NSW Foundation Spatial Data Framework Data Custodian Records

The following spatial theme profile is the formal custodian arrangements for whole of government foundation spatial data.

Water theme

Theme profile

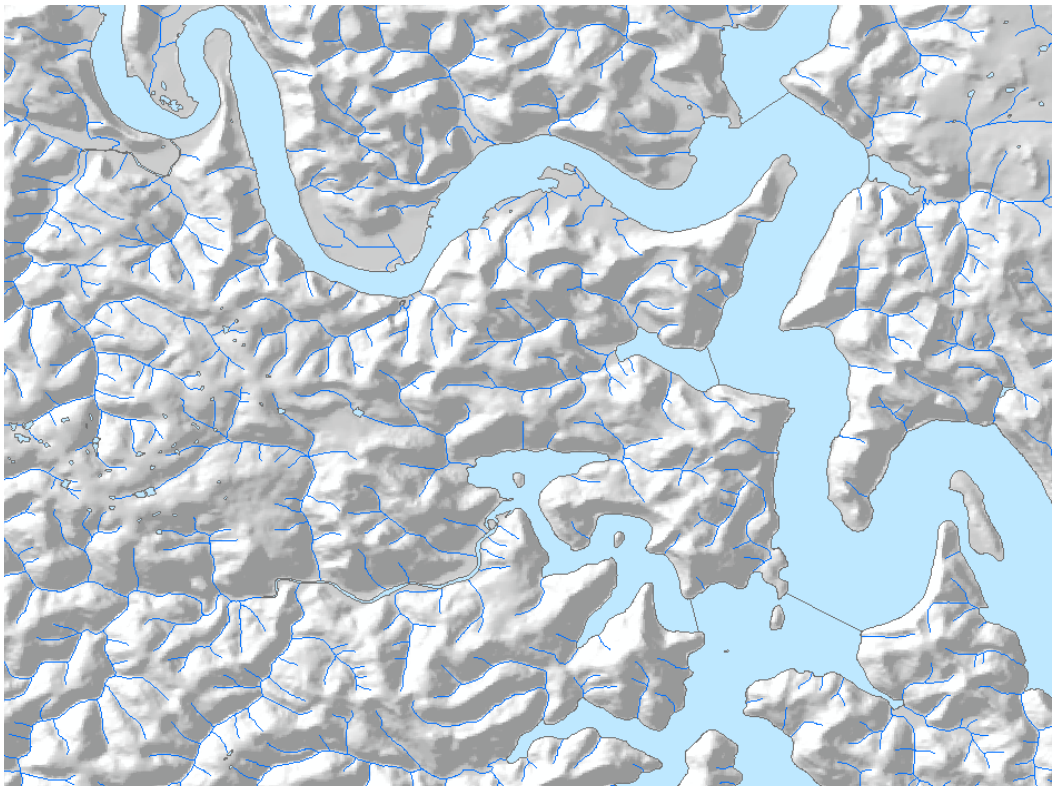

Image depicts a sample of the water theme datasets © DFSI Spatial Services 2018

Name	Water
Description	The Water theme is based on hydrology which is the study of the movement, distribution and quality of water. This includes the hydrologic cycles, water resources and environmental watershed sustainability. Hydrology includes surface hydrology, hydrogeology, drainage basin management and water quality where water plays the central role. Water (surface water and groundwater) is concerned with information as aligned with the definitions under the Water Act 2007. This theme includes Hydrology elements which are described as:

	Surface Water • Water in a watercourse, lake or wetland. • Any water flowing over or lying on land, either: • after having precipitated naturally after having risen to the surface naturally from underground. **Groundwater** • Water occurring at a place below ground that has been pumped, diverted or released to that place for the purpose of being stored there • Does not include water held in underground tanks, pipes or other works.
Datasets	Ancillary Hydro Point Coastline Fuzzy Extent Water Area Fuzzy Extent Water Line Hydro Area Hydro Line Hydro Point Named Water Course
Purpose	Water security is one of Australia's major challenges. The benefits of using these nationally consistent data products include analysis, improved operational practises and policy decision making. Key users of the hydrology data are NSW State and Local Government agencies as well as Federal Government agencies. These bodies use this data to better manage State and Local Government assets. This hydrology data provides the NSW component of the Australian Hydrological Geospatial Fabric which is a critical input to the Australian Water Resources Information System. More widespread use of the hydrology data is also found in emergency management response and recovery efforts, hazard mitigation or disaster risk reduction, climate change, natural resource assessment, environmental planning and monitoring, insurance, mining and agriculture.
Status	The data was systematically upgraded in 2011 using latest available imagery to achieve a more consistent state wide and national specification. Update frequencies vary for each dataset. Individual current status can be found under each Spatial data profile.
Future status	The objective is to maintain the hydrology datasets to meet the FDSI requirements of key data users.

	Current programs include: • Farm dam and other water storages are continuously updated using latest available imagery for NSW government water custodians and auditors. • Development projects are investigating the use of high resolution surface model data for the improvement of selected catchment areas within the State. • Integration of custodial and other higher order data from other providers will continue to ensure continued improvement of data. Longer term programs include: • Continued spatial upgrade of hydrology datasets using latest acquired and higher resolution imagery • Utilisation of feature recognition and change detection for the maintenance of farm dam and other water storages • Increased accuracy of sea and estuarine shorelines to assist with planning, emergency management and climate control.
Standards	AS/NZS ISO 19115 - ANZLIC Metadata Profile Version 1.1. AS/NZS ISO 19131:2008 Geographic Information - Data product specifications. OGC compliant Web Map Services (WMS) and Web Feature Services (WFS).
Version	Version 0.7