

2. BACKGROUND

P. Guinane Pty Ltd (trading as Tweed Turf and Sand) (the Applicant) operates a sand quarry on land off Crescent Street, Cudgen, in the Tweed local government area (see Figure 2). The sand quarry is principally used to supply brickies loam or fine washed sand for concrete manufacture. The total area of the subject site is 77.2 hectares of flat low-lying land on the Tweed River floodplain (see Figure 3).

Tweed Shire Council (Council) granted development consent for Phase 1 of the quarry in 1983, which included establishment of a turf farm and brickies loam pit on the site. Approximately 11.6 hectares was subjected to extraction between 1989 and 2000. In 2001, Council granted consent for expansion of the quarry, which comprised extraction of sand from a further 6.8 hectares (Phase 2), as well as the establishment of a recreational fishing facility within the waterbody created by the dredge quarry operation (it is noted that this component has not yet commenced).

The existing land use on the site includes the Phase 1 and 2 sand extraction areas, a tea tree plantation (50 hectares) and tea tree distillery/ manufacturing plant. Land use in the surrounding area includes:

- cane farming and cattle grazing to the north and west;
- sand extraction has been approved to the east for filling of land at Chinderah Road, Cudgen;
- wastewater treatment plant has been approved on land to the north; and
- residences to the southeast (260 metres) and east (450 metres) from the boundary of the extraction area.

The Applicant now proposes to further expand the quarry, identified as Phases 3, 4 and 5.



Figure 2: Regional Context

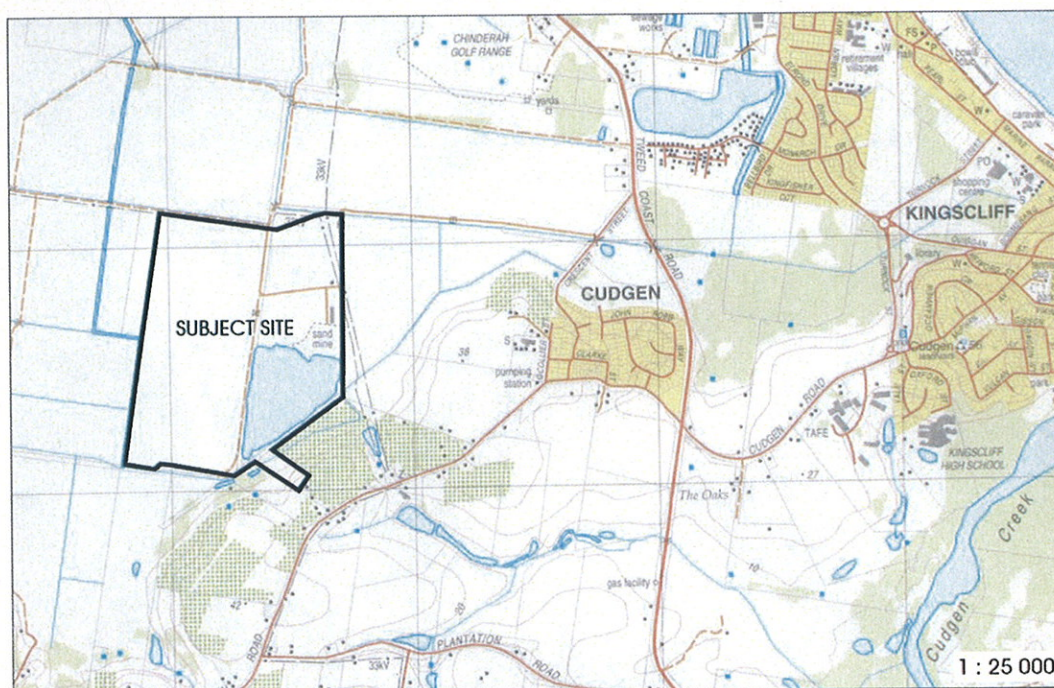


Figure 3: Site Plan

3. PROPOSED DEVELOPMENT

The Applicant is proposing to develop Phases 3, 4 and 5 of the sand quarry. The proposal involves:

- extracting a total of approximately 8.7 million cubic metres of sand, including:
 - Phase 3 – additional sand extraction from the existing Phase 1 pond to a depth of approximately 20 metres below natural ground surface, for an estimated sand resource of 812,590 cubic metres;
 - Phase 4 – expansion of the extraction area to the west of Phase 1 and 3, for an estimated sand resource of 3,640,760 cubic metres; and
 - Phase 5 – expansion of the extraction area to the north of Phase 2 and 4 areas, for an estimated sand resource of 4,238,820 cubic metres;
- extracting at a rate of approximately 150,000 cubic metres per annum;
- operating the sand quarry for 58 years; and
- progressively rehabilitating the quarry to form a lake area for ongoing use as a recreational fishing facility.

