

#### Site selection criteria

Use of GIS (Geographical Information System) for site selection







#### Site selection criteria – Factor to consider

- Conflicting uses of area
- Shore line contour
- Depth profile
- Exposure to wind
- Fetch
- Currents
- Maximum wave height
- Tides
- Water temperature
- Salinity



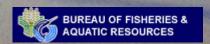




#### Site selection criteria – Factor to consider

- Dissolved oxygen concentration
- Pollution (organic and inorganic)
- Phytoplankton and zooplankton occurrence and distribution
- Potential danger of red tides, plankton blooms, biofouling
- Predators crabs, fish, birds, seals, etc.
- Flora and fauna studies (indicator organisms)
- Accessibility to the site roads, transportation, airport, port, etc.



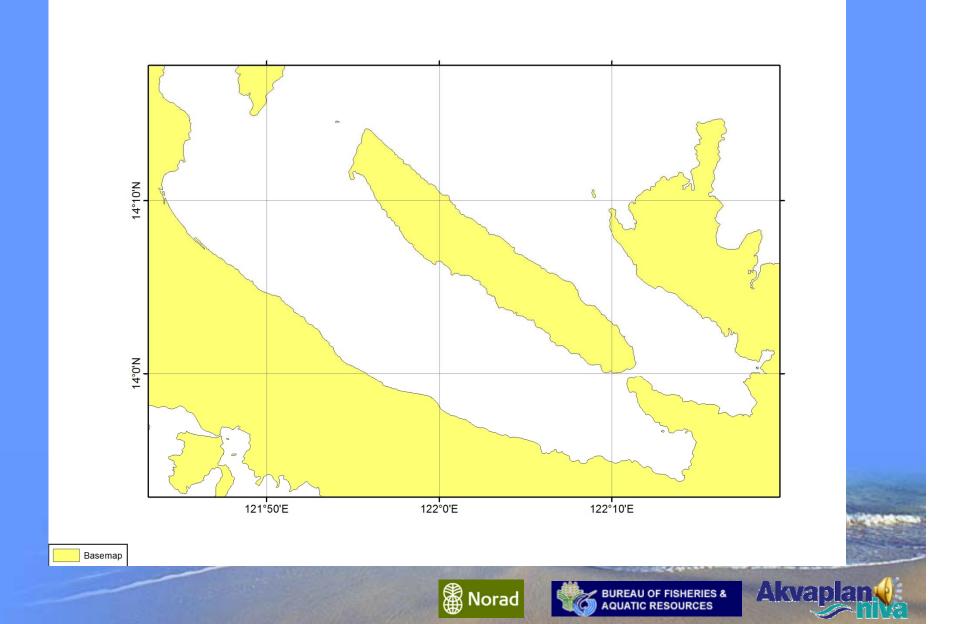


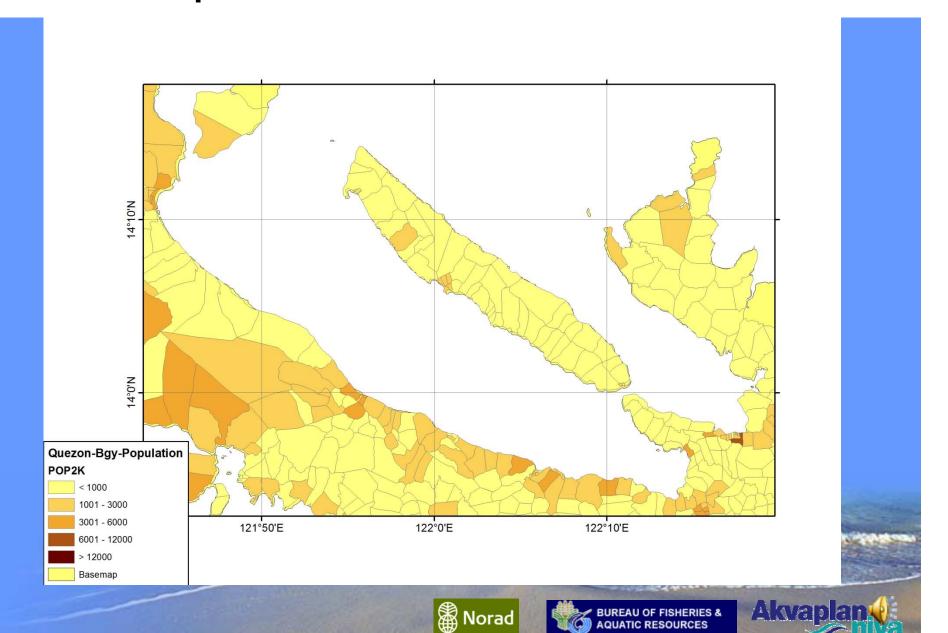


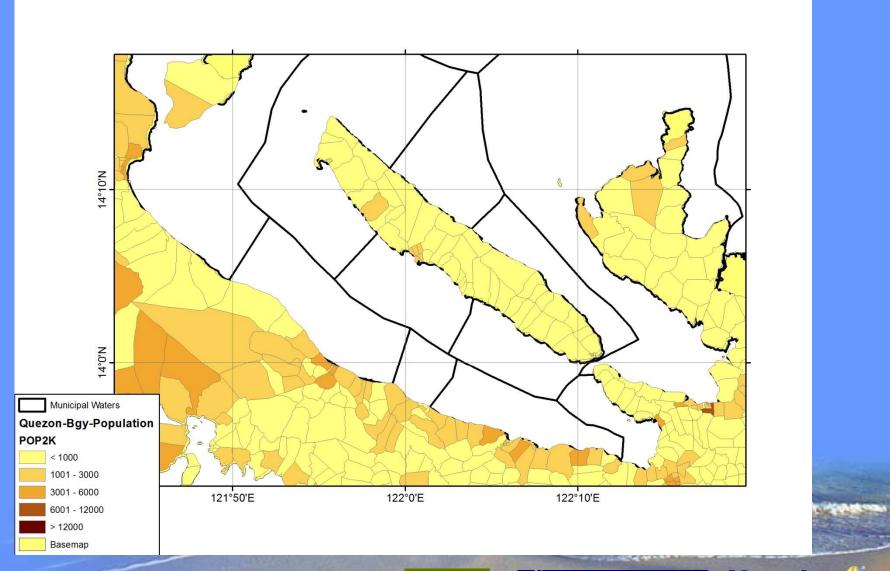
#### Site selection criteria – Factor to consider

- Infrastructure facilities, security, communication, electricity, freshwater
- Potential for expansion availability of adjacent area
- Environmental assessment, monitoring and control – bioremediation and mitigation
- Legal framework policies, regulations, licenses, permits, concessions, etc.
- Public and government acceptance of project





