Metadata Statement

Info Asset Details

Enter information about the resource you are attaching to your asset record	
Name	River Condition Index
Description	The NSW River Condition Index (RCI) is the primary long-term reporting tool for assessing riverine condition. It is used to combine a range of indicators into a single condition score. The indicators include riparian vegetation, geomorphic condition, hydrologic stress, biodiversity, catchment disturbance and water quality. The RCI was developed using the Framework for the Assessment of River and Wetland Health (FARWH) approach. The FARWH is an accepted approach applied throughout Australia. The FARWH method uses existing data collection activities across Australia. It converts them into a standardised and nationally comparable representation of river health. The River Condition Index: method document provides a detailed explanation of the index and how it has been applied across NSW.
Format	ArcGIS ▼ ArcGIS Rest Map Service, ArcGIS Feature Service,
Publish resource as open data?	Yes ▼

P.T.O

Scope, coverage and geography

Enter information about the scope, coverage and geography of the Asset(s)	Extent covers the whole of NSW.

P.T.O

Files, Outputs and Interpretation

Title describing the files: **NB: If uploading a ZIP file, pls include for each asset within:** • **Name of Zip File,** • **Description (including a list of all the files within the Zip and a short description of what they are**	(i) ESRI Rest Feature Service of River Condition Index (ii) ESRI Rest Map Services of River Condition Index
Enter information about the Files, Output and Interpretation	**Interpretation:** The RCI was developed using the Framework for the Assessment of River and Wetland Health (FARWH) approach. The FARWH recognises the effects of catchment disturbance, physical form of the landscape, hydrologic regime, water quality, riparian zone and aquatic biota as measures of river health. These six indicators are the sub-indices used in developing the River Condition Index in NSW. River condition sub-indices are standardised prior to being integrated into the RCI. This approach enables sub-indices to be represented on a dimensionless 0-1 scale where 1 represents the best or reference condition. Condition categories are derived from the final scores for each sub-index. All six input layers are combined into an overall River Condition Index score and category for each sub-catchment using a standardised Euclidean distance formula. The standardised Euclidean distance formula was chosen in accordance with Table 3 in NWC's Assessment of River and Wetland Health: A Framework for Comparative Assessment of the Ecological Condition of Australian Rivers and Wetlands. Application of the method results in a score (range 0 – 1) for all sub-catchments with a higher score applying to sub-catchments in better condition.

The range of scores is split into five classes in the following ranges:

>0.8 – 1 = Very Good

>0.6 – 0.8 = Good

>0.4 – 0.6 = Moderate

>0.2 – 0.4 = Poor

<=0.2 = Very Poor

The River Condition Index: method document provides a detailed explanation of the index and how it has been applied across NSW.

Output:

Polygon features defining River Condition Index in New South Wales.

1. ArcGIS REST MAP SERVICE – River Condition Index

   What is a ESRI map service?
   https://enterprise.arcgis.com/en/server/10.5/publish-services/windows/what-is-a-map-service.htm

2. ArcGIS REST FEATURE SERVICE – River Condition Index

   What is a ESRI feature service?
   https://enterprise.arcgis.com/en/server/10.5/publish-services/windows/what-is-a-feature-service-.htm

Description of Field headings/Attributes
(of the River Condition Index Feature Class)

[RCI_Catchment]
Catchment boundaries that define study areas used for the River Condition Index analysis. These catchments were based on Catchment Management Authority boundaries and match the study area boundaries used in the original River Condition Index analysis from 2012.

[Subcatchment_ID_catchment]
Unique numerical identifier for each sub-catchment within

each RCI Catchment. Sub-catchments were based on Water Sharing Plan Water source boundaries combined with the Contracted Catchments identified in the Bureau of Meteorology's Australian Hydrologic Geospatial Fabric.

[Subcatchment_ID_State]
Unique numerical identifier for the sub-catchments within New South Wales. Sub-catchments were based on Water Sharing Plan Water source boundaries combined with the Contracted Catchments identified in the Bureau of Meteorology's Australian Hydrologic Geospatial Fabric.

[RCI_WQI_category]
An overall condition category for the Water Quality Index based on the RCI_WQI_score.

[RCI_RSGC_category]
An overall condition category for the River Styles Geomorphic Condition Index based on the RCI_RSGC_score.

[RCI_RVC_category]
An overall condition category for the Riparian Vegetation Condition Index based on the RCI_RVC_score.

[RCI_CDI_category]
An overall condition category for the Catchment Disturbance Index based on the RCI_CDI_score.

[RCI_RBCI_category]
An overall condition category for the River Biodiversity Condition Index based on the RCI_RBCI_score.

[RCI_HS_category]
An overall condition category for the Hydrologic Stress Index based on the RCI_HS_score.

[RCI_category]
An overall condition category for the River Condition Index based on the RCI_score.

Accuracy and Error

Enter information about accuracy and any known error	The RCI was required to be undertaken utilising existing, available, datasets. Some datasets do not cover the entire NSW. The age of data inputs varies depending on the data source as detailed in the method document.
	A minimum or four input indices was required to calculate the final RCI score.
	Details of the individual base layers used, and their accuracy, scale and age is detailed in the River Condition Index: method document.

Additional Comments

Enter any additional comments pertaining to the Asset or files within	For instructions on how to add ArcGIS Server map and feature services, refer to the following ESRI instructions:
	• ArcGIS10.8 https://desktop.arcgis.com/en/arcmap/latest/map/web-maps-and-services/adding-arcgis-server-map-services.htm

• ArcGIS PRO https://pro.arcgis.com/en/pro-app/latest/help/mapping/layer-properties/add-layers-to-a-map.htm |

Contact

For further information on this dataset contact:
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