The sand would be extracted using two diesel-powered dredges. The proposed expansion would use the existing plant for sand washing and processing, which would be relocated to more convenient sites for each of the subsequent development phases.

The proposal would increase the area of the existing dredge pond by about 53 hectares to a total area of approximately 70 hectares.

The recreational fishing facility would involve stocking the pond with native fish, and opening the pond to small groups of recreational fishers, with the facility managed on a controlled catch-and-release basis. The facility would not involve any supplemental feeding of the stocked fish. The facility would operate concurrently with the quarry operations, and continue following the end of quarrying.

The layout of the proposal is shown on Figure 4, and the final landform concept is shown on Figure 5.

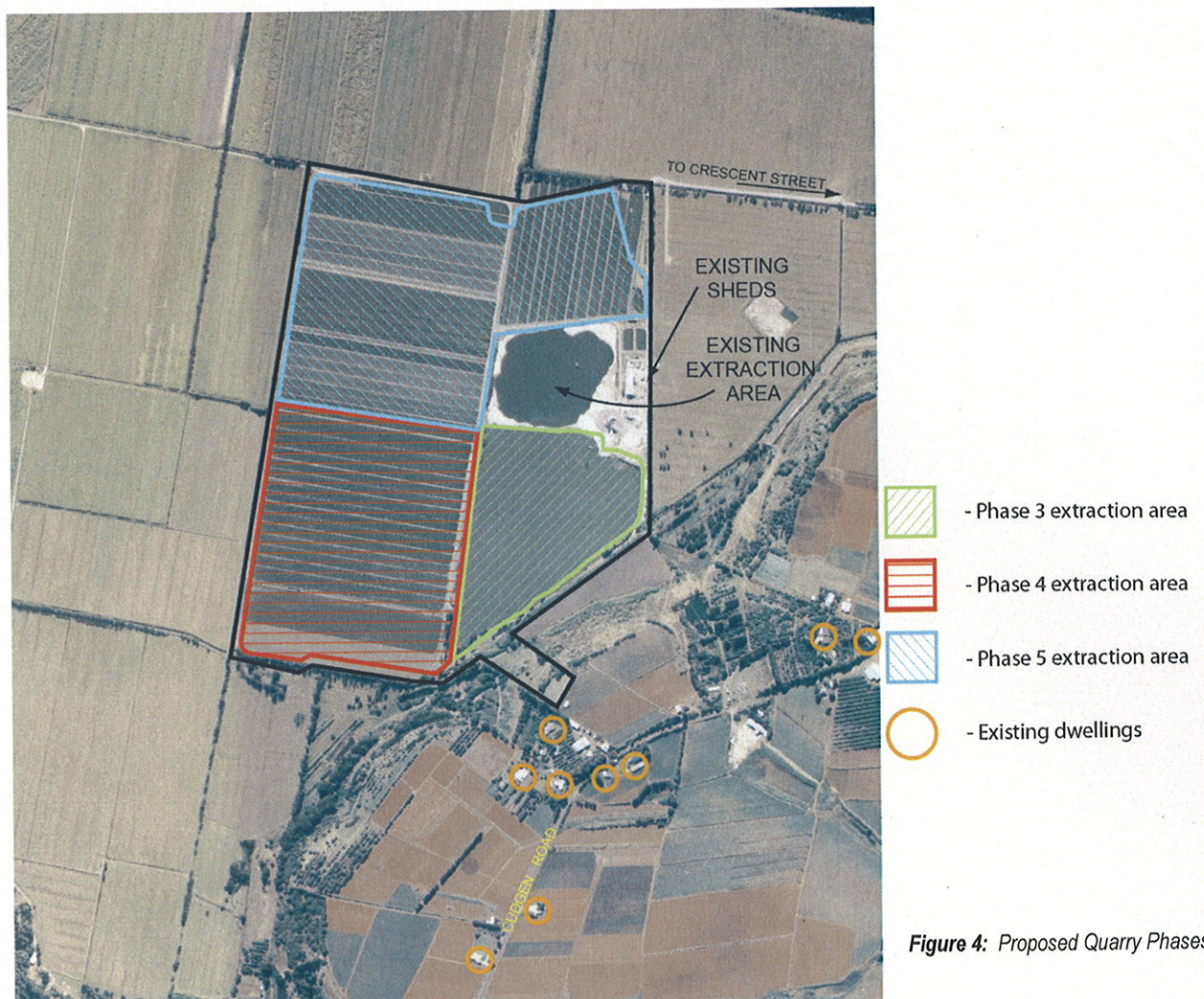


Figure 4: Proposed Quarry Phases

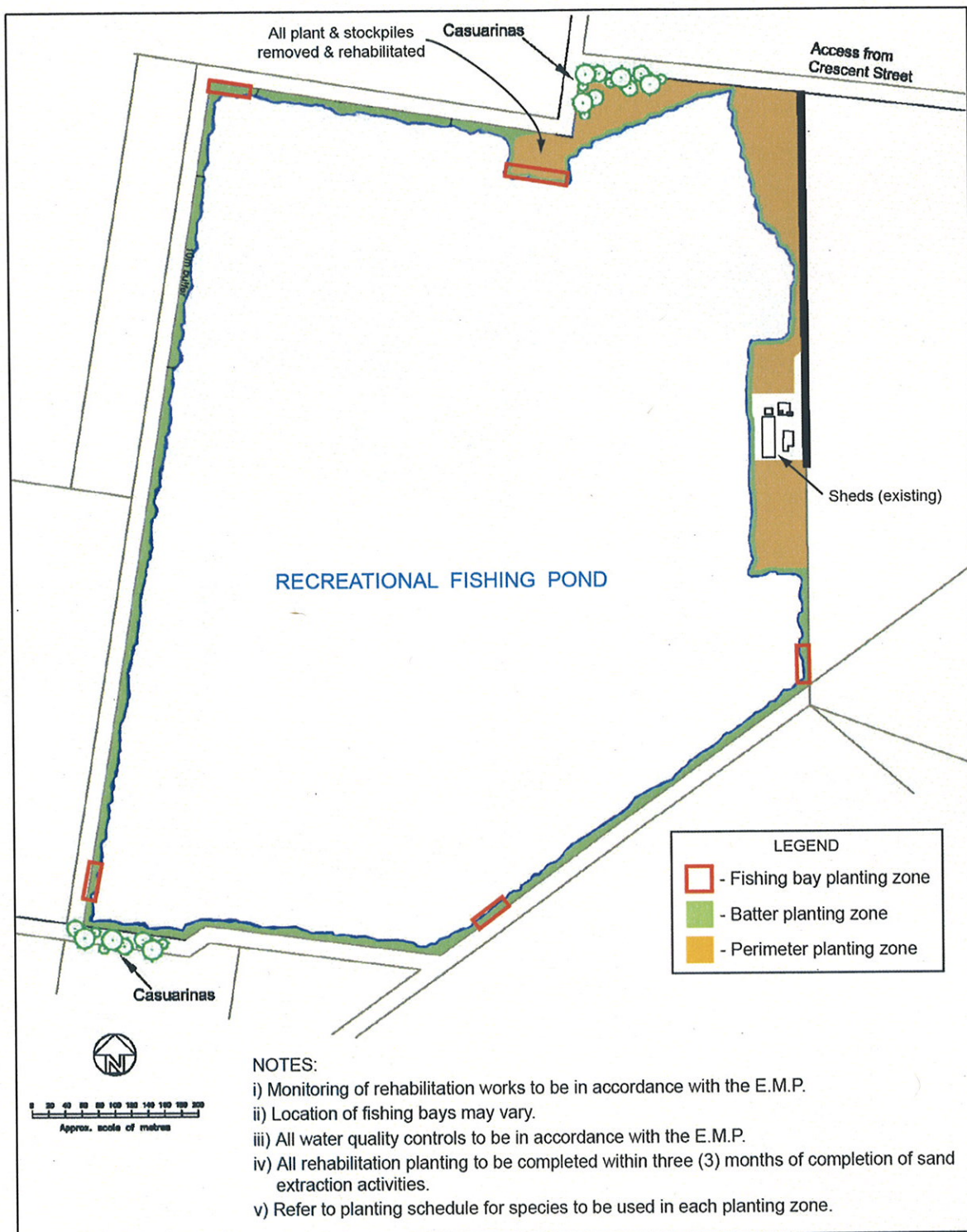


Figure 5: Final Landform Concept

4. STATUTORY CONTEXT

Under the *Environmental Planning and Assessment (EP&A) Act 1979*, the proposal is classified as State significant, designated, and integrated development.