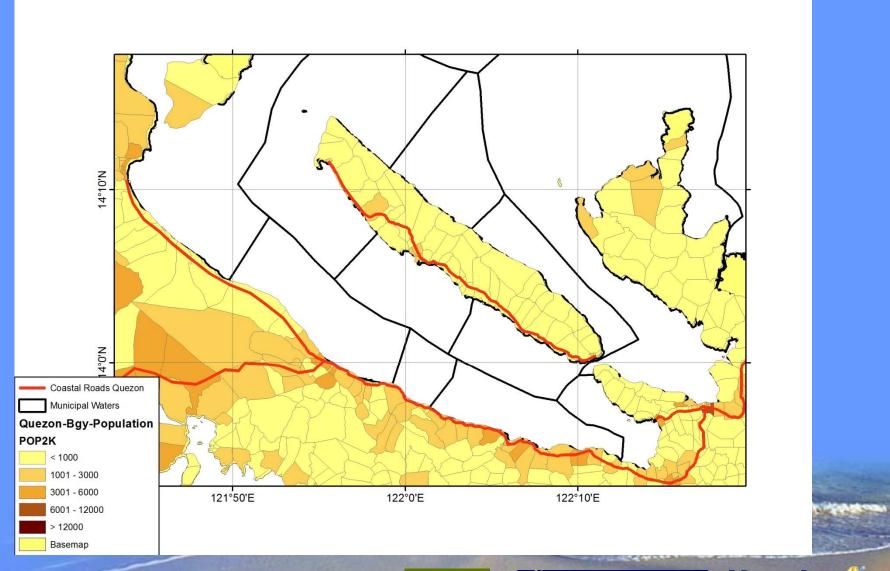








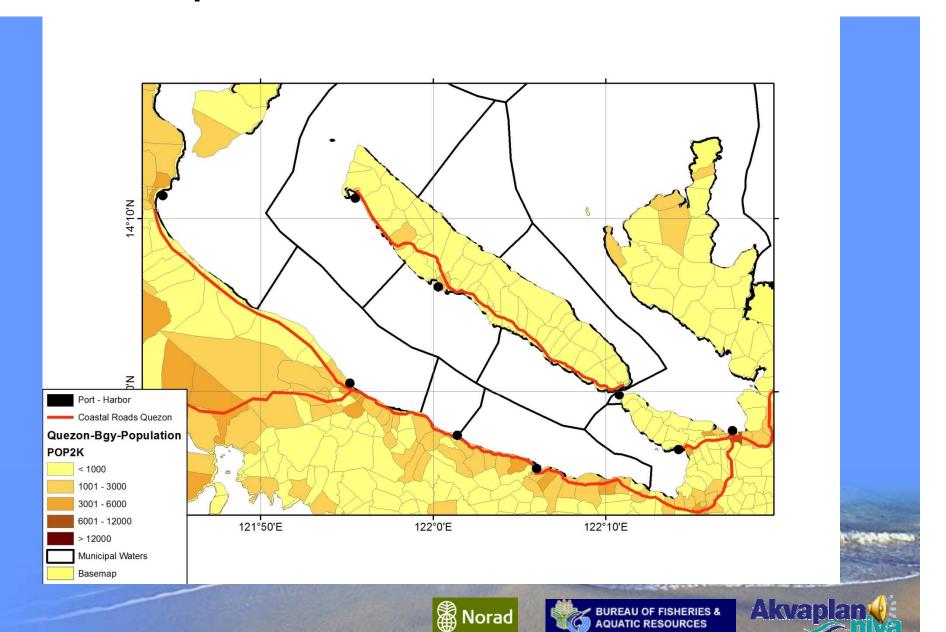


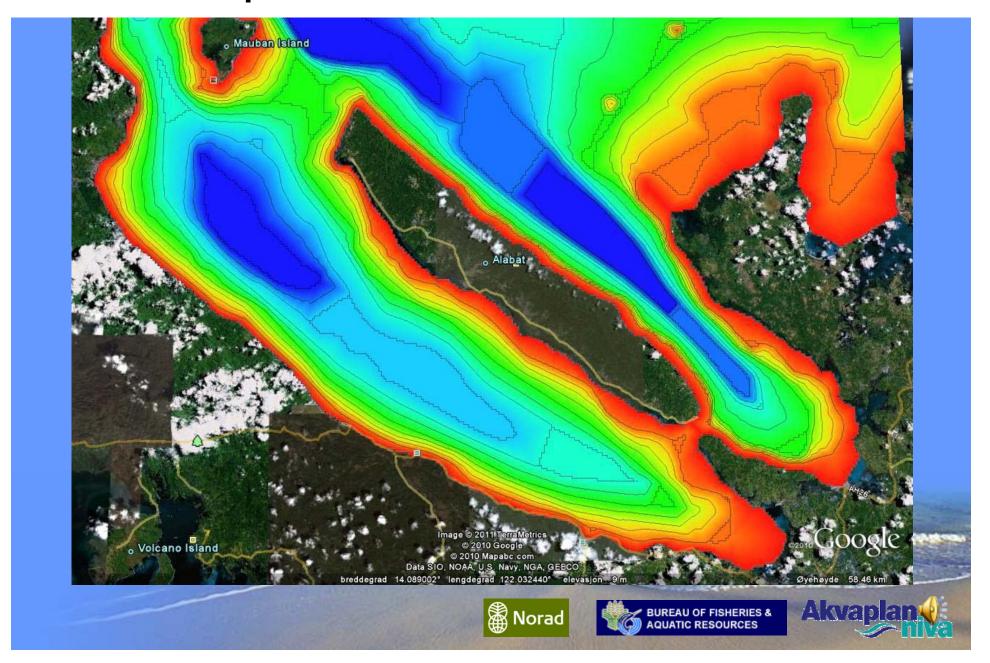




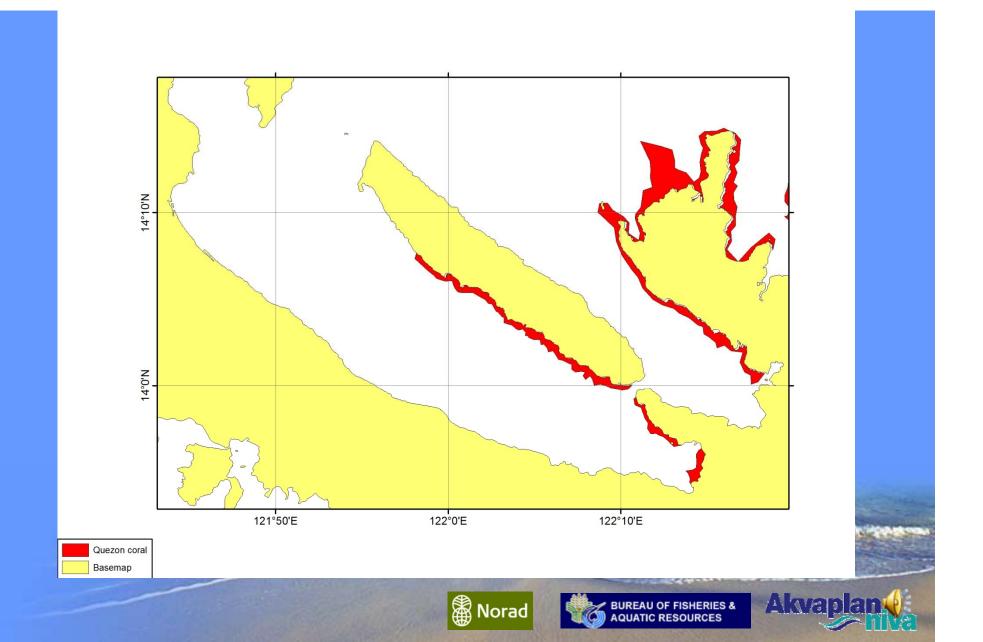




