

Metadata Form – NRC

1. Identification Information

Data Set Name: Northland Flood Susceptible Land

Data Set Abstract: The layer denotes areas of floodplain, alluvial soil and peat basins that are considered susceptible to flooding.

Dataset Purpose: The objective of publishing these indicative data is to alert people to a potential hazard, enabling any decisions on the development or use of the land to be made having due regard to the risks involved.

The data does not attempt to differentiate on the grounds of probability of the land being flooded, that is, the data does not distinguish between land that is likely to flood frequently and land that may only flood on rare occasions. That sort of detail is the subject of ongoing investigation and where the information is available it will be held in the relevant District Council's Hazards Database.

Supplemental Information: Some of the areas so defined are on the floodplains of rivers for which more detailed information is available or will become available over the next five to ten years. This data is held on a Hazards Database and may be inspected at the offices of the Far North District Council or the Northland Regional Council.

Access Constraints: Creative Commons Licence Attribution 3.0

Use Constraints: Due to the scale of mapping, there will be some land within the areas so defined that may well be free from flooding, just as there will be land outside of the areas defined as flood-susceptible that is subject to flooding.

The data from which these data has been derived has been surveyed and recorded at a scale of 1:50,000. The data should not be enlarged or used at any more detailed scale.

Data Set Credit: This dataset was derived by Bob Cathcart, Northland Regional Council from the Fundamental Soils of New Zealand dataset (published by LandCare Research).

Data Set Originator: Northland Regional Council

Publication Date and Edition: August 2009

Progress: Complete

Update Frequency: As needed

2. Data Set Contact Details

Contact Organisation: Northland Regional Council

Contact Position: Land Programme Manager

Programme: Land Operations

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3. Data Quality

Source Information:

Source scale: 1:50,000

Type of source material: GIS Shapefiles

Data Acquisition Method(s): This dataset was derived by Bob Cathcart, Northland Regional Council from the Fundamental Soils of New Zealand dataset (published by LandCare Research).

4. Attribute Information

Attribute titles, values and descriptions:

Soil types per category

Category 1 - RECENT SOILS

Soils on the banks of rivers and in narrow valleys where floodwaters are moving and where sand and silt have been and continue to be deposited by floodwaters.

WF	Whakapara silt loam and clay loam
WFm	Whakapara mottled clay loam
Wfa	Whakapara sand
MF	Mangakahia silt loam and clay loam
MFm	Mangakahia mottled clay loam

Category 2 – ESTUARINE CLAYS (Gleysoils)

These are areas on higher terraces that are flooded less frequently, may be on the alluvial fans where streams emerge from adjoining hills, or may include basins where runoff is trapped, causing ponding. Included in this category are smaller basins and lower, frequently flooded areas amongst less frequently flooded higher terraces. (The terrace levels are easily defined on detailed scale data or onsite)

KA	Kaitaia clay loam ^{** (1)}
Kay	Kaitaia peaty clay loam
KP	Kaipara clay and clay loam
KPy	Kaipara peaty clay loam

Category 3 - SOILS OF THE UNDULATING TERRACES AND LOWLANDS

Soils formed from organic matter laid down in swamps. Included in this category are areas which may be above flood level at the present time, but as the peat dries out and "shrinks" (oxidises), the land settles, increasing the risk of it being flooded

WO	Whareora clay loam ^{** (2)}
WOa	Whareora sand
KM	Kohumaru clay ^{** (3)}
KO	Kamo clay loam
KOI	Kamo silt loam

KOy	Kamo peaty silt loam
YF	Waipapa clay ^{**⁽⁴⁾}
YU	Waipu clay
YUy	Waipu peaty silt loam and peaty clay

Category 4 - ORGANIC SOILS (SOILS OF COASTAL SAND DUNE COMPLEXES AND SWAMPY BASINS) (Estuarine Flats)

Soils formed from organic matter laid down in swamps. Included in this category are areas which may be above flood level at the present time, but as the peat dries out and “shrinks” (oxidises), the land settles, increasing the risk of it being flooded.

RK	Ruakaka peaty sandy loam
RKd	Ruakaka loamy peat
RKv	Ruakaka peaty silt loam
RKI	Ruakaka peaty sandy loam
RKu	Ruakaka fine sandy peat
OG	Otonga peaty clay loam
OGd	Otonga loamy peat
OR	Otakairangi peaty clay loam
ORd	Otakairangi loamy peat
PZ	Parore peaty sandy loam

Category 5 - SOILS OF THE ESTUARY EDGES AND FORMER LAKE BEDS (GleyPodzols)

These are flat areas that may be affected by ponding or by high tides

TCa	Takahiwai sand
TC	Takahiwai clay
TCy	Takahiwai peaty clay loam
TCya	Takahiwai peaty sand
YUa	Waipu peaty sand
YUay	Waipu peaty sand
OE	Ohia sand
OEy	Ohia peaty sand
TZ	Tawharanui sand
TZy	Tawharanui peaty sand
KK	Kaikino sand
TEKm	Te Kopuru sand, wet phase

NOTES:

- (1) Kaitaia clay loam on the Awanui River floodplain includes both low-lying land and higher (+ 2.0 metres) terraces.
- (2) Whareora clay at various locations is found in association with either Whakapara silt loam and clay loam, where Whareora clay is on the higher terraces and the younger Whakapara soil is on the lower floodplain, or with a gleyed or peaty soil (Waipu) where the latter soil is in a basin trapped behind the higher terrace. The scale at which the maps are published means that the soil types, and therefore the more or less flood susceptible land cannot be differentiated. On the ground, the terrace levels can be identified. (Examples – Oromahoe, floodplain of the Manaia Stream near the intersection of Oromahoe Road and SH10, and Kaingaroa, floodplain and terraces of the Mangatete River, alongside Duncan Road)
- (3) Kohumaru clay appears as slightly higher terraces on the floodplain of the Awanui River between Pampurua and Kaitaia. At the scale of mapping, both the soils maps and the District Plan, it is not possible to differentiate between the lower terraces, some of the higher terraces that are subject to flooding in a major flood and the even higher terraces that are above flood level. The more detailed survey and modelling work on the Awanui River will define those areas that are subject to flooding and this data will be recorded in the hazards database

5. Metadata Reference

Metadata date: 20092608

Contact Organisation: NRC

6. Further Metadata Information

Related Information: NZFSL – Landcare Research Ltd