



Appendix 1. DRAFT Phase 1 Zhangzhou RSC fishery improvement work plan *summary*

(NOTE: Initial 5-year ideas to support detailed co-design and work planning with FIP partners)

Year 1 (2017-18) ¹¹ : Performance Goals	Year 2 (2019): Performance Goals	Year 2 (2019): Performance Goals	Year 4 (2021): Performance Goals	Year 5 (2022): Performance Goals
<ul style="list-style-type: none"> - Complete essential project implementation steps - Assess traceability risks - Evaluate stock status risks - Begin partial collection of essential fishery data - dockside - Assess abundance assessment options as linked w/ current & potential mgmt. and harvest strategies (HS) - Develop fishermen education, training and outreach program elements - Assess progress, adjust work plan as necessary 	<ul style="list-style-type: none"> - Mitigate any local area traceability risks - Implement catch-biological data collection – expand coverage - Initial evaluation of secondary species catch composition - Evaluate fleet characteristics, capacity in relation to harvest - Test resource survey assessment methodology - Assess potential ETP issues - Implement initial elements of fishermen sustainability education and FIP sustainability training - Assess progress, adjust work plan as necessary 	<ul style="list-style-type: none"> - Expand catch monitoring to collect fishery effort data (e.g. # landings & days fished) - Continue secondary species catch composition analysis - Complete initial stock/resource assessment - Assess potential P2 Ecosystem issues, ETP, habitat, ghost gear - Begin design of RSC specific mgmt. plan elements - Test fishermen behavior, awareness and compliance with current sustainable fishing measures for RSC - Assess progress, adjust work plan as necessary 	<ul style="list-style-type: none"> - Begin assessing extent of other jurisdictions participation in the fishery (e.g., Taiwan and Guangdong) - Conduct a risk assessment on fisheries impacts on ecosystem structure and function - Implement pilot logbook program - Continue 2nd yr. stock/resource assessment - Assess-test harvest strategy plan elements - Continue design of new mgmt. plan elements - Design regular resource monitoring project connect with catch monitoring data - Assess progress, adjust work plan as necessary 	<ul style="list-style-type: none"> - Continue assessment of other jurisdictions' participation & begin identifying potential options for factoring into mgmt. - Continue assessing-testing key harvest strategy plan elements - Evaluate 2 yrs. stock assessment program and integration with harvest strategy and development of HCRs - Draft management plan with short- and long-term objectives, including continued design of new elements - Assess potential for mgmt. transition to support harvest strategy, including incentives - Assess progress, adjust work plan as necessary - Map out performance outcomes, activities and budget to complete the FIP

¹¹ The actual annual dates will be refined once the initial start time confirmed, but the first year is expected to be a portion of 2017. There may be a natural and progress evaluation date each year coinciding with the summer fishing moratorium or it may be simplest to use a calendar year break.



