April 2020
Public Consultation
Stakeholder Webinar

Aquaculture Stewardship Council
www.asc-aqua.org
<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PRESENTER(S)</th>
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<tbody>
<tr>
<td>Welcome and introduction</td>
<td>Contessa</td>
</tr>
<tr>
<td>Freshwater Shrimp Indicators and Metrics</td>
<td>Marcelo and Kathrin</td>
</tr>
<tr>
<td>Marine Shrimp Metrics</td>
<td>Kathrin</td>
</tr>
<tr>
<td>ASC Metrics Methodology</td>
<td>Kathrin</td>
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<tr>
<td>How to give feedback</td>
<td>Contessa</td>
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<td>Questions</td>
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</table>
What’s Happening?

+ Sixty (60) day public consultation open 2\textsuperscript{nd} March – 2\textsuperscript{nd} May

+ Topics open for public consultation:

1. Shrimp Standard Revisions
2. Metrics Methodology

+ At least one 60 day consultation is needed for each Standard revision. This is the first consultation for these topic

+ Timelines will need review if a 2\textsuperscript{nd} consultation is needed on these topics.

*Please be advised that this session is being recorded and will be available to the public for review*
Shrimp Standard
Revision Background

Two main parts

1. Scope extension to include freshwater species
   + Gap analysis
   + New freshwater indicators
   + Metric setting

2. Revision of the existing standard
   + Clarification for several other Penaeus spp.
   + Revision of metrics
What about Antibiotics?

Other projects that also affect Shrimp are ongoing and will be delivered as part of P2 of the aligned ASC Farm Standard.

These are:

1. Revision of antibiotic requirements
2. Revision of mangrove and wetlands requirements
<table>
<thead>
<tr>
<th>DOC #</th>
<th>TITLE</th>
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</thead>
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<tr>
<td>3</td>
<td>Freshwater Crustacean Spp – Metric Revision - Consultation Summary</td>
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<td>Freshwater Crustacean Spp – Metric Revision Metric Analysis</td>
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<td>5</td>
<td>Freshwater Spp – Environmental Indicators – Consultation Summary</td>
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<td>6</td>
<td>Freshwater Crustacean Species – Proposed Additional indicators</td>
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<td>7</td>
<td>Saltwater Shrimp Spp – Metric Revision – Consultation Summary</td>
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<td>8</td>
<td>Data Overview_Saltwater Shrimp Revision</td>
</tr>
<tr>
<td>8a</td>
<td>Data Overview_Saltwater Shrimp Species_New Spp Rationale</td>
</tr>
<tr>
<td>9</td>
<td>Gap analysis – New crustacean Spp considered for inclusion in ASC Shrimp Standard</td>
</tr>
<tr>
<td>10</td>
<td>ASC Metrics Methodology_Baseline</td>
</tr>
<tr>
<td>12</td>
<td>ASC Metrics Methodology_Consultation Summary</td>
</tr>
</tbody>
</table>
Where can I Find Information?

Public Consultation Documents:
G:\COMMUNICATIONS\00 PUBLIC CONSULTATION\March 2020 - Shrimp review Docs\Resources for Outreach

Shrimp:

Metrics Methodology:
https://www.asc-aqua.org/what-we-do/programme-improvements/metrics/
Freshwater Crustacean Indicators
Background

Based on a gap analysis carried out in 2019

Three species were identified

1. *Cherax* spp.

The recommendations of this gap analysis were supported by the ASC TAG in Nov 2019

- Environmental indicators and metrics indicators
- Re-scope from Penaeus to Crustaceans to add freshwater new species
Cherax spp

+ Australia, Argentina and Uruguay
+ Native of Australia
+ IUCN – least concern
Procambarus spp

- USA and China
- Considered an invasive species in Europe
- A very aggressive crustacean
- IUCN – least concern
Macrobrachium spp