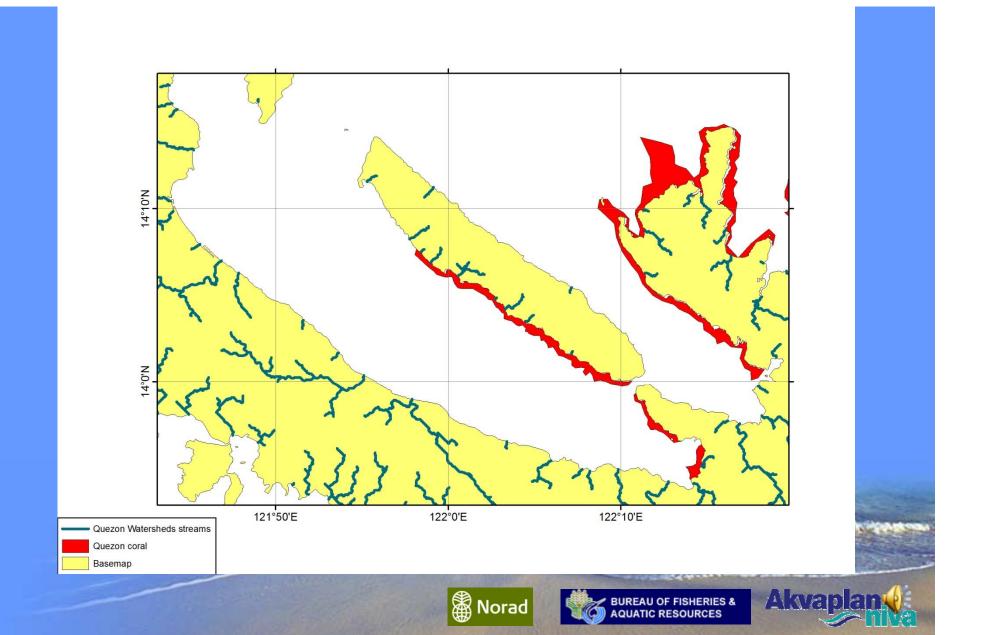




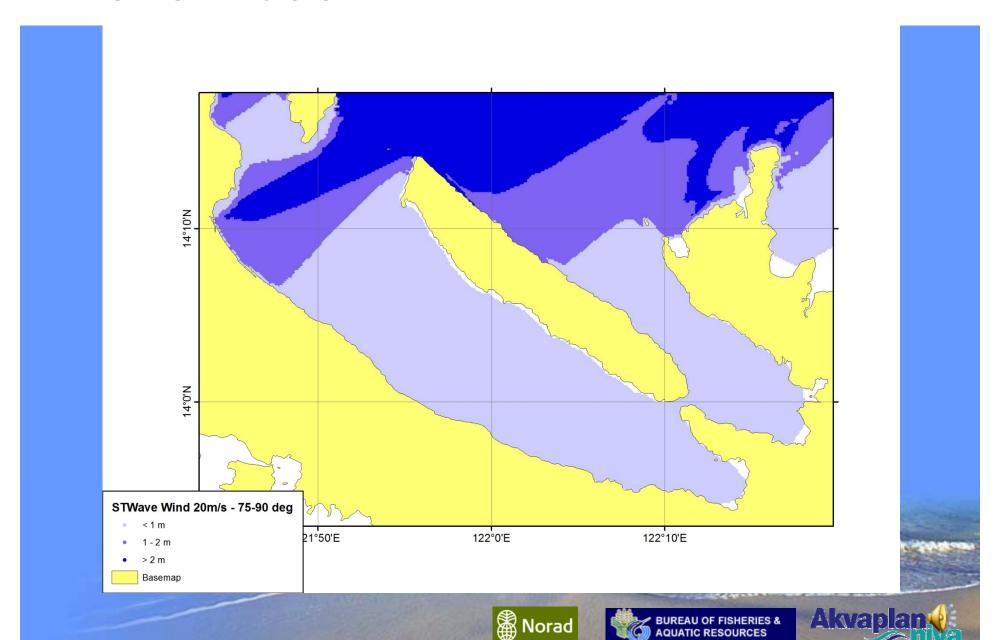
### Sensitive areas



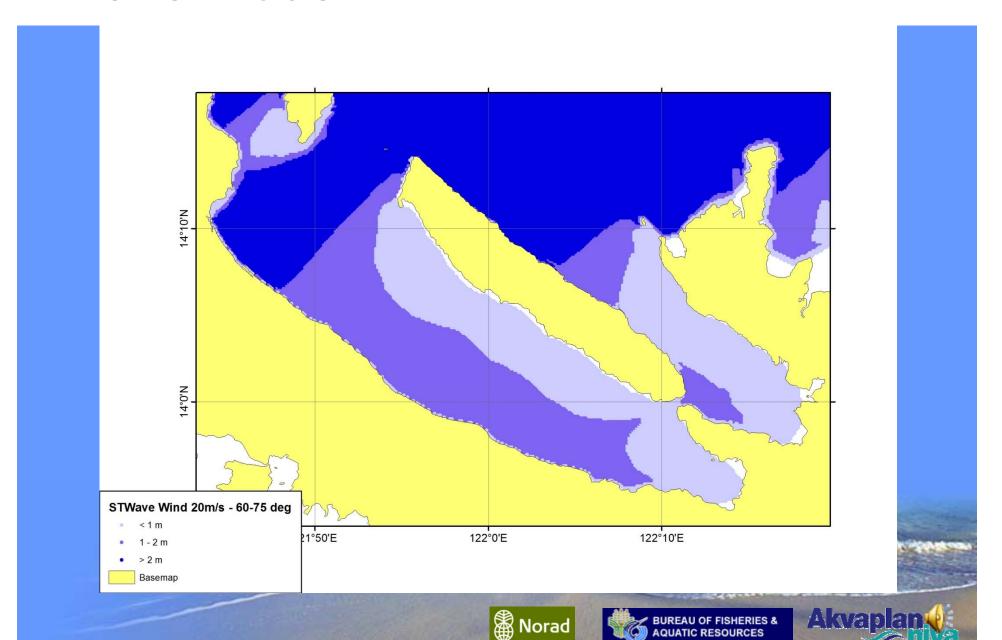
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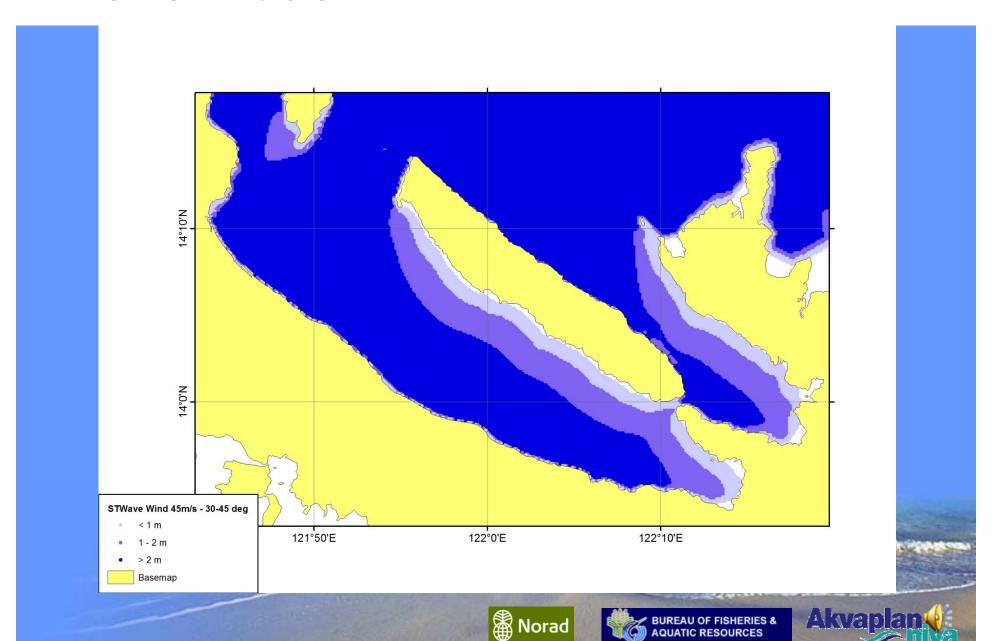
