DCP 30

Acid Sulfate Soils

KEMPSEY
Shire Council

Development Control Plan 30

1 INTRODUCTION

1.1 Citation

This Plan may be cited as the Kempsey Shire Council Development Control Plan No 30 - Acid Sulfate Soils.

1.2 Commencement and Operation of Plan

This Plan was adopted by Council on 11 May 1999 and shall be effective from 23 May 2000

The DCP is a Council plan prepared in accordance with Section 72 of the Environmental Planning and Assessment Act 1979. The operation of the Plan is subject to the statutory provisions of:

- Kempsey Local Environmental Plan 1987

1.3 Application of Plan

This DCP shall apply to all land with Kempsey Shire Council Local Government Area, however, it will only have direct application to land outlined in Section 2.1 - Local Environmental Plan - Acid Sulfate Soils map.

Applicants should note that the landuse tables contained in LEP 1987, still apply. All applicants are advised that they should contact Council's Environmental Services Department if there are any questions in this regard.

1.4 Aims and Objectives

The principal aims of this Plan are to:

- provide guidance to landowners, consultants and the general community on the procedures involved in the management of activities within areas affected by acid sulfate soils. (ASS)
- to ensure that activities located within an area of acid sulfate soils risk is identified.
- to require a preliminary acid sulfate soil assessment be undertaken to clarify the extent of risk.
- to require an acid sulfate soil management plan to be prepared where the nature of development poses an acid sulfate soil risk.

1.5 Development Application Procedure

Step 1 Check the Local Environmental Plan - Acid Sulfate Soils map to determine whether the land in question is within an area affected by acid sulfate soils.

Step 2 If the proposed activity is likely to materially alter the land; affect groundwater; result in any disturbance to ASS or involve placement of any ASS on any land, a development application is required, unless a

preliminary soils assessment is carried out which indicates that no such effects will occur.

Step 3 a If a development application is required, carry out a preliminary soil assessment to determine the specific extent of acid sulfate soil. Details are provided in Section 2.3 and the Acid Sulfate Soils Assessment Guidelines, or

b Assume that the soils within the site of the proposal contain acid sulfate soil and by-pass this step and carry out step 4.

Step 4 Prepare an acid sulfate soil management plan for all proposals which will disturb/expose acid sulfate soils or potential acid sulfate soils or impact on the groundwater within ASS areas.

During the preparation of the soil assessment or management plan, applicants are urged to liase with local offices of:

- Department of Land and Water Conservation
- Environment Protection Authority
- NSW Fisheries
- NSW Department of Agriculture
- Council's Environmental Services Department

2 ASSESSMENT

2.1 Development Control Plan - Acid Sulfate Soils maps

Council has prepared maps for this Development Control Plan based on data supplied by the Department of Land and Water Conservation which indicate those areas likely to contain ASS. The DCP ASS Maps indicate five classes of land based on the likely depth of ASS and works categories likely to result in their disturbance.

The five principal land classes are as follows:

Class	Development Control Requirements
1	Works within mapped waterways which will disturb the ground surface.
2	Works below the ground surface and/or where the water table is likely to be lowered.
3	Works beyond 1 metre below the natural ground surface and/or where the water table is likely to be lowered beyond 1 metre below natural ground surface.
4	Works beyond 2 metres below the natural ground surface and/or where the water table is likely to be lowered beyond 2 metres below natural ground surface.

5	Works where the water table is likely to be lowered to below 1 m AHD in adjacent class 1,2,3 or 4 land.

The onus is on the landowner, contractor and proponent of any works to check which class their land falls within and to lodge a Development Application or preliminary soils assessment with Council. Land not classified on the maps (shown in white) may still require development consent in accordance with the landuse tables of the particular zone. Check with Council's Development Environmental Services Department.

2.2 Types of Development

The following activities, works, development and the like are subject to the need to obtain development consent unless a preliminary soil assessment is carried out which indicates that the works will not disturb any ASS or impact on groundwater:

- drainage works
- excavation works
- laying of pipes, cables, etc
- works which will have the effect of lowering the water table
- flood mitigation works, including construction of levees
- construction of dams, stock water holes and the like
- site levelling
- buildings and structures

2.3 Preliminary Soils Assessment

Where it is proposed to carry out any of the activities which are subject to the need to obtain development consent or where an exemption is being sought, a Preliminary Soils Assessment or Management Plan must be submitted to Council.

