Name of dataset or data source:	Assessment of Rainforest TECS on NSW Crown Forest Estate
Custodian of the dataset or data source:	Chief Environmental Regulator (EPA)
Description:	Operational map for Lowland Rainforest: The operational map for Lowland Rainforest (LORF) was constructed to resolve long-standing issues surrounding its identification, location and extent within the NSW State Forest estate covered by the coastal Integrated Forestry Operation Agreements. The project's Threatened Ecological Community (TEC) Reference Panel (the Panel) preceded the assessment process by reviewing the determination for LORF. The Panel found that the determination for LORF relies almost exclusively on a rainforest classification system described by Floyd (1990) where several rainforest 'suballiances' make up the LORF assemblage. Floyd's suballiance classifications presented a challenge to our project as they were largely subjective and were not compatible with quantitative analysis, meaning that it was difficult to distinguish between the LORF TEC and other rainforest vegetation using statistically sound methods. To overcome some of these problems we revisited a set of reference sites that were assigned by Floyd to the suballiances cited in the LORF determination and in other rainforest TEC determinations, and collected new floristic data using standard flora survey methods. We also targeted a range of localities on State Forest that we considered likely to include LORF and other rainforest TECs based on the suballiance descriptions, cited localities in Floyd (1990), and preliminary distribution models. Over 300 new rainforest plots were combined with a large pool of existing data covering eastern NSW to construct a provisional revised rainforest classification. We used the rainforest groups derived from this analysis to compare the species composition of Floyd's suballiances, determination assemblage lists and recent rainforest classifications included in regional classifications. Rainforest groups (and the plots that defined them) were assigned to the Floyd suballiance with the highest degree of floristic similarity. We conferred with the Panel to resolve any inconsistencies between the results of our analyses and statements relating to the distribution and composition of individual suballiances in Floyd (1990) and the determinations. We then used plot data and a selection of environmental and remote-sensing variables to develop a Random Forest (RF) model of the probability of occurrence of LORF. We assessed the location of plots assigned to LORF against the distribution of the RF model on and adjoining State Forests. We then completed detailed aerial photograph interpretation (API) using a prescribed set of mapping classes to delineate rainforest areas for a range of canopy cover thresholds. We constructed an operational map of LORF by assigning our API polygons as being LORF based on the modelled probabilities and plot data underlying the polygon. Our mapping identified a total of approximately 14,036 hectares of LORF, the vast majority of which was located in the north coast region. We mapped 13,209 hectares of LORF on the north coast, with the largest areas found in Ewingar and Unumgar State Forests. Only 827 hectares of LORF were mapped on the south coast, with the largest areas found in Yadboro and Currowan State Forests. Operational map for Lowland Rainforest on Floodplains: The operational map for Lowland Rainforest on Floodplains (LRFP) was constructed to resolve long-standing issues surrounding its identification, location and extent within the NSW State Forest estate covered by the coastal Integrated Forestry Operation Agreements. The project's Threatened

Ecological Community (TEC) Reference Panel (the Panel) preceded the assessment process by reviewing the determination for LRFP. The Panel found that the determination for LRFP relies mainly on a rainforest classification system described by Floyd (1990) where several rainforest 'suballiances' make up the LRFP assemblage. The determination also identifies a range of floodplain and alluvial descriptors. Floyd's suballiance classifications presented a challenge to our project as they were largely subjective and were not compatible with quantitative analysis, meaning that it was difficult to distinguish between the LRFP TEC and other rainforest vegetation using statistically sound methods. To overcome some of these problems we revisited a set of reference sites that were assigned by Floyd to the suballiances cited in the LRFP determination and other rainforest TEC determinations, and collected new floristic data using standard flora survey methods. We also targeted a range of localities on State Forest that we considered likely to include LRFP and other rainforest TECs based on the suballiance descriptions, cited localities in Floyd (1990), and preliminary distribution models. Over 300 new rainforest plots were combined with a large pool of existing data covering eastern NSW to construct a provisional revised rainforest classification. We used the rainforest groups derived from this analysis to compare the species composition of Floyd suballiances, determination assemblage lists and recent rainforest classifications included in regional classifications. Rainforest groups, (and the plots that defined them), were assigned to the Floyd suballiance with the highest degree of floristic similarity. We conferred with the TEC Project Reference Panel (the Panel) to resolve inconsistencies between the results of our analyses and statements relating to the distribution and composition of individual suballiances in Floyd (1990), and the determinations. We attempted to use plot data and a selection of environmental and remote-sensing variable to develop Random Forest models of the probability of occurrence of LRFP, but we were unable to assign any of our rainforest groups to the assemblage lists or the primary suballiances cited in the LRFP determination. We overcame this problem by constructing a fine scale digital elevation model (DEM) of landscape elements that we considered were likely to be associated with the range of floodplain and alluvial descriptors identified in the determination for LRFP. We then mapped our rainforest groups onto the DEM and assigned any rainforest assemblage that overlapped with our alluvial and floodplain DEM map as LRFP TEC. Using this method we constructed an operational map of LRFP in State Forests on the NSW coast. Our mapped identified a total of 680 hectares of LRFP, all of which was located in the north coast region.

Operational TEC Mapping have been derived by API at a viewing scale between 1-4000 using ADS40 50 cm pixel imagery and 1 m derived LIDAR DEM grids for floodplain EECs.