### Wave model



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## Criteria for fishfarming

- Suitable depth
  - 15 to 50 m
- Infrastructure
  - Road preferable less then 1 km away

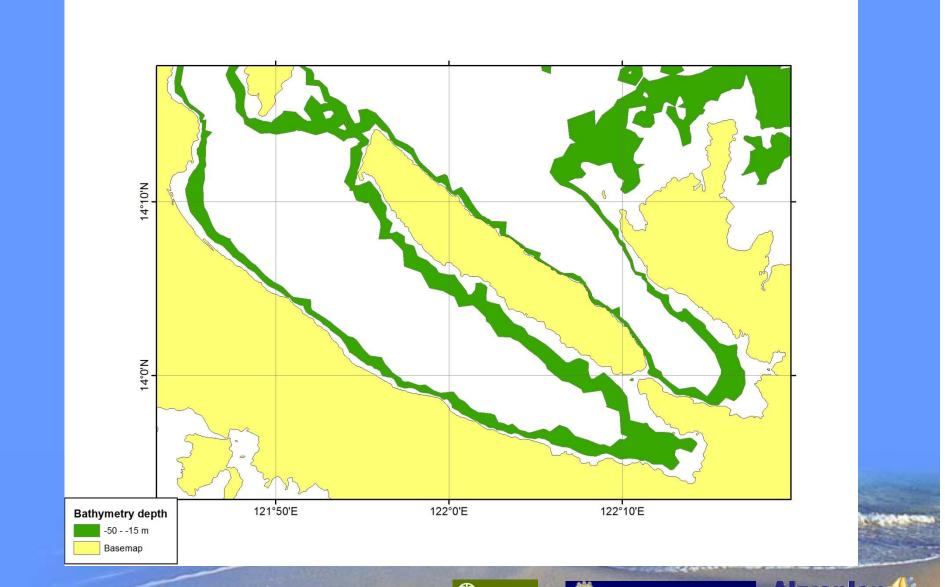
#### **Excluding factors**

- Wave
  - More then 1 m height
- Rivers
  - Large river 3 km, other river 1,5 km
- Sensitive areas
  - Coral reef 300 m away