4.1 Permissibility

The land subject to the development application (DA) is zoned part 1(b1) and part 1(b2) Rural – Agricultural Protection under the *Tweed Local Environment Plan (LEP) 2000*. A small part of the land, a road corridor, is unzoned.

The proposed sand quarrying extension represents development for the purpose of 'extractive industry' under the LEP. The proposed use of the dredge pond as a recreational fishing facility represents development for the purpose of a 'rural tourist facility'. Both these uses are permissible with consent in the Agricultural Protection zone (and the unzoned portion), but the extractive industry use must satisfy clause 8(2) of the LEP.

The Department has assessed the proposed extractive industry use against clause 8(2) and is satisfied that the development can be carried out in a manner that is consistent with the provisions of the clause (see consideration in Appendix B). This consideration is subject to the recommended conditions of consent, which include granting approval for Phases 3 and 4 only (see Section 6.1.1 below).

4.2 State Significant Development

The DA was lodged on the basis that the proposal was classified as State significant development under section 76A(7) of the EP&A Act, because it complied with the criteria in schedule 1 of *State Environmental Planning Policy (State Significant Development) 2005*, being development for an extractive industry with a total resource greater than 5 million tonnes and an extraction rate exceeding 200,000 tonnes a year.

While the Minister did not formally form the opinion that the proposal was classified as State significant development (as required by clause 6 of this SEPP) before the SEPP was repealed in conjunction with the introduction of Part 3A of the EP&A Act, clause 8J(7) of the *Environmental Planning and Assessment Regulation 2000* provides:

'8J(7) If:

- (a) a development application was made before the commencement of Part 3A of the Act on the basis that the development was State significant development, and
- (b) the Minister is required to form an opinion that the development is State significant development in order to determine the application on that basis (but the Minister had not, before that commencement, formed an opinion on the matter),

the Minister may, after that commencement, form an opinion that the development was, at the time the application was made, State significant development. In that case, the application is to be determined (unless withdrawn by the applicant) as if the amendments made to the Act by Schedule 1 to the Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Act 2005 had not been made.'

Consequently, the Minister may form the opinion that the proposal is State significant development and determine the DA under Part 4 of the Act even though the SEPP has subsequently been repealed, and this proposal would need to be assessed under Part 3A if it were lodged today.

The Department is satisfied that the proposal complies with the criteria in schedule 1 of *State Environmental Planning Policy (State Significant Development) 2005*, and consequently recommends that the Minister form the opinion that the proposal is classified as State significant development.

While the recreational fishing facility component of the proposal does not trigger the criteria in the SEPP, it is deemed to be State significant development by virtue of section 76A(8)(a) of the unamended EP&A Act, which provides that if a project comprises development part of which is State significant development, all other development comprised in the project is taken to be State significant development.

4.3 Designated Development

The proposal is classified as designated development under section 77A of the EP&A Act and schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), because it involves an extractive industry obtaining more than 30,000 cubic metres of material per year and will disturb a total surface area of more than 2 ha of land.

4.4 Integrated Development

The proposal is classified as integrated development under section 91 of the EP&A Act because it requires additional approvals from the:

- Department of Environment and Conservation (DEC), under the *Protection of the Environment Operations Act 1997*; and
- Department of Natural Resources (DNR), under the *Water Act 1912*; and

The Department of Primary Industries (DPI) was also initially identified as an integrated approval body, but the DPI later confirmed that an approval under the *Fisheries Management Act 1994* is not required for the development.

The integrated approval bodies have provided their General Terms of Approval (GTAs) for the proposal.

4.5 Environmental Planning Instruments

The following environmental planning instruments are relevant to the proposal:

- *State Environment Planning Policy (SEPP) No. 11 – Traffic Generating Developments*;
- *SEPP No. 33 – Hazardous and Offensive Development*;
- *SEPP No. 44 – Koala Habitat Protection*;
- *SEPP No. 55 – Remediation of Land*;
- *SEPP No. 62 – Sustainable Aquaculture*;
- *North Coast Regional Environmental Plan 1988*; and
- *Tweed Local Environment Plan 2000*.

An assessment of the proposal in relation to each of these environmental planning instruments is provided in Appendix B. Following its assessment the Department is satisfied that the proposal can be conducted in a manner that is broadly consistent with the relevant requirements of the applicable planning instruments.

5. CONSULTATION AND ISSUES RAISED

On 28 June 2005, the Applicant lodged a DA and EIS for the proposal with the Department.

