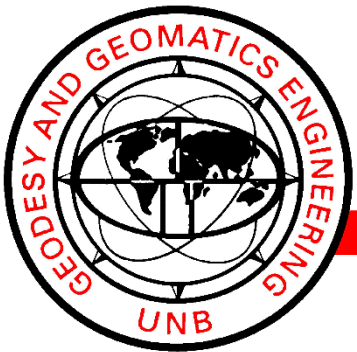
Eric Root

GGE 4700

Supervisor: Dr. Sue Nichols



# Offshore Oil and Gas



US G

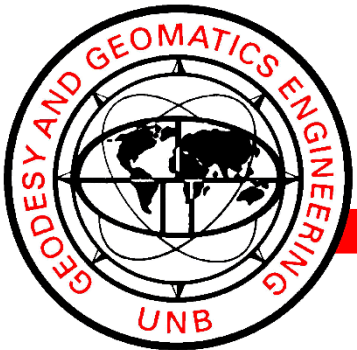
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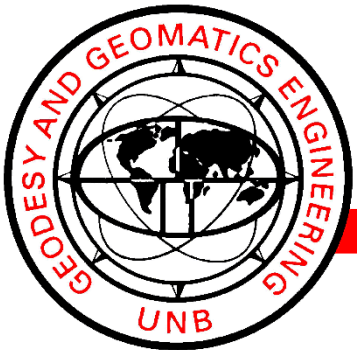
# Research Focus

- Oil and Gas Rights Regime: Offshore Areas
- Atlantic Canada and US Gulf of Mexico
- Areas of federal jurisdiction
- US Gulf of Mexico used as model for Atlantic Canada



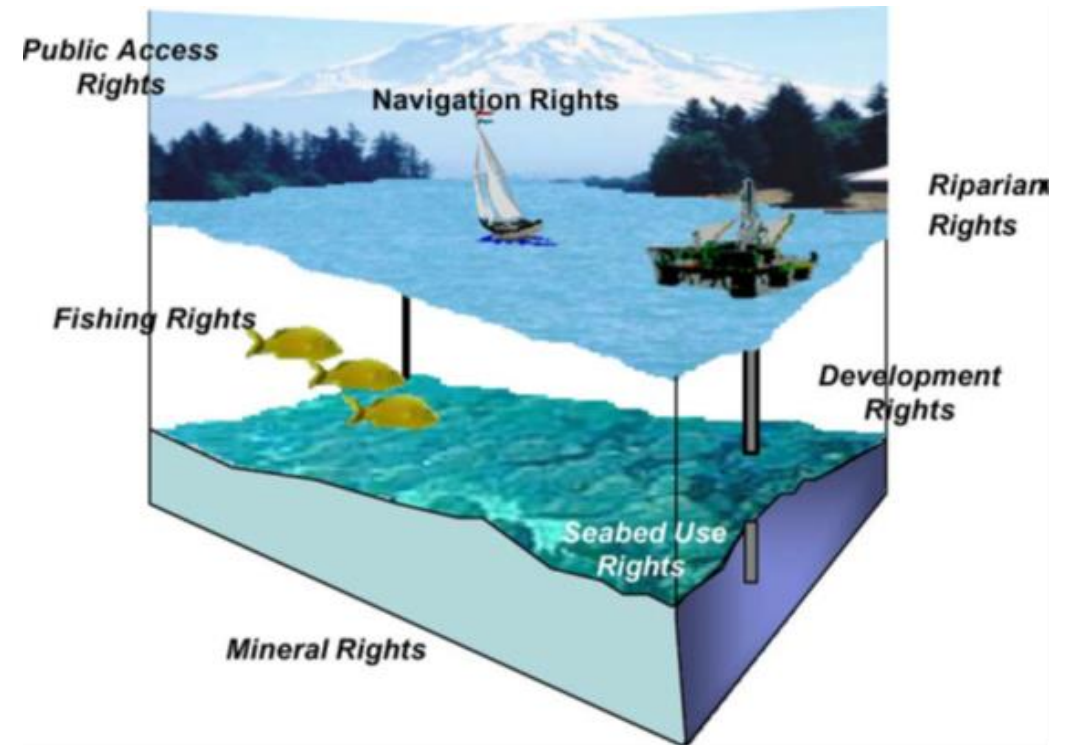
# Comparison Criteria

- Mathematical projection and datum
- International Borders
- Multipurpose Marine Cadastre Development

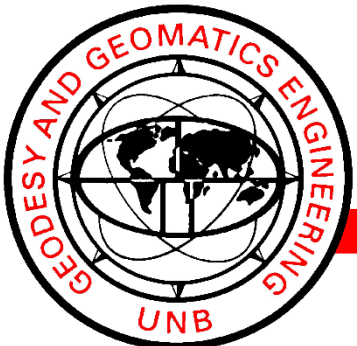


# Multipurpose Marine Cadastre

- Good Governance of Marine Spaces
- Includes all property rights
- One aspect: Oil and Gas interests



