

The dilemma – valuing compliance and enforcement activities

Eidre Sharp
Manager Compliance Advice
Ministry of Fisheries, New Zealand



Guardian of the multitudes of Tangaroa – maximising the value New Zealanders obtain through the sustainable use of fisheries resources and protection of the aquatic environment

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Drivers of Compliance and Enforcement

- Fisheries management strategies give direction and priority
- Compliance outcomes and strategies
 - Change behaviour by promoting voluntary compliance and deterring offending
- Focused by a risk management framework - targeted high quality information
- Adds compliance direction and priorities
- Monitoring performance of compliance and enforcement activity:
 - Effort/Activity - compliance or offending where and when it is seen (traditional)
 - Outcomes – achieve the strategies, behavioural change
- What indicates the value or achievement of compliance and enforcement activity?
- Recognition of the need for action is typically when there is a significant ‘failure’



Case Study : Options to Address Maritime Aerial Patrol Gap

- A significant gap in aerial patrol capability and capacity was identified
- Aerial patrolling addresses risks through early detection, management, prevention
- Significant overlap in information for enforcement agencies to manage risks: border security, environment, management of resources, search and rescue, and hazards
- Task: to quantify gap and provide options to solve
- Options require significant investment - need to justify benefit and value
- Qualitative benefits of risk based mitigation described - based on experience
- Qualitative assessments valid but insufficient on their own



Case Study : Options to Address Aerial Patrol Gap (cont)

- Quantitative assessments required but typical cost benefit analysis not suitable
 - illegal products entering New Zealand economy = a transfer, other risks not recognised
- Alternative two pronged approach – only fisheries information available
- Value analysis - market value of known quantities of illegal fish for relevant offences give conservative estimates of reduced illegal take flowing to legitimate operators
- Compare with annual rate of return for establishing and operating over life
- Cost of enforcement/potential gains – reduced revenue from reduced TACs [and catch] could be recouped or increased if stock can reach optimal harvest levels



Case Study: Options to Address Aerial Patrol Gap (cont)

- Value analysis result - area and quantity misreporting offence
 - National paua (abalone) - retail \$NZ 9.6m if deter/intercept 10% of illegal catch
 - West Coast South Island hoki/hake – retail \$NZ 5.6m if deter/intercept 50% of illegal catch
 - Conservative estimated economic benefit - $\frac{1}{2}$ to $\frac{3}{4}$ of annual rate of return for two options
- Cost of enforcement result – paua, hoki and hake
 - offending likely contributor to need for TACC reductions that resulted in decreased export \$
 - future market demand remains if can limit impact and allow stock rebuild
 - additional benefits e.g. paua poaching revenues driven by offshore interests, incentives apply where illegal take manageable e.g. enhance stocks through reseed of paua



Value and Cost of Enforcement Analysis - Pros and Cons

- Pros
 - Works with typical patchy activity based compliance/offending data
 - Extension of existing analysis for risk profiling / advice
 - Accessible to stakeholders and positive incentives to assist
 - Can identify benefits of activity and information generated (outcomes)
 - Supported by financial advisors as acceptable
- Cons
 - Operational investigation based information – not all publicly available
 - Relies on relationships - accept assessment of extent of offending and benefits of types of activity
 - Relies on sufficient risk profiling and investigations to drive stock offending/compliance profile



Wider Relevance?

- Reactive use:
 - assist with decisions on new or enhanced capability and capacity
 - highlight positive or negative risk of proposed management options
- Predictive use:
 - maintain risk and value estimates from operational activity both stock based and parts of supply chain
- Use as outcome performance indicator - monitor change in inputs to value analysis - stock performance, information improvements, public perceptions affecting stock strategy applied, desire to invest
- Use with activity based performance indicators - trend and risk profiling
- All support decisions on targeting of compliance and enforcement resources and \$





Questions?

