Summary of Changes made to SCAD for Draft Standards released in Public Comment Period 2 (Aug 19, 2013).

1) Revisions based on Public Comments received.

| Principle 1 | |
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| No comments received in PC period 1 for Principle 1 | |
| Principle 2- Summary of Comments by Indicator | SC Response to Comment/ Changes made |
| 2.1.1- Add a drawing outlining the concept of an AZE to clarify | It was decided that the footnoted definition was clear enough |
| 2.1.2 Suggestions to better define sampling design of environmental surveys such as benthic comparisons, particularly in cases where geographic considerations might limit the ability to compare with a reference site | The SC believes it should stay as is (comparison vs. absolute value) as the main consideration is not to determine the ultimate quality as some conditions and variables may be of different quality due to other factors, the key essential piece of this indicator is to compare the farm's impact vs. area not impacted by the farm and to motivate a farm to reduce their own impact. The SC added "statistically" before significant in order to define the change level. The SC recognizes that this AZE approach is not perfect but still believes overall that this represents the best way to track and influence farms. |
| 2.1.2 Comment on the costs of the sampling for smaller farms | The SC believes this indicator and sampling must remain in the standards though the cost issue is recognized. SC suggests this issue, or reduced costs for smaller operations could be raised with the certification bodies (CBs) or ASC directly. |
| 2.1.3 Comments made around developing a clear list (globally) of such indicator species or if it is acceptable for the farms identify those key species and communicate those species with auditors | The SC believes it would not be possible to develop a globally applicable list, however resources such as natural history museums often track such species and are able to conduct samples and such information could be documented and made available to auditors and farms in the future. The SC decided to reach out to stakeholders to determine whether farms generally have a sense of these species in local contexts. |
| 2.2.1/2.2.2 Suggestions were made that DO is best for a health and animal welfare indicator rather than an indicator of impact on biodiversity | The SC recognized that a well-run farm should have high DO levels for the sake of the fish however DO is not something a farm generally can manage for. The process for testing and calibrating DO is also very difficult to do consistently. The SC decided to move this indicator to Principle 5. |
| 2.2.1/2.2.2 It was suggested that DO level should be set at 80% | The SC made the decision to look into the DO monitoring practices and DO levels in the Japanese sector to get a sense of current practices for the majority of producers. It was decided that 70% would be a more realistic number in order to include/ motivate the better producers. |

| 2.2.4 Suggestion was made to set an absolute value for ammonia levels | The SC once again maintains that comparative value is the most effective way to encourage farm level improvement and to account for the geographic and situational variations across farms. |
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| 2.4.5 Comment was made that the practicality of a .5 mortality of marine mammals over 2 years was not a practical measure | The SC debated and agreed, .5 is not a logical number and therefore agreed to move the number of acceptable marine mammal mortalities to one per two years. |
| Principle 3- Summary of Comments by Indicator | SC Response to Comment/ Changes made |
| 3.3.1 Comment was made that clarity around "already existing" needs to be made | SC added a note on "commercial" and defined this as non- experimental production. |
| 3.3.2/3.3.3 Comment was made that the technology exists to count but needs to take into account early stage cannibalism | Given the challenges associated with counting and existing margin of error, the SC revised this indicator to focus on collection of data in order to set a meaningful number in future iterations of the standard. |
| 3.3.4 The metric used here should be a number, not "yes" | Standard was changed to focus on data collection |
| Rationale in P3, comment was made to add that cobia are also poor spawners | SC Added clarification |
| Principle 4- Summary of Comments by Indicator | SC Response to Comment/ Changes made |
| 4.2 FFDR. Comments were raised about the fact that the body size for market of different Seriola species differs, therefore so does their energy consumption. In order to drive efficiency and best practice should SC explore the FFDR for different species/ sizes | SC reached out to producers and using the information collected, calculated new suggestions for more specific FFDR standards. 3 separate FFDR levels were set in order to encourage continuous improvement for all species/ sizes of fish sold, particularly with regard to Japanese Hamachi sold at sizes above 3 KGs |
| Principle 5- Summary of Comments by Indicator | SC Response to Comment/ Changes made |
| 5.2.4 Comment was made to clarify that formaldehyde is banned for use in Japan and therefore P1 takes precedence. | SC added footnote |
| 5.3 DO comments reiterated as stated for DO comments in P2 | Standard was modified to 70% and similar standard from P2 was moved to P5. |
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| Principle 6 | Servesponse to commenty enanges made |
| No public comments received for Principle 6 | |
| | SC Response to Comment/ Changes made |

Summary of additional changes made to draft standards by the SCAD Steering Committee.

| Additional Changes | |
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| discussed by the SC | |
| Changes Made | Rationale |
| Introduction | |

| Introduction added | The SC felt the document needed a section to provide context of the effort as well as scope and details around process. The SC used other dialogues introduction as a model and modified with specific details from the SCAD |
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| Principle 1 | |
| 1.1.2-1.1.4 | The SC debated whether 1.1.1 covers 1.12-1.1.4. It was decided to leave all in for further clarity on the scope of the relevant legal frameworks |
| Principle 2 | |
| 2.3.2 | Suggestion was made to add language around when a farm pre-dates a MPA and to clarify that economic activities are relevant to those that are incompatible with the management and conservation goals of the protected area |
| 2.4.2 | "and adjacent areas" but due to farm activities was added to standard to ensure that this covered farm related activities. |
| 2.4.3 | (non-endangered or non- red listed) was added as a clarification since no farm that takes lethal action against an endangered or red listed species would be eligible for certification |
| 2.4.5 | Clarification on footnote 8 was made to further clarify accidental and intentional lethal incidents |
| Principle 3 | |
| 3.1.1 | SC chose to add "commercial" to the definition of existing so as to exclude small experimental operations being grandfathered in as existing. SC also chose to add a flag for feedback to solicit information on current farming regions where <i>Seriola</i> and cobia farming may be legally occurring but is being actively discouraged by regulatory authorities. |
| 3.3.1-3.3.4 | The SC finds these indicators very challenging due to the issues of cannibalism, theft and escapement, problems with counting methods (including a standard deviation of 15- 20% in some cases). Additionally, it is very expensive to stock fish when they are at a larger stage yet technology is much worse for counting smaller fish. The SC decided to require escape plans and evidence of best standards for escape prevention, net inspection and then to require data collection in order to set future metrics based standards on escapement. Data collection includes stocking vs. recovery rates, incidences of escapes, counting methodology etc. |
| 3.4 | The SC chose to add a standard related to the capture of wild fingerlings for Seriola and cobia culture. In order to meet ASC certification, wild fingerlings must come from a fishery that is certified by a relevant ISEAL compliant fisheries certification scheme within 5 years of publication of the standard. The SC also added requirements on traceability of wild caught fingerlings. |
| Principle 6 | |
| 6.1- 6.11 | Formatting and organizational changes were made to indicators in 6.1 through 6.11. This was mainly to address that the previous version of section 6 did not have "standards" organized/ defined as they are in other places in the document. SC will seek input from ASC in public comment period 2 re: definitions, consistency, and auditability of social component of already released ASC species standards |
| Principle 7 | |

| 7.1 | Minor formatting changes made. SC will seek input from ASC in public comment period |
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| | 2 re: definitions, consistency and auditability of social component of already released |
| | ASC species standards. |