**Table 8.3.       Information required to support post-processing of model inputs and outputs into standardised visual outputs.**

| **Indicator** | **Output** | **Post-processing script** |
| --- | --- | --- |
| Salinity | Need: Required  Style: Time series  Time step: Daily  Space: Murray estuary, Coorong North Lagoon split into thirds, Coorong South Lagoon split into thirds.  Measure: Average daily salinity Duration: 12-months | *LagoonAverages.py*  Uses Lagoons\_Wet.shp as polygon boundaries to generate average across the spatial extent (CNL & CSL). Exports AVERAGES.csv daily time series file.  Modify to point to new shape files of sub-regions. |
| Flow (River Murray discharge) | Need: Required  Style: Time series  Time step: Daily  Measure: Flow (ML/day) across all barrages  Duration: 12-months | Boundary condition file provided |
| Flow (Salt Creek discharge) | Need: Required  Style: Time series  Time step: Daily  Measure: Flow (ML/day) at Salt Creek outlet  Duration: 12-months | Boundary condition file provided |
| Water level (Coorong South Lagoon) | Need: Required  Style: Time series  Time step: Daily  Space: Murray estuary, Coorong North Lagoon split into thirds, Coorong South Lagoon split into thirds.  Measure: Average daily water level across longitudinal transect  Duration: 12-months | *LongSectionOutput\_Gen1.5CDM\_Jun2022.R*  References LongSection.py. Distance from Murray Mouth along Coorong transect, average of variable, seasonal plots for high-res outputs. |
| Fishway operation (Salt Creek) | Need: Required  Style: Time series  Time step: Daily  Space: Salt Creek/Coorong South Lagoon  Measure: Salt Creek flow is >3 ML/day and CSL is >+0.4 m AHD or >2 ML/day and CSL is >+0.8 m AHD, 1=conditions met and 0 = conditions not met.  Duration: 12-months | UWA Export 8 (draft\_export\_8.m, run\_all\_exports.m)  Find all cells within region, calculate daily average for each cells within region (?), calc daily average across all cells.  Load BC File & Calculate daily flow, calculate event results |
| Water depth (inundation area) | Need: Not required.  Comment: Adequately accounted for within the tabular results of the framework. | N/A |
| Water depth (<10 cm area) | Need: Required  Style: Time series  Time step: Daily  Space: Murray estuary, Coorong North Lagoon split into thirds, Coorong South Lagoon split into thirds.  Measure: Mean average daily area (Ha) of water cover less than 10 cm  Duration: 12-months | UWA Export 9 (draft\_export\_9.m, run\_all\_exports.m)  Currently system-wide, modify into zones |
| Macroalgae (Ulva HSI) | Need: Required  Style (1): Raster  Space (1): last third of the Coorong North Lagoon and first third of the Coorong South Lagoon  Measure (1): HSI value over model period for each scenario or delta-map showing comparison of two scenarios.    Style (2): Longitudinal plot  Space (2): Longitudinal transect of the Coorong  Measure (2): HSI value over model period | UWA Export 10 calculates system-wide average daily Ha of algae HSI >0.25. (draft\_export\_10.m, run\_all\_exports.m)  Modify to reference Central.shp zone  Modify LongSectionOutput script to refer to HSI |
| Ruppia (HSI) | Need: Required  Style (1): Raster  Space (1): entire system  Measure (1): HSI output for each life stage and the sexual lifecycle    Style (2): Longitudinal plot  Space (2): Longitudinal transect of the Coorong  Measure (2): HSI value over model period | Current UWA scripts generate HSI x Area outputs split into CNL and CSL for each life stage.  Check with Sherry as to updated presentation approaches.  As above re: adopting LongSectionOutput script, but for each life stage HSI. |

Scripts:

* D:\TUFLOW\CoorongTFV\TFVPlotter\*LongSectionOutput\_Gen1.5CDM\_Jun2022.R*
  + References LongSection.py. Distance from Murray Mouth along Coorong transect, average of variable, seasonal plots for high res outputs.
* D:\TUFLOW\CoorongTFV\TFVPlotter\*HighRes\_Outputs\_Gen1.5CDM\_Jun2022.R*
  + A4 page with series of key site graphs for WL, SAL, Tracers
* D:\TUFLOW\CoorongParticles\TFVPlotter\*CommunityPlotting\_TFV\_Long&Short\_Jun2022.R*
  + Comparison of scenarios (high or coarse resolution) for one site (e.g. Woods Well)
* D:\TUFLOW\CoorongTFV\code\Python\*LagoonAverages.py*
  + Uses Lagoons\_Wet.shp as polygon boundaries to generate average across the spatial extent (CNL & CSL). SAL, WL, Tracers. Modify to point to new shape files saved in C:\TUFLOW\CDM\scripts\modeltools\exports\CoorongPolygons\_DEW. Ensure common projection (set in QGIS and save before running script).
* C:\TUFLOW\CDM\scripts\modeltools\exports
  + UWA MATLAB scripts