Exceptional Circumstances *DRAFT* Proposal

Red Abalone FMP Project Team Webinar
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Exceptional Circumstances Proposal

More precautionary management measures may be needed in the face of unusual or extreme environmental conditions (‘exceptional circumstances’) that could drastically impact the red abalone resource.
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• Part A was added to the management strategy to account for exceptional circumstances

• Part A of the decision tree would evaluate presence of broader scale ecosystem events or impacts, and/or rapidly assess indicators to evaluate any risks that could be detrimental or result in mass mortality of the red abalone resource.

• If no exceptional circumstances are observed, then proceed to Part B (indicator-based decision-tree)
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• Broader-scale ecosystem events and impacts would include:
  o Persistence of large marine heat waves
  o Presence of disease (e.g., withering syndrome)
  o Presence of toxic harmful algal blooms
  o Oil spills
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• Rapid assessment would include an evaluation of pre-determined and justified indicators:
  o Ocean Warming
    ▪ Dissolved oxygen level
    ▪ Ocean temperature
  o Environmental Shifts
    ▪ Kelp abundance
    ▪ Sea urchin density
    ▪ Sea star density
  o Ocean pH/acidification
  o Red Abalone Reproductive State
    ▪ Body condition
    ▪ Gonad condition
    ▪ Presence of empty abalone shells
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• Three potential actions if exceptional circumstances are triggered –
  o Collect more data and continue on to Part B
  o Fishery closed across one or multiple fishing zones
  o Go to Fish and Game Commission for direction on management action
Discussion Questions

• Given capacity and cost constraints and current data availability, which three indicators would you suggest we prioritize for monitoring in Part A? Which data streams do we anticipate using?

• Are the indicators under consideration directly or indirectly related to impacts on red abalone health and productivity? Is the mechanism clearly understood or does a clear threshold exist?

• Which exceptional circumstances would trigger closure of all fishing zones and which would trigger closures at the individual fishing zone?

• What could data collection/sampling protocols look like during rapid assessments? Would data sources and sampling entities be pre-defined?

• How do we account for persistence of events like marine heat waves?

• Do you have any insights or concerns about how Part A would function? Would you be interested in serving in an advisory capacity or reviewing a more complete version of this proposal in advance of the draft FMP being presented?