Title	Vegetation surveys and mapping of the Crinolyn and Windella Ramsar sites of the Gwydir wetlands 2023		
Abstract	This dataset is the Plant Community Type (PCT) mapping for the Crinolyn and Windella Ramsar sites of the Gwydir wetlands based on from the tree demographic and full floristic plot vegetation surveys undertaken by Eco Logical Australia from 12 April to 16 April 2023 under the NSW Department of Planning and Environment Gwydir Reconnecting Watercourse Country Program.		
	Within Crinolyn, three PCTs were recorded, two of which (PCT 40 and 53) occur in two distinct forms and form the dominant vegetation communities within the site. A total of four PCTs were recorded within Windella, one of which (PCT 53) occurs in two distinct forms. Coolabah woodland (PCT 40a and 40b) occupied a considerable extent (33.02 ha combined) of Crinolyn and the presence of dead Coolabah throughout areas of PCT 53a, indicate a greater previous extent of Coolabah woodland within and surrounding the site. The extent of Coolabah woodland (PCT 40b) across Windella is less extensive, consisting mostly of patches featuring one mature tree and surrounding saplings and seedlings. PCT 182, characterised by dense stands of Typha domingensis (Narrow-leaved Cumbungi), dominates the central and southern portions of Windella. Following recent inundation, Narrow-leaved Cumbungi is widespread across the majority of the site, featuring as a measurable component of the remaining three other PCTs.		
	A total of two tree demographic / full floristic plots and four full floristic monitoring plots were established in both the Crinolyn and Windella Ramsar sites. A total of 70 flora species (comprising 50 native and 20 exotic species) were recorded within Crinolyn full floristic plots, whilst a total of 48 flora species (comprising 33 native and 15 exotic species) were recorded within Windella full floristic plots. Condition class schemas developed for flood-dependent PCTs were applied to Crinolyn and Windella full floristic plot data. Condition class results were consistent for PCTs across both Crinolyn and Windella, with PCT 40 plots (PCT 40a and 40b) assessed as either Intermediate/Poor or Intermediate, whilst PCT 53a plots ranged from Intermediate to Good or Excellent/Benchmark and PCT 182 plots were assessed as Intermediate.		
	A total of 45 trees were assessed within the two tree demographic plots (CRIN_3 – PCT 40b and CRIN_6 – PCT 40 a) established and surveyed within Crinolyn Coolabah woodland patches. Despite the two plots occurring in the two different forms of Coolabah woodland (PCT 40a and PCT 40b), major differences in tree condition between the two sites were not apparent. A total of 65 trees were assessed within the two tree demographic plots (WIND_2 and WIND_3 – both PCT 40 b) established and surveyed within Windella Coolabah woodland patches. Both plots recorded consistent results, reflective of the similar structure of the Coolabah woodland patches present within Windella. Landscape features or structures present within and surrounding the Crinolyn and Windella Ramsar sites which may influence inundation and hydrological regimes were noted during the field survey, most evidently drainage channels that have been constructed within both sites. Both drainage channels influence the flow of water across both sites and in doing so, also influence the distribution and composition of vegetation within the sites. Away from site boundaries, and apart from Phyla canescens (Lippia) which was widespread across both sites, weed cover was generally low and no listed weed species for the region were recorded during field surveys (Local Land Services 2017).		
	Crinolyn and Windella Ramsar sites contain vegetation reflective of functioning wetland systems which vary in form and condition across their extent, and in addition to their individual ecological value, are an important part of the wider Gwydir Wetlands. At a broader scale, the separation of the sites from one another and surrounding wetlands is apparent, as is the influence of external factors such as the scale and intensity of surrounding land use. The vegetation and conditions within both sites at the time of field surveys were typical of a recent 'wet' period and may contrast considerably with 'dry' period conditions. Given this, there may be value in assessing condition changes across both sites through remote sensing and a follow up 'dry period' field survey. It is also recommended that a revision of the boundaries of both Crinolyn and Windella Ramsar sites be undertaken in order to maximise the extent of remnant vegetation and overall ecological value of both sites.		
Resource locator			
Data Quality	Name: Data Quality Statement		
Statement	Protocol: WWW:DOWNLOAD-1.0-httpdownload		
	Description:		
	Data quality statement for Vegetation Survey and Mapping of the Crinolyn and Windella Ramsar sites 2023		