+ USA, Mexico, Central America, India and Thailand

+ IUCN – least concern
## Proposed Indicators

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicator</th>
<th>Description</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 (TL)</td>
<td>2.1.1</td>
<td>Site location, history and stewardship activities matrix located in Appendix 1, Table 1 is completed and validated</td>
<td>Yes</td>
</tr>
<tr>
<td>2.2 (TL)</td>
<td>2.2.1</td>
<td>Demonstration that the crustacean species cultured is established(^2) and naturally reproducing in the receiving waters(^3,4) of the operation on or before March 2014(^5)</td>
<td>Yes</td>
</tr>
<tr>
<td>2.6 (TL)</td>
<td>2.6.1</td>
<td>Hectares of allowable wetland(^6) conversion since 1999(^7)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## Proposed Indicators

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicator</th>
<th>Description</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 (TL)</td>
<td>4.2.1</td>
<td>Presence and evidence of use of crustacean transport containers that have no escape path for these species</td>
<td>Yes</td>
</tr>
<tr>
<td>3.1 (TR)</td>
<td>3.1.3</td>
<td>All use of underground pumped water has been permitted by regulatory authorities</td>
<td>Yes</td>
</tr>
<tr>
<td>3.1 (TR)</td>
<td>3.1.4</td>
<td>Well depths are tested at least annually, and results made publicly available&lt;sup&gt;22&lt;/sup&gt;</td>
<td>Yes</td>
</tr>
<tr>
<td>3.2 (TR)</td>
<td>3.2.5</td>
<td>Water-quality monitoring matrix completed and submitted to ASC (see Appendix II-B)</td>
<td>Yes</td>
</tr>
<tr>
<td>2.2 (PG)</td>
<td>2.2.4</td>
<td>Evidence&lt;sup&gt;10&lt;/sup&gt; of no negative impacts on endangered species&lt;sup&gt;11&lt;/sup&gt;</td>
<td>Yes</td>
</tr>
<tr>
<td>2.4 (PG)</td>
<td>2.4.1</td>
<td>Farm complies with water allocation&lt;sup&gt;15&lt;/sup&gt; limits set by local authorities or a reputable independent institution&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Consultation Questions

+ Are the indicators presented in previous slides adequate to assess the impacts of freshwater crustacean farming on the environment?

+ Are there other environmental impacts indicators which ASC should add, in addition those mentioned above?

+ Are you a farmer of these mentioned species and are you interested in participating in our first pilots?
Next Steps

+ After stakeholder comments, responses will be provided to all parties.
+ Feedback and any revised proposals will be presented to the ASC TAG.
+ Based on this, we will consider whether a second consultation period is needed.
+ Pilot testing is recommended.
2

Freshwater Crustacean Metrics

ASC SHRIMP STANDARD REVISION
Freshwater Crustacean Species - Metric Revision
Metric Analysis

March 2020
Freshwater Crustacean Metrics

Two new species groups


Metrics revision based on ASC Metrics Methodology

+ Issue: no production data (yet), limited research data
# Freshwater Crustacean Metrics

<table>
<thead>
<tr>
<th>Ind.</th>
<th>Topic</th>
<th>Proposed value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5.3</td>
<td>Conductance/chloride conc.</td>
<td>Same as for saltwater shrimp</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Survival rate</td>
<td>Same as for saltwater shrimp</td>
</tr>
<tr>
<td>7.4.1</td>
<td>FFER</td>
<td>Cherax spp. Procambarus spp. Astacus spp: 1.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macrobrachium spp.: 2.1</td>
</tr>
<tr>
<td>7.4.2a</td>
<td>eFCR</td>
<td>Recording</td>
</tr>
<tr>
<td>7.4.2b</td>
<td>PRE</td>
<td>Recording</td>
</tr>
<tr>
<td>7.5.1</td>
<td>Nitrogen effluents</td>
<td>Cherax spp. Procambarus spp. Astacus spp: 26.1 kg/t</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macrobrachium spp.: 39.2 kg/t</td>
</tr>
<tr>
<td>7.5.2</td>
<td>Phosphorous effluents</td>
<td>Cherax spp. Procambarus spp. Astacus spp: 4.0 kg/t</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macrobrachium spp.: 6.1 kg/t</td>
</tr>
<tr>
<td>7.5.4</td>
<td>Settleable solids</td>
<td>Same as for saltwater shrimp</td>
</tr>
<tr>
<td>7.5.5</td>
<td>DO change</td>
<td>Same as for saltwater shrimp</td>
</tr>
</tbody>
</table>
What do we Need?