All applicants have the opportunity to assume that the soils within the site of their proposal contains Acid Sulfate Soil and by-pass the need to undertake a preliminary soils assessment. However, this will still necessitate a Soil Management Plan to be undertaken in accordance with Section 2.4

A Preliminary Soils Assessment must be undertaken by a suitably qualified person and include the matters outlined in the Acid Sulfate Soils Assessment Guidelines.

2.4 Soil Management Plans

All Development Applications for proposals which will disturb Acid Sulfate Soils or impact on groundwater within ASS areas, must include a Soil Management Plan prepared in accordance with the Acid Sulfate Soils Assessment Guidelines, as amended from time to time.

3 JOINT APPLICATIONS

3.1 Joint Applications

Where a development involves, or may impact upon a number of properties in the one locality, a joint development application for the work and its ongoing maintenance is encouraged by Council. This will include the preliminary soil assessment and/or management plan outlined in Section 2. Development where this should apply may include construction of a drain that traverses more than one property or flood mitigation works which may impact upon a specific area.

4 GLOSSARY OF TERMS

Acid Sulfate Soil: soil containing the highly acidic soil horizons or layers resulting from the aeration of soil materials that are rich in iron sulfides, primarily pyrite.

Acid Sulfate Soils Assessment Guidelines: guidelines published by the NSW Acid Sulfate Soils Management Advisory Committee.

Acid Sulfate Soil Local Environmental Plan Map: a map prepared by Council for the purpose of identifying land which requires development consent prior to certain works being undertaken.

Actual Acid Sulfate Soil: acid sulfate soils containing acidic soil material resulting from the oxidation of iron sulfides. The soil material has a pH of less than 4 when measured inn dry season conditions and may be identified by either yellow mottles and coatings of jarosite overlying potential acid sulfate soils containing 0.05% oxidisable sulfur.

Agricultural-related Works: includes any farming or land management activities which will materially alter the shape or natural form of the land or which may alter groundwater levels including:

- drainage works
- maintenance of open drains
- excavation works
- construction of dams, stock water holes and the like
- site levelling
- flood mitigation works, including construction of levees
- topsoil removal and turf farming
- laying of pipes, cables etc.

but does not include ploughing, scarifying, tilling or deep ripping (less than 50cm).

DCP ASS Maps: form part of this Plan and describe the risk categories to which this Plan refers.

Drain: a man-made ditch deeper than 30cm, used to draw water from one area to another.

Flood Mitigation Works: are structural measures intended to reduce flood damage by either reducing flood levels or the lateral extent of flooding and include:

- levees
- flood mitigation dams
- retarding basins
- by-pass floodways
- flood gates on drains
- channel improvement

Jarosite: pale yellow mineral deposits which form around old root channels and soil aggregates in acid sulfate soils under strongly oxidising, severely acid conditions (Jarosite is one of the most commonly used morphologic features to identify acid sulfate soils, although not always present).

Maintenance of Existing Drains: refers to any works which will disturb or remove soil within existing drains.

pH: a measure of acidity or alkalinity of the soil. A pH of 7.0 denotes neutrality, higher values indicate increasing alkalinity, and lower values indicate increasing acidity.

Potential Acid Sulfate Soil: soil material is waterlogged and contains oxidisable sulfur compounds that has a field pH of 4 or more but will become severely acid when oxidised.