Data quality rating:

★Institutional Environment - 4
★Accuracy - 4
★Coherence - 4
★Interpretability - 4
★Accessibility - 5

INSTITUTIONAL ENVIRONMENT	Very Good	★

✔ Does the information have the potential to enhance services or service delivery?

✔ The following governance roles and responsibilities for this asset are clearly assigned:

- Information Asset Owner
- Information Asset Custodian
- Information Steward

✔ Data collection is authorised by law, regulation or agreement

✔ The Custodial agency has no commercial interest or conflict of interest in the data

✗ The data aligns with the Data Quality Framework, including:

- Legislation
- Policies
- Information Asset Governance
- Standards
- Data Management Plans

ACCURACY	Very Good ★

✔ Data has been subject to a data assurance process (for example: Checking for errors at each stage of data collection and processing, or verifying data entry and making corrections if necessary.)

✔ There are no known gaps in the data or if there are gaps (for example: non-responses, missing records, data not collected), they have been identified in caveats attached to the dataset.

✔ No changes have been made or other factors identified (for example: weighting, rounding, de-identification of data, changes or flaws in data collection or verification methods) that could affect the validity of the data; or any changes/factors have been identified in caveats attached to the asset.

✔ The data collection met the objectives of the primary user. The data correctly represents what it was designed to measure, monitor or report.

✗ Data is revised and the revision is published if errors are identified

COHERENCE	Very Good ★

✔ Standard definitions, common concepts, classifications and data recording practices have been used.

✔ Elements within the data can be meaningfully compared.

✔ This data is generally consistent with similar or related data sources from the same discipline

✔ The data does not form part of a collection or, if it is the latest in a series of data releases, there have not been any changes in methodology or external impacts since the last data release.

✗ The data can be analysed over time (for example, there have not been any significant changes in the way items are defined, classified or counted over time).

INTERPRETABILITY	Very Good ★

✔ Information is available about the primary data sources and methods of data collection (e.g. instruments, forms, instructions).

✔ Information is available to help users evaluate the accuracy of the data and any level of error

✔ Information is available to explain concepts, help users correctly interpret the data and understand how it can be used

✔ Information is available to explain ambiguous or technical terms used in the data

✗ A data dictionary is available to explain the meaning of data elements, their origin, format and relationships

ℹ Find out more about the data dictionary from the Custodian (contact details below).

ℹ Find out more about the primary data sources and methods of data collection from the Custodian (contact details below).

ℹ Find out more about concepts used in this dataset and how to understand or interpret the data from the Custodian (contact details below).

ℹ Find out more about ambiguous or technical terms used in the data from the Custodian (contact details below).

ACCESSIBILITY	Excellent ★

✔ Data is available online with an open licence

✔ Data is available in machine-processable, structured form (e.g. CSV format instead of an image scan of a table)

✔ Data is available in a non-proprietary format (e.g. CSV, XML)

✔ Data is described using open standards (e.g. RDF, SPARQL) and persistent identifiers (URIs or DOIs)

✔ Data is linked to other data, to provide context (e.g. employee ID is linked to employee name or species name is linked to genus)

DATA DISCLAIMER

For more information about this dataset or data source, contact:	Environment Protection Authority (EPA)
Data Broker email:	N/A
Data Broker phone:	N/A

Understanding the Data Quality Statement

The data quality statement aims to help you understand how a particular dataset could be used and whether it can be compared with other, similar datasets. It provides a description of the characteristics of the data to help you decide whether the data will be fit for your specific purpose.
The Data Quality statement is prepared by the data custodian (provider of the dataset), using a questionnaire that has been developed in accordance with the NSW Government Standard for Data Quality Reporting.
About the quality rating:
The reporting questionnaire asks five questions for each of these data quality dimensions:

- Institutional Environment
- Accuracy
- Coherence
- Interpretability
- Accessibility

For each question: “yes” = 1 point; “no” = 0 points
The number of points determines the Quality Level for each dimension (high, medium, low).
Only dimensions with four or five points receive a star.

Points	Quality Level	Star / No Star
0	Poor	No Star
1	Poor	No Star
2	Fair	No Star
3	Good	No Star
4	Very Good	Star
5	Excellent	Star

Evaluating data quality

Quality relates to the data's “fitness for purpose”. Users can make different assessments about the dataquality of the same data, depending on their “purpose” or the way they plan to use the data.
The following questions may help you evaluate data quality for your requirements. This list is not exhaustive.Generate your own questions to assess data quality according to your specific needs and environment.

- What was the primary purpose or aim for collecting the data?
- How well does the coverage (and exclusions) match your needs?
- How useful are these data at small levels of geography?
- Does the population presented by the data match your needs?
- To what extent does the method of data collection seem appropriate for the information being gathered?
- Have standard classifications (eg industry or occupation classifications) been used in the collection of the data?If not, why? Does this affect the ability to compare or bring together data from different sources?
- Have rates and percentages been calculated consistently throughout the data?
- Is there a time difference between your reference period, and the reference period of the data?
- What is the gap of time between the reference period (when the data were collected) and the release date of thedata?
- Will there be subsequent surveys or data collection exercises for this topic?
- Are there likely to be updates or revisions to the data after official release?