

Case study 1 Farming with no use of feed or fertilisers



Scope criterion 2.7
compliant, no action needed

Case Study 2

Cage farming in offshore marine systems

(definition for lotic, 2.7.20 footnote: offshore treated as high flow rate)

WUM level

Farm level

2.7.22 & 2.7.24

weekly average of daily DO monitoring:

- $\geq 70\%$ saturation (seawater)
- $\leq 5\%$ weekly averages $< 2\text{mg/l}$ DO concentration

2.7.26 water body $\geq 2x$ cage depth or $\geq 10\text{m}$ above benthos

2.7.28 feed $< 1\%$ fines

2.7.29 species-specific limit:
TN/TP load per production (t)

Note
Reporting indicators not listed

Acronyms
DO – dissolved oxygen
TN/TP – total Nitrogen / total Phosphorus

Case Study 3

Case Study 3 Cage farming in ultra-oligotrophic lakes or reservoirs

WUM level

2.7.2 Identification of the WUM

2.7.2 Initial baseline survey characterising the WUM as SD >10m

2.7.4-8

continued monitoring confirms SD >10m
◦ i.e., no limiting nutrient, source apportionment or other modelling required
◦ i.e., continued WUM level monitoring can be limited to SD measurement

Farm level

2.7.9 Depth of oxygen depletion/ anoxia: $\leq 25\%$ decrease in depth over 2 years

2.7.10 & 11

weekly average of daily DO monitoring:
◦ $\geq 65\%$ saturation (freshwater)
◦ $\leq 5\%$ weekly averages $< 2\text{mg/l}$ DO concentration

2.7.12 water body $\geq 2x$ cage depth or $\geq 10\text{m}$ above benthos

2.7.28 feed $< 1\%$ fines

2.7.29 species-specific limit: TN/TP load per production (t)