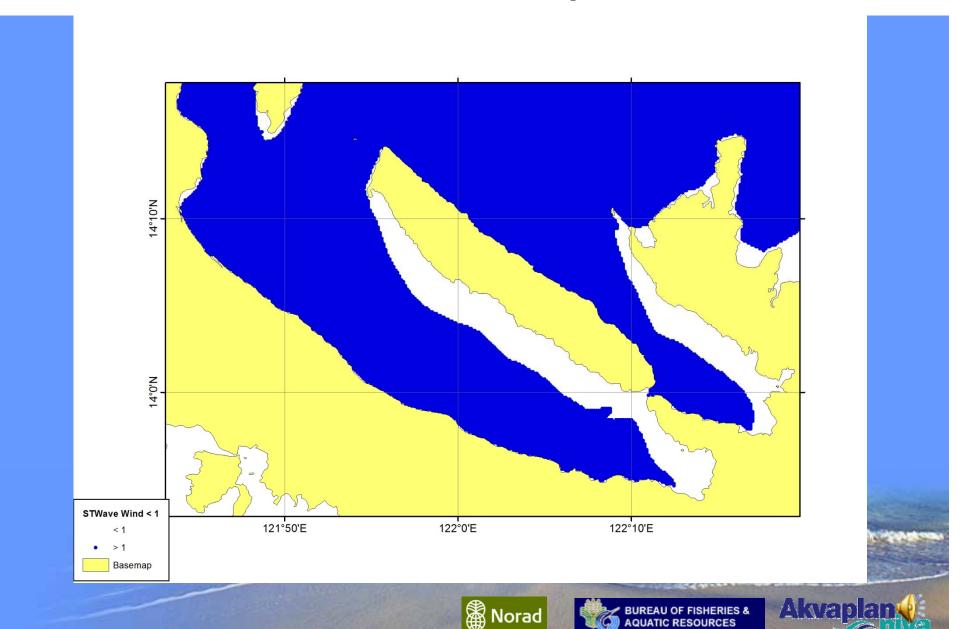


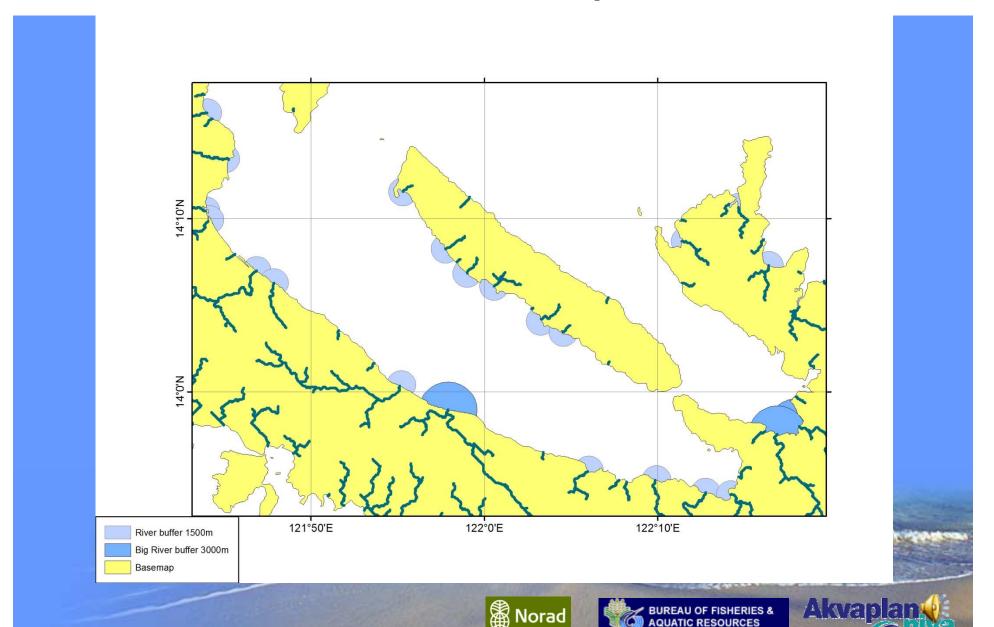


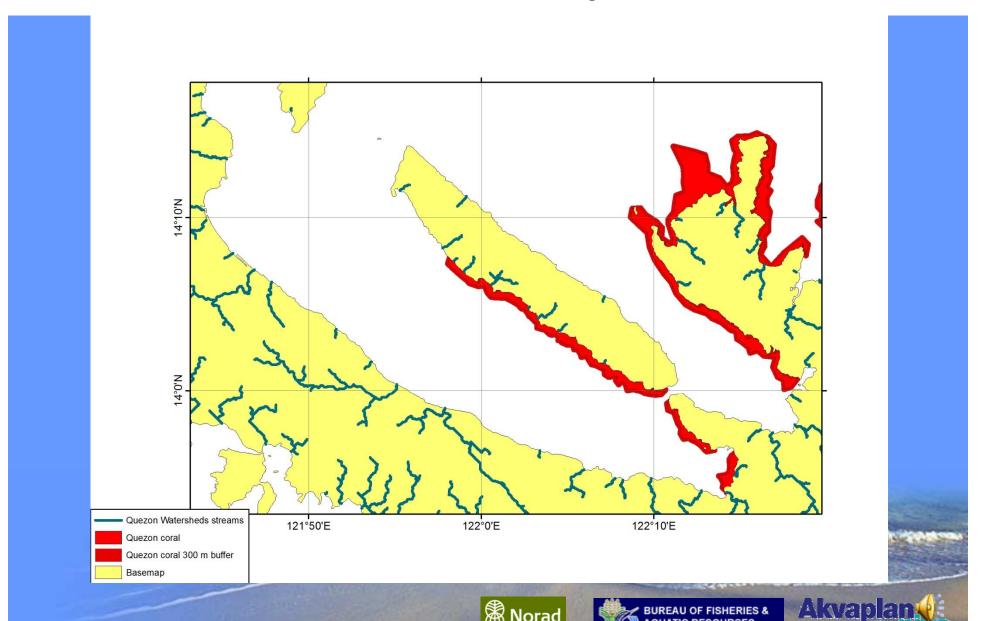




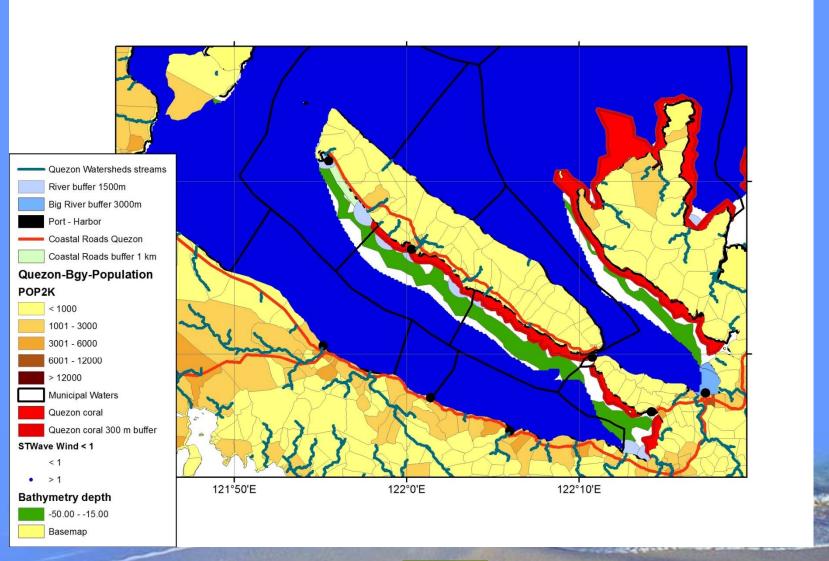








