Name of dataset or data source:	Assessment of North Coast Floodplain TECs on NSW Crown Forest Estate
Custodian of the dataset or data source:	Chief Environmental Regulator (EPA)
Description:	Operational map for River-flat Eucalypt Forest: The operational map for River-flat Eucalypt Forest (RFEF) 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 map was constructed in two parts, with State Forests to the north of Sydney being mapped in a separate process to those to the south of Sydney. We did this to minimise the risk that relationships between regional vegetation communities and the TEC would be confounded or masked by geographical variation or other major ecological gradients, which might otherwise be a significant risk if we had treated the full latitudinal range of the TEC as a single study area. In total, we assessed 1,218,000 hectares of State Forest across coastal NSW. This consisted of 868,000 hectares of State Forest on the north coast and more than 350,000 hectares of State Forest on the south coast. In both study areas, the project's Threatened Ecological Community (TEC) Reference Panel (the Panel) preceded the assessment process by reviewing the determination for RFEF and agreeing upon a set of diagnostic parameters for its identification. The Panel found that RFEF is primarily defined by floristic plot data and that it is mostly located on coastal floodplains and associated alluvial landforms. Following on from these conclusions, we started the mapping process by mapping the distribution of floodplains and alluvial soils and thus identifying possible areas of RFEF. For both the north and the south coast we used an existing map of coastal landforms and geology in combination with several fine-scale models of alluvial landform features to determine the likely extent of floodplains and alluvial soils within our study areas. We used aerial photograph interpretation (API) to assess the floristic and structural attributes of the vegetation cover found on our modelled alluvial environments, and thus delineated polygons likely to contain RFEF. We also used API to modify the boundaries of the modelled alluvial areas using a prescribed list of eucalypt, casuarina and melaleuca species in combination with the interpretation of landform elements relevant to alluvial and floodplain environments. We then compiled floristic plot data for all State Forest areas within our modelled alluvial landforms and API polygons. For both the north and the south coast the floristic plot data was sourced from both existing flora surveys held in the OEH VIS database and from targeted flora surveys conducted specifically for this project. We compared these plots with those previously assigned to flora communities listed in the determination of RFEF. Both dissimilarity-based methods and multivariate regression methods were used for the comparison. The results of the comparison were then used to assess the likelihood that the plots in State forests belonged to one or more of the communities listed in the RFEF determination. Following this, we developed a predictive statistical model of the probability of occurrence of RFEF using plot data and a selection of environmental and remote-sensing variables. For the north coast, we used a Random Forest model, while for the south coast we used a Boosted Regression Tree model. To create the operational map, we assigned every mapped API polygon to RFEF if appropriate based on the plot data, over-storey and understorey attributes, landform features and modelled probabilities underlying each API polygon. We mapped 3819 hectares of

RFEF on the south coast and 198 hectares of RFEF on the north coast.

Operational map for Swamp Oak Floodplain Forest:

The operational map for Swamp Oak Floodplain Forest (SOFF) 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 map was constructed in two parts, with State Forests to the north of Sydney being mapped in a separate process to those to the south of Sydney. We did this to minimise the risk that relationships between regional vegetation communities and the TEC would be confounded or masked by geographical variation or other major ecological gradients, which might otherwise be a significant risk if we had treated the full latitudinal range of the TEC as a single study area. In total, we assessed 1,218,000 hectares of State Forest across coastal NSW. This consisted of 868,000 hectares of State Forest on the north coast and more than 350,000 hectares of State Forest on the south coast. In both study areas, the project’s Threatened Ecological Community (TEC) Reference Panel (the Panel) preceded the assessment process by reviewing the determination for SOFF and agreeing upon a set of diagnostic parameters for its identification. The Panel found that SOFF is primarily defined by floristic plot data and that it is mostly located on coastal floodplains and associated alluvial landforms. Following on from these conclusions, we started the mapping process by mapping the distribution of floodplains and alluvial soils and thus identifying possible areas of SOFF. For both the north and the south coast we used an existing map of coastal landforms and geology in combination with several fine-scale models of alluvial landform features to determine the likely extent of floodplains and alluvial soils within our study areas. We used aerial photograph interpretation (API) to assess floristic and structural attributes of the vegetation cover on our modelled alluvial environments, and thus delineated polygons likely to contain SOFF. We also used API to modify the boundaries of the modelled alluvial areas using a prescribed list of casuarina and melaleuca species in combination with the interpretation of landform elements relevant to alluvial and floodplain environments. We then compiled floristic plot data for all State Forest areas within our modelled alluvial landforms and API polygons. For both the north and the south coast the floristic plot data was sourced from both existing flora surveys held in the OEH VIS database and from targeted flora surveys conducted specifically for this project. We compared these plots with those previously assigned to flora communities listed in the determination of SOFF. Both dissimilarity-based methods and multivariate regression methods were used for the comparison. The results of the comparison were then used to assess the likelihood that the plots in State forests belonged to one or more of the communities listed in the SOFF determination. To create the operational map, we assigned every mapped API polygon to SOFF based on the plot data, over-storey and understorey attributes, landform features and model output underlying each API polygon. In total, we mapped approximately 272 hectares of SOFF across our full study area.