<u>Vegetation</u> <u>Mapping of</u> <u>Windella and</u> <u>Crinolyn</u> <u>Ramsar sites</u> 2023	Name: Vegetation Mapping of Windella and Crinolyn Ramsar sites 2023		
	Protocol: WWW:DOWNLOAD-1.0-httpdownload		
	Description:		
	This is the shapefile of the Plant Community Type (PCT) mapping for the Crinolyn and Windella Ramsar sites of the Gwydir wetlands based on from the tree demographic and full floristic plot vegetation surveys undertaken by Eco Logical Australia from 12 April to 16 April 2023.		
	Function: download		
<u>Report of</u> Gwydir	Name: Report of Gwydir Wetlands Vegetation Survey 2023 – Crinolyn and Windella Ramsar sites		
<u>Wetlands</u> Vegetation	Protocol: WWW:DOWNLOAD-1.0-httpdownload		
Survey 2023 -	Description:		
<u>Crinolyn and</u> <u>Windella</u> <u>Ramsar sites</u>	Eco Logical Australia 2023. Vegetation survey and mapping of Crinolyn and Windella Ramsar sites 2023. Prepared for NSW Department of Planning and Environment – Environment and Heritage Group.		
	This report documents tree demographic and full floristic plot vegetation surveys and desktop and in-field Plant Community Type (PCT) mapping in the Crinolyn and Windella Ramsar sites from 12 April to 16 April 2023.		
	Function: download		
<u>Report of</u> <u>Gwydir</u>	Name: Report of Gwydir Wetlands Soil Seedbank Assessment 2023 - Crinolyn and Windella Ramsar Sites		
<u>Wetlands Soil</u> Seedbank	Protocol: WWW:DOWNLOAD-1.0-httpdownload		
Assessment	Description:		
<u>2023 - Crinolyn</u> <u>and Windella</u> Ramsar Sites	This report documents the soil seedbank assessment of the Crinolyn and Windella Ramsar sites, that complements the field vegetation surveys and mapping undertaken from 12 April to 16 April 2023 detailed in the report "Vegetation survey and mapping of Crinolyn and Windella Ramsar sites 2023" prepare by Eco Logical Australia.		
	Function: download		
Unique resourc	e identifier		
Code	6a3b6fd4-c758-4387-b163-081653acd84a		
Presentation form	Map digital		
Edition	1		
Dataset language	English		
Metadata standard			
Name	ISO 19115		
Edition	2016		
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/6a3b6fd4-c758-4387-b163-081653acd84a		
Purpose	To assist the planning, management and strategic delivery of environmental water to maintain and/or enhance key ecological assets in Ramsar listed wetlands in the Gwydir catchment of the Murray-Darling Basin.		
Status	Completed		
Spatial representation			

Function: download

Туре	vector	
Spatial reference system		
Code identifying the spatial reference system	4283	
Spatial resolution	100 m	
Topic category		

Keyword set			
keyword value	WATER-Wetlands		
	VEGETATION		
	VEGETATION-Floristic		
	VEGETATION-Structural		
Originating controlled vocabulary			
Title	ANZLIC Search Words		
Reference date	2008-05-16		
Geographic location			
West bounding longitude	149.09134		
East bounding longitude	149.12859		
North bounding latitude	-29.22608		
South bounding latitude	-29.19812		
NSW Place Name	Gwydir Catchment		
Vertical extent information			
Minimum value	-100		
Maximum value	2228		
Coordinate reference system			
Authority code	urn:ogc:def:cs:EPSG::		
Code identifying the coordinate reference system	5711		
Temporal extent			
Begin position	2023-12-04		
End position	N/A		
Dataset reference date			
Resource maintenance			
Maintenance and update frequency	As needed		
Contact info			
Contact position	Data Broker		
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water		
Telephone number	131555		
Email address	data.broker@environment.nsw.gov.au		
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew		
Responsible party role	pointOfContact		