### GIS result

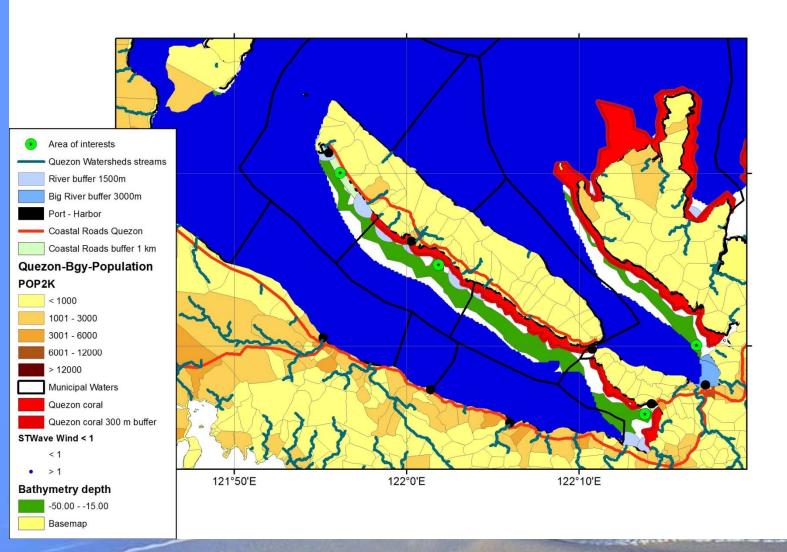








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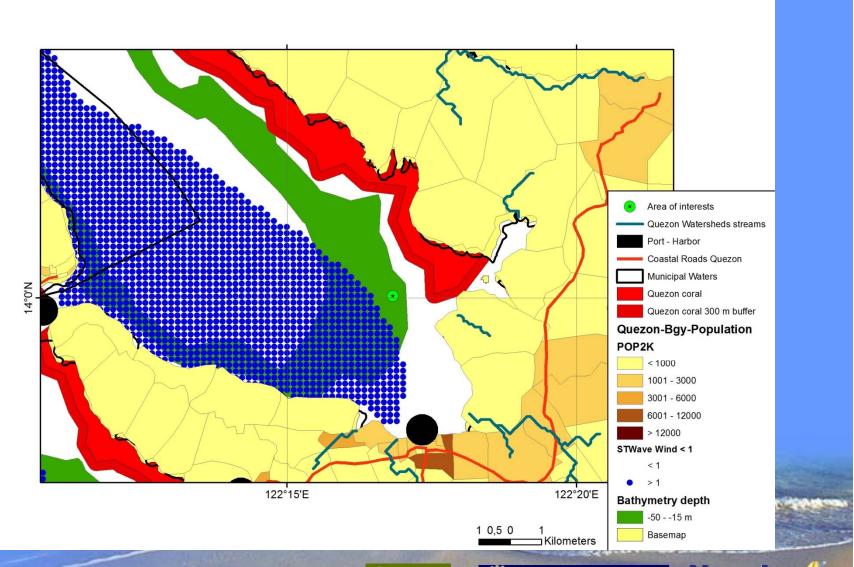