Operational map for Swamp Sclerophyll Forest:

The operational map for Swamp Sclerophyll Forest (SSF) 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 map was constructed in two parts, with State Forests to the north of Sydney being mapped in a separate process to those to the south of Sydney. We did this to minimise the risk that relationships between regional vegetation communities and the TEC would be confounded or masked by geographical variation or other major ecological gradients, which might otherwise be a significant risk if we had treated the full latitudinal range of the TEC as a single study area. In total, we assessed 1,218,000 hectares of State Forest across coastal NSW. This consisted of 868,000 hectares of State Forest on the north coast and more than 350,000 hectares of State Forest on the south coast. In both study areas, the project’s Threatened Ecological Community (TEC) Reference Panel (the Panel) preceded the assessment process by reviewing the determination for SSF and agreeing upon a set of diagnostic parameters for its identification. The Panel found that SSF is primarily defined by floristic plot data and that it is mostly located on coastal floodplains and associated alluvial landforms. Following on from these conclusions, we started the mapping process by mapping the distribution of floodplains and alluvial soils and thus identifying possible areas of SSF. For both the north and the south coast we used an existing map of coastal landforms and geology in combination with several fine-scale models of alluvial landform features to determine the likely extent of floodplains and alluvial soils within our study areas. We used aerial photograph interpretation (API) to assess the floristic and structural attributes of the vegetation cover on our modelled alluvial environments, and thus delineated polygons likely to contain SSF. We also used API to modify the boundaries of the modelled alluvial areas using a prescribed list of eucalypt, casuarina and melaleuca species in combination with the interpretation of landform elements relevant to alluvial and floodplain environments. We then compiled floristic plot data for all State Forest areas within our modelled alluvial landforms and API polygons. For both the north and the south coast the floristic plot data was sourced from both existing flora surveys held in the OEH VIS database and from targeted flora surveys conducted specifically for this project. We compared these plots with those previously assigned to flora communities listed in the determination of SSF. Both dissimilarity-based methods and multivariate regression methods were used for the comparison. The results of the comparison were then used to assess the likelihood that the plots in State forests belonged to one or more of the communities listed in the SSF determination. Following this, we developed a predictive statistical model of the probability of occurrence of SSF using plot data and a selection of environmental and remote-sensing variables. For the north coast, we used a Random Forest model, while for the south coast we used a Boosted Regression Tree model. To create the operational map, we assigned every mapped API polygon to SSF if appropriate based on the plot data, over-storey and understorey attributes, landform features and modelled probabilities underlying each API polygon. In total, we mapped approximately 1131 hectares of SSF across out study area.

Operational map for Subtropical Coastal Floodplain Forest:

The operational map for Subtropical Coastal Floodplain Forest (SCFF) was constructed to resolve long-standing issues surrounding its identification, location and extent within the NSW State Forest estate covered by the eastern Regional Forest Agreements. The project’s Threatened Ecological Community (TEC) Reference Panel (the Panel) reviewed the determination for SCFF in conjunction with the determinations of three other TECs associated with coastal floodplain environments. The Panel agreed that SCFF is primarily defined by floristic plot data and that it is mostly located on coastal floodplains and associated alluvial landforms. The operational map was constructed in several stages. Firstly, we identified candidate areas for SCFF by mapping the distribution of floodplains and alluvial soils. To do this we used an existing map of coastal landforms and geology in combination with several fine-scale models of alluvial landform features to determine the likely extent of floodplains and alluvial soils in our study area. Secondly, we compiled floristic plot data for State Forest areas within these alluvial landforms. The floristic plot data was sourced from both existing flora surveys held in the OEH VIS database and from targeted flora surveys conducted specifically for this project. We compared these plots with those assigned to previously defined communities listed in the determinations for SCFF. Both dissimilarity-based methods and multivariate regression methods were used for the comparison. The results of the comparison were then used to assess the likelihood that plots in State forests belonged to one or more of the communities listed in the determination. Thirdly, we used aerial photograph interpretation (API) to assess both floristic and structural attributes found on the modelled alluvial and related environments. We also used API to modify the boundaries of the modelled alluvial areas using a prescribed list of eucalypt, casuarina and melaleuca species in combination with the interpretation of landform elements relevant to alluvial and floodplain environments. Fourthly, we 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 SCFF. To create the operational map, we assigned every mapped API polygon to SCFF if appropriate based on the plot data, over-storey and understorey attributes, landform features and modelled probabilities underlying each API polygon. In total, we mapped approximately 11,050 hectares of Subtropical Coastal Floodplain Forest. The majority of the mapped SCFF was located between Grafton and Casino.

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

DPE endeavours to make sure that information provided is correct at the time of its publication. However, as necessary you should obtain independent advice before making any decision based on the information. The information is made available on the understanding that custodial agencies and the State of NSW accept no responsibility for any damage, cost, loss or expense incurred by you as a result of:

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- without limiting the above, any delay, failure or error in recording, displaying or updating information, including but not limited to, data relating to credit holdings.

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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?