Example key actions	Example key actions	Example key actions	Example key actions	Example key actions
<ul style="list-style-type: none"> - Finalize work plans, complete agreements & operating mechanisms w/ parties, form FIP council - Complete traceability risk assessment for fishery - Design and test initial catch monitoring, biological sampling & data collection approaches - Complete assessment of existing fishery and resource studies/data - Retain expertise & evaluate resource assessment & related (HS) options - Identify priority fishermen education & outreach needs w/ leaders and design approaches - Conduct annual stakeholder workshop 	<ul style="list-style-type: none"> - Implement needed traceability tools – collect needed data - Refine initial catch monitoring design, expand to larger % of landings - Analyze data from initial dockside monitoring for species composition - Collect fleet vessel characteristics; design-test effort data collection - Test resource survey methods - Conduct annual stakeholder workshop 	<ul style="list-style-type: none"> - Design & test vessel logbooks for use in conjunction w/ dockside catch monitoring with incentives - On-water observer trial effort as needed to collect on sea data (e.g., ETP, discard, habitat) - Implement resource surveys, including abundance, sex, size & maturity, and information on MSC P2 components - Begin to develop potential ideas/options for harvest strategy elements to address target species and any P2 ecosystem issues identified (this would include a suite of mgmt. measures harvest controls to achieve MSY outcomes) - Require fishermen compliance with minimum allowable catch size and release egg-bearing crab - Conduct annual stakeholder workshop 	<ul style="list-style-type: none"> - Develop education and outreach to other jurisdictions; with their help begin to collect/analyze data on vessels, catch and timing of fishery harvest from adjacent jurisdictions - Train & support vessel captains in use of logbooks - Develop catch data processing systems for regular analysis of key information - Conduct a Scale Intensity Consequence Analysis (SICA) with stakeholders on ecosystem vulnerability and fishery consequence , identifying the most - Identify research and enforcement priorities given work to date - Conduct annual stakeholder workshop 	<ul style="list-style-type: none"> - Continue work with other jurisdictions to collect/ analyze data on vessels, catch and timing of fishery harvest from adjacent jurisdictions; identify possible cross jurisdictional mgmt. approaches to scale FIP - Analyze stock assessment data and population dynamics, consider regular stock/fishery monitoring program and refine HS-HCR approach - Assess compliance w/ logbook program - Conduct analysis on how environmental indicators might be used for assessment – develop hypotheses - Implement highest priority enforcement and research needs - Conduct annual stakeholder workshop - Finalize Phase 2 FIP work plan for FIP's completion



Associated MSC Pls	Associated MSC Pls	Associated MSC Pls	Associated MSC Pls	Associated MSC Pls
Pls 1.1.1, 1.2.3, 1.2.4, 2.1.3, 2.2.3	Pls 1.1.1, 1.2.3, 1.2.4, 2.1.3, 2.2.1, 2.2.3, 2.3.3	Pls 1.1.1, 1.2.1, 1.2.3, 1.2.4, 2.1.3, 2.2.1, 2.2.3, 2.3.1, 2.3.3, 2.4.1, 2.4.3,	Pls 1.1.1, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 2.1.3, 2.2.1, 2.2.2, 2.2.3, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 3.1.3, 3.2.1, 3.2.3, 3.2.4	Pls 1.1.1, 1.2.1, 1.2.2, 2.2.1, 2.2.2, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.5.1, 2.5.3, 3.1.3, 3.2.1, 3.2.3, 3.2.4



DRAFT Phase 1 Zhangzhou RSC fishery improvement *detailed* work plan (by MSC PI)

(NOTE: To be completed - Initial 5-year ideas to form basis for detailed co-design and work planning with fishery partners. The format provides for performance goals and action steps for each MSC indicator that needs improvement. With the necessary rows simply being added to the template below)

Principle 1: Sustainability of the stock

Issue/ Performance indicators	Year 1: Performance Goal	Year 2: Performance Goal	Year 3: Performance Goal	Year 4: Performance Goal	Outcome Year 5
	Year 1: Action Plan	Year 2: Action Plan	Year 3: Action Plan	Year 4: Action Plan	Outcome Year 5
Responsibility (Lead and support)					



Principle 2: Ecosystem impacts

Issue/ Performance indicators	Year 1: Performance Goal	Year 2: Performance Goal	Year 3: Performance Goal	Year 4: Performance Goal	Outcome Year 5
	Year 1: Action Plan	Year 2: Action Plan	Year 3: Action Plan	Year 4: Action Plan	Outcome Year 5
Responsibility <i>(Lead and support)</i>					



Principle 3: Management system

Issue/ Performance indicators	Year 1: Performance Goal	Year 2: Performance Goal	Year 3: Performance Goal	Year 4: Performance Goal	Outcome Year 5
	Year 1: Action Plan	Year 2: Action Plan	Year 3: Action Plan	Year 4: Action Plan	Outcome Year 5
Responsibility (Lead and support)					