+ Performance level data submissions
  Data will be anonymised
  Data sets do not have to be complete

+ Do you consider the combination of metric performance levels for *Cherax* spp., *Procambarus* spp. and *Astacus* spp. reasonable?

+ Are there environmental concerns with any of the species that are not addressed by the proposed metric indicators?

+ Could the metric performance levels be met easily and can they be measured within the farming system?
Next Steps

+ Evaluate feedback - incorporate additional data sets
+ Provide initial response to stakeholders
+ Present feedback and recommendations to TAG
+ Update stakeholders on plans
+ 2nd consultation if necessary in March 2021
+ Pilot testing
3. Saltwater Shrimp Metrics
Saltwater Shrimp - Metrics

Metric revision for P. monodon and P. vannamei
+ Changing from *Litopenaeus* to *Penaeus*

Metrics revision based on ASC Metrics Methodology
+ Limited production data from non-certified farms
+ Not all data shows normal distribution
## Saltwater Shrimp - Metrics

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<th>Proposed value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5.3</td>
<td>Conductance/chloride conc.</td>
<td>No changes</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Survival rate</td>
<td>+ 5% per category</td>
</tr>
<tr>
<td>7.4.1</td>
<td>FFER</td>
<td>P. vannamei: 1.3 (-0.05) P. monodon: 1.8 (-0.10)</td>
</tr>
<tr>
<td>7.4.2a</td>
<td>eFCR</td>
<td>Recording</td>
</tr>
<tr>
<td>7.4.2b</td>
<td>PRE</td>
<td>&gt;20%</td>
</tr>
<tr>
<td>7.5.1</td>
<td>Nitrogen effluents</td>
<td>No changes</td>
</tr>
<tr>
<td>7.5.2</td>
<td>Phosphorous effluents</td>
<td>No changes</td>
</tr>
<tr>
<td>7.5.4</td>
<td>Settleable solids</td>
<td>No changes</td>
</tr>
<tr>
<td>7.5.5</td>
<td>DO change</td>
<td>No changes</td>
</tr>
</tbody>
</table>
What do we need?

+ General opinion on rationale and conclusions
+ Is adding PRE (protein retention efficiency) beneficial?
+ Objections to the proposed changes (data to support objections)
+ Additional data sources or data submissions
+ Data will be anonymised
Next Steps

+ Evaluate feedback
+ Provide initial response to stakeholders
+ Present feedback and recommendations to TAG
+ Update stakeholders on plans
+ 2\textsuperscript{nd} consultation if necessary in March 2021
4
ASC Metrics Methodology
Metrics Methodology

Objective

+ Consistency into metric setting, science based approach
+ Applicable for all species metrics (incl. ASC Farm Standard)
+ Provide minimum requirements for setting/revising metrics
+ Summary documents on website

Purpose

+ Procedural document (not a Standard)
+ General feedback and transparency
Metrics Methodology

Relevant Data
+ Certified farm data
+ Non-certified farm data
+ Research/literature

Statistical Analysis
+ Relevance of checking for normal distribution
+ General suggestions
Questions?

- ASC Public Consultation - 2\textsuperscript{nd} March - 2\textsuperscript{nd} May 2020
- ASC Shrimp Standard Revision
- ASC Metrics Methodology
How Can You Comment?

Public Consultation Documents:
G:\COMMUNICATIONS\00 PUBLIC CONSULTATION\March 2020 - Shrimp review Docs\Resources for Outreach

Shrimp:

Metrics Methodology:
https://www.asc-aqua.org/what-we-do/programme-improvements/metrics/
Thank you!

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