Legend

required action/situation

required metric compliance

Acronyms

DO – dissolved oxygen

SD – Secchi depth

TN/TP – total Nitrogen / total Phosphorus

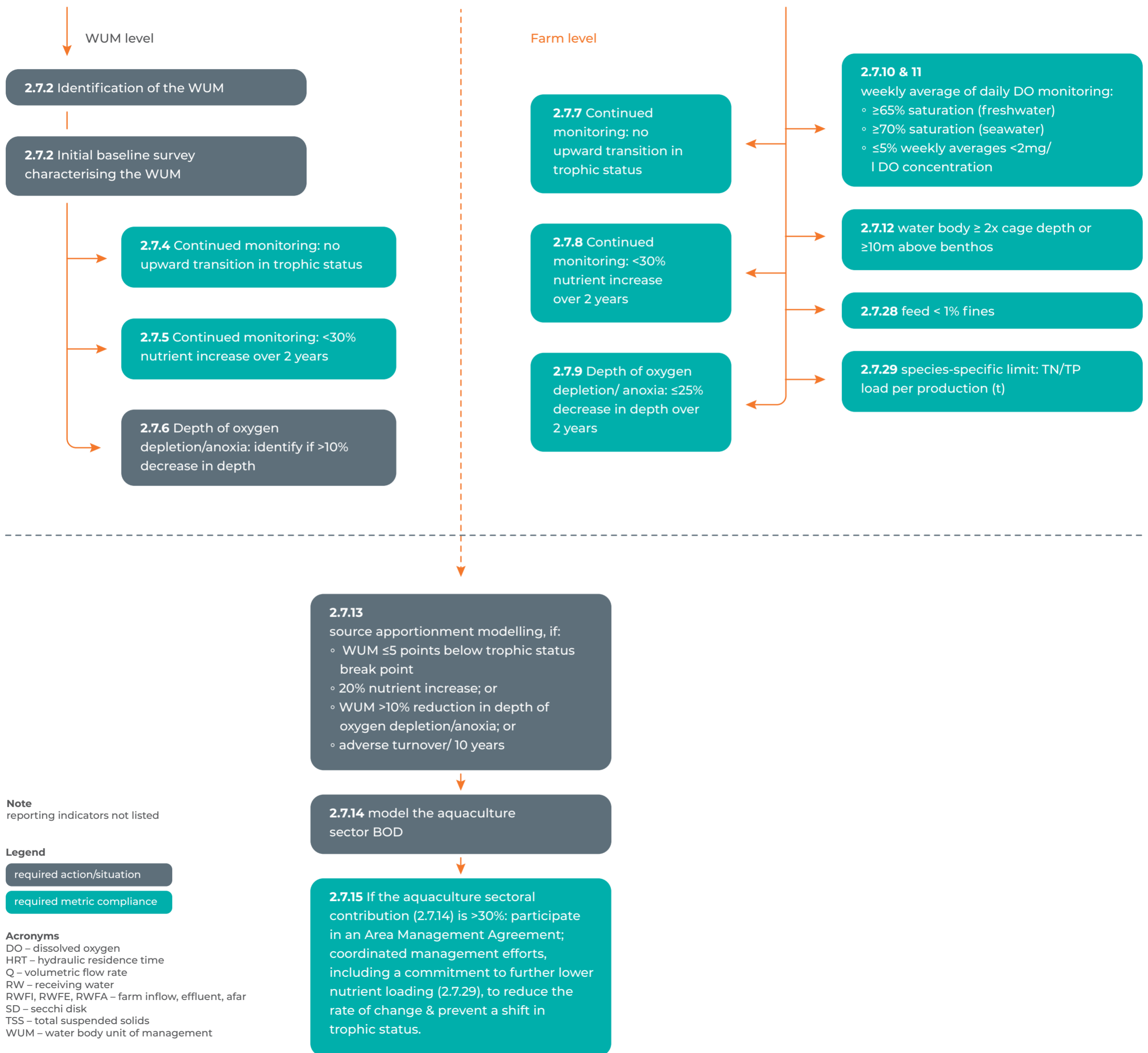
WUM – water body unit of management

Note

reporting indicators not listed

Case Study 4

Cage farming in lakes or fjords 2.7.1 identified as lentic



Case Study 5

Land-based ponds releasing effluents to very large fast flowing / alluvial rivers e.g., Main Mekong River Channel
2.7.1 lotic, 2.7.16 – 2.7.19 no action required for average RW flow rates > 1000m³/s or TSS loads >20mg/l at low flow)

WUM level

Farm level

2.7.25 daily diurnal DO fluctuation is ≤65% at RWFA

2.7.25 weekly average of daily DO monitoring:

- ≥65% saturation (freshwater)
- ≥70% saturation (seawater)
- ≤5% weekly averages <2mg/l DO concentration

2.7.27 no dumping of sludge to public waterways, wetlands or other natural ecosystems

2.7.28 feed contains < 1% fines

2.7.29 species-specific limit: TN/TP load per production (t)

Intensive systems only
2.7.30 effluent treatment -> settleable solids <3.3ml/L

Intensive systems only
2.7.31 effluent treatment -> capturing ≥65% suspended solids

Note
reporting indicators not listed

Legend

required action/situation

required metric compliance

Acronyms

DO – dissolved oxygen
HRT – hydraulic residence time
Q – volumetric flow rate
RW – receiving water
RWFI, RWFE, RWFA – farm inflow, effluent, afar
SD – secchi disk
TSS – total suspended solids
WUM – water body unit of management

Case Study 6

Land-based ponds or RAS hatcheries releasing effluents to slow flowing streams (2.7.1 lotic, 2.7.16 average flows < 1000m³/s)

WUM level

Farm level

2.7.16 Estimation of "farm effluent Q" contribution to the "RW Q" at RW low flow

Minimal farm effluent contribution
maximum "farm effluent Q"
contribution to the "RW Q" is <1%
2.7.17 Initial estimation and
reconfirmation at recertification

"farm effluent Q" contribution
to the "RW Q" is >1%
2.7.17 Annual estimation

annual estimation of
"farm effluent Q" to
"RW Q" is <10%
2.7.18 no action

**Considerable farm effluent
contribution**
"farm effluent Q" to "RW Q" is >10%
2.7.18 quarterly estimation of RW
Q, TN, TP and TSS at RWFI and
RWFE

Compliant, no further action required.

2.7.19 <25% increase of TN, TP or
TSS between RWFI and RWFA

2.7.25 daily diurnal DO fluctuation is
≤65% at RWFA

2.7.21 & 2.7.23
weekly average of daily DO monitoring:
◦ ≥65% saturation (freshwater)
◦ ≥70% saturation (seawater)
◦ ≤5% weekly averages <2mg/
l DO concentration

2.7.27 no dumping of sludge to public
waterways, wetlands or other natural
ecosystems

2.7.28 feed contains < 1% fines

2.7.29 species-specific limit: TN/
TP load per production (t)

Intensive systems only
2.7.30 effluent treatment -> settleable
solids <3.3ml/L

Intensive systems only
2.7.31 effluent treatment -> capturing
≥65% suspended solids

Note
reporting indicators
not listed

Legend

required action/situation

required metric compliance

Acronyms

DO – dissolved oxygen
HRT – hydraulic residence time
Q – volumetric flow rate
RW – receiving water
RWFI, RWFE, RWFA – farm inflow, effluent, afar
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