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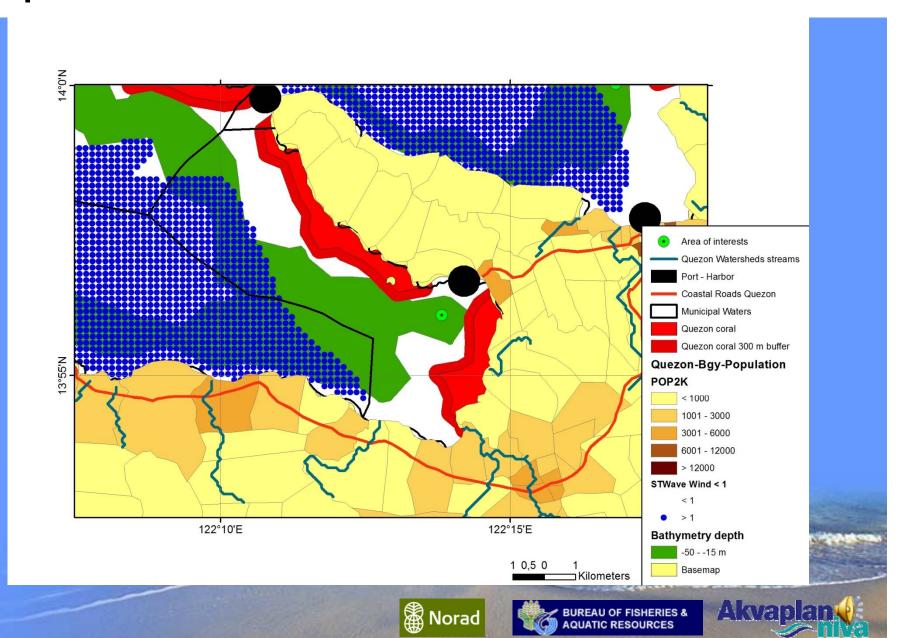




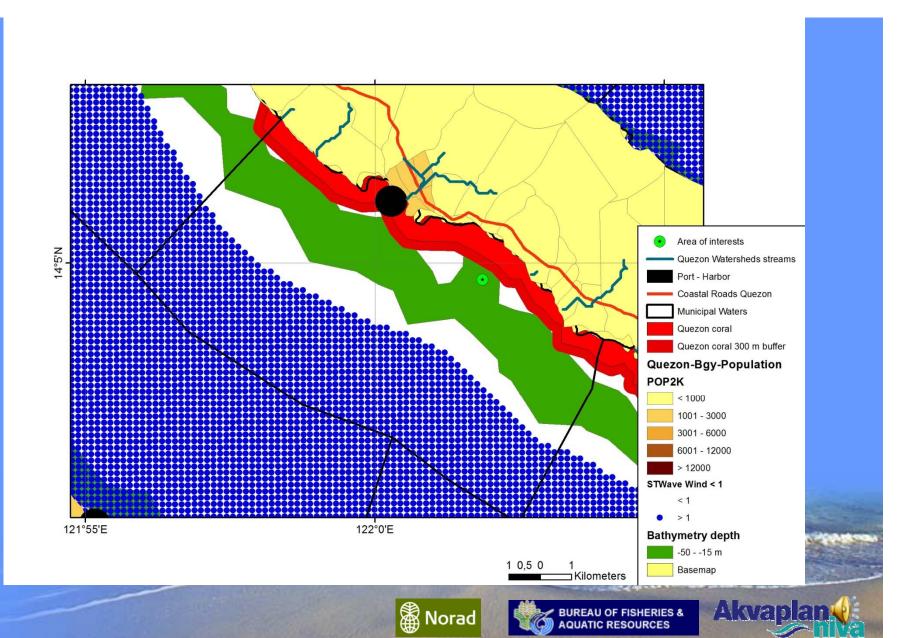




## Lopez



#### **Alabat**



#### Perez