3D Perspective of marine rights - Ng'ang'a (2004)

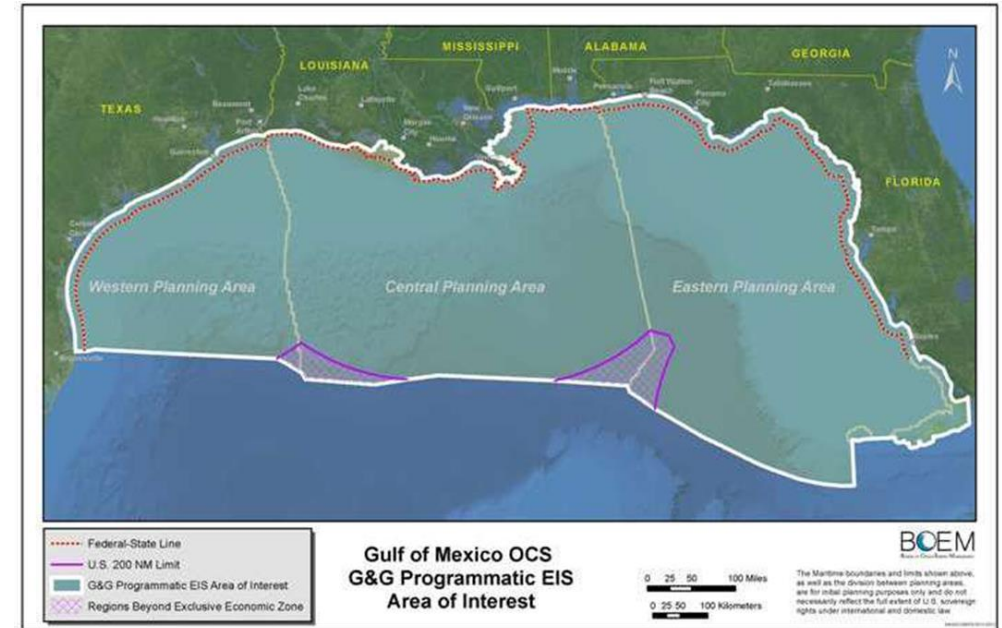


| Aspect                | US Gulf of Mexico  | Atlantic Canada  |
|-----------------------|--|------------------|
| Reference Datum       | NAD 1927   | NAD 1927         |
| Lease Delimitations   | Leasing Maps (State Plane)<br>and<br>Official Protraction Diagrams (UTM) | Grid System      |
| Units of Distance     | US survey feet   | Metres           |
| Activities Managed by | Bureau of Ocean Energy<br>Management (BOEM)                              | Petroleum Boards |

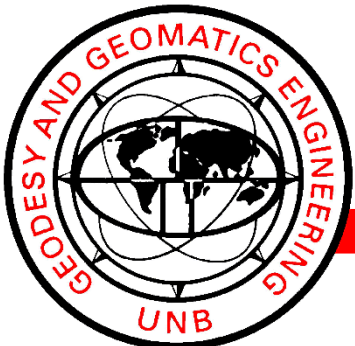


# US Gulf of Mexico Limitations

- Leases defined in planar coordinates
- Datum Update Moratorium
- Synthesis to other Cadastres

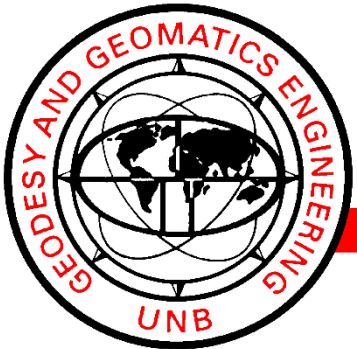


Bureau of Ocean Energy Management



# Atlantic Canada Limitations

- No current multipurpose marine cadastre initiatives
- No requirement as-built pipeline surveys
- Multiple Databases



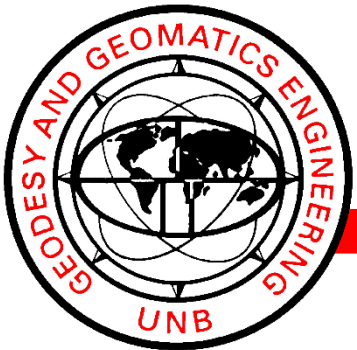
# International Borders

## US Gulf of Mexico

- Mexico

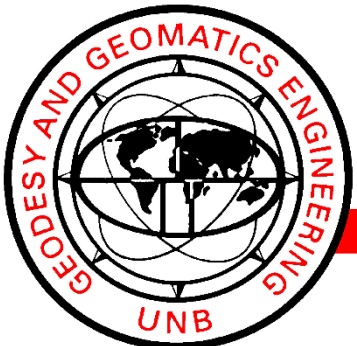
## Atlantic Canada

- France
- Denmark
- USA



# Moving Forward: Lessons from the Gulf

- System development with time
- Legal requirement for pipeline surveys
- Agreements between bordering nations
- Single Canadian database



# Acknowledgments

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