Lineage	An accurate ecological a (PCTs) pres and field su	e and comprehensive vegetation map is a key component of understanding the assets contained within any site. The type and extent of Plant Community Types ent within the Crinolyn and Windella Ramsar sites were mapped using desktop rrvey methodologies detailed in the sub-sections below.		
	Pre-field de Ramsar site concerning condition m NSW State mapping so (Bowen et a	esktop assessment Recent vegetation mapping of the Crinolyn and Windella es from the following two sources was assessed to provide information the potential PCTs within and surrounding both sites: • Vegetation extent and happing of the Gwydir Wetlands and floodplains 2008 – 2015 (Bowen et al 2019) • Vegetation Type Map (DPE 2022a). Associated reports for both vegetation burces were reviewed to provide an insight into the mapping methodology applied al 2019) and relevant qualitative data associated with the likely PCTs (Benson et		
	The location surveyed in plot, located for re-surve following da areas for th Sensor 40 c Model capto 2022b) • NS	n and floristic composition of existing vegetation survey plots established and 2008 (Bowen unpub.) and 2019 (ELA unpub.) was assessed. Only one survey d within Crinolyn (CRIN_1 V26, see Results section below), was deemed suitable ey, as the other existing plots were located outside of the Ramsar boundary. The ata sources provided by DPE-EHG were also assessed to help determine target he field survey and plot locations: • Ramsar site boundaries • Airborne Digital cm (ADS40) aerial imagery captured August 2022 • 1m LiDAR Digital Elevation ured in 2009 • Gwydir Wetlands 10 year flood frequency map: 2012-2022 (DPE SW hydro line mapping.		
	Field survey Crinolyn (Fie collected us overstorey, positioning Maps, the s mapped in an initial in- community survey. Whi west corner the present surveyed fr delineate Pe	A total of 31 and 38 rapid vegetation assessment plots were completed across gure 2) and Windella (Figure 3) Ramsar sites respectively, with the following data sing ESRI Field Maps digital data collection software at each site: • Dominant midstorey and ground stratum species • Relevant soil and landscape features or • Initial field assigned PCT number • Photograph (where relevant). Utilising Field spatial extent of vegetation community patches encountered in the field were real-time, via the use of GPS-enabled georeferenced polygons. This allowed for field PCT map to be produced, which included the delineation of vegetation • boundaries based on vegetation and landscape conditions present at the time of ilst the majority of both sites were able to be surveyed on the ground, the south- r and central portion of Windella (Figure 6) was not able to be accessed due to ce of surface water and highly dense vegetation growth. These areas were form a distance using binoculars and aerial photograph interpretation in order to CT boundaries.		
Post-field desktop mapping Data collected from the field was downloaded directly into ESRI Arc Pro digital mapping software and Microsoft Excel formats for analysis and further refinement. In-field allocation of initial PCTs, along with rapid vegetation assessment and full floristic plot data, was quantitatively assessed against the PCT descriptions and species compositions detailed in the NSW BioNet Vegetation Information System (DPE 2023), along with previous mapping sources (Benson et al 2011 and Bowen pers. comm.). Attributes included Interim Biogeographic Regionalisation for Australia (IBRA) region and subregion, landscape position and features, soils, vegetation formation, vegetation class, dominant flora species in each stratum and their relative abundance. Once final PCT allocations were determined, a final PCT map was produced utilising ESRI Arc Pro with output files set to Geocentric Datum of Australia 2020 (GDA2020).				
Limitations on public access				
Responsit	ole party			
Contact po	osition	Data Broker		
Organisati	on name	NSW Department of Climate Change, Energy, the Environment and Water		
Telephone	number	131555		
Email addr	ess	data.broker@environment.nsw.gov.au		
Web address		https://www.nsw.gov.au/departments-and-agencies/dcceew		

Responsible party role

pointOfContact

Metadata point of contact			
Contact position	Data Broker		
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water		
Telephone number	131555		
Email address	data.broker@environment.nsw.gov.au		
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew		
Responsible party role	pointOfContact		
Metadata date	2024-02-26T13:11:02.270316		
Metadata language			