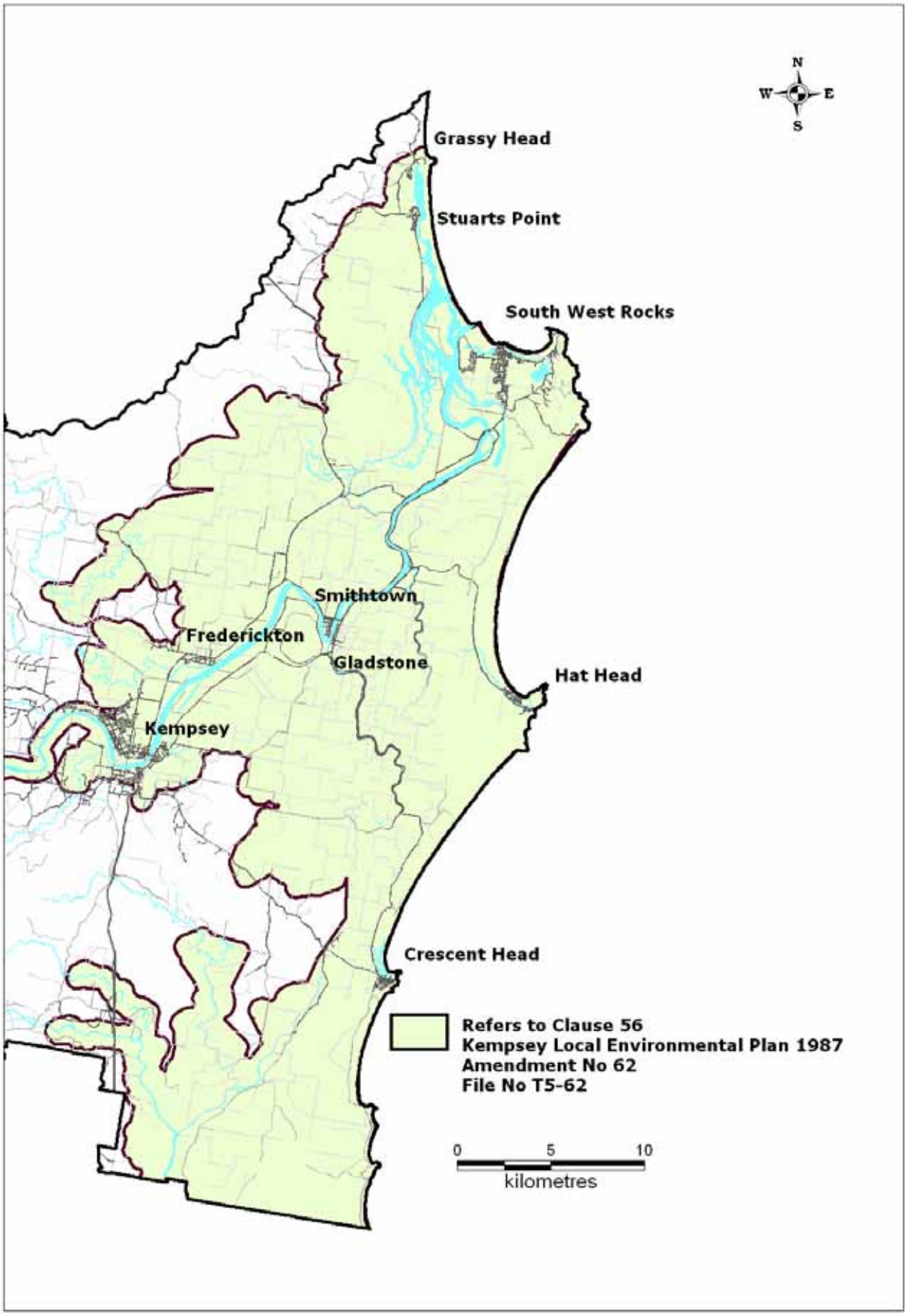
Preliminary Soils Assessment: a soil survey involving soil sampling and laboratory methods outlined in the Acid Sulfate Soils Assessment Guidelines.

Pyrite: the cubic crystalline form of ferrous disulfide (FeS_2).

Soil Management Plan: a full description of the management procedures to be applied for a site. The Management Plan must comply with the requirements of the Acid Sulfate Soils Assessment Guidelines.

Suitably Qualified Person: a person registered with Council as having suitable qualifications to undertake the assessment of acid sulfate soils and to prepare a preliminary soil assessment and/or soil management plan.

Works which may alter groundwater levels: includes drainage works and underground pumping in land adjacent to land containing acid sulfate soil which would lower the groundwater in the general use.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W
E
S
Grassy Head
Stuarts Point
South West Rocks
Smithtown
Frederickton
Gladstone
Hat Head
Kempsey
Crescent Head
Refers to Clause 56
Kempsey Local Environmental Plan 1987
Amendment No 62
File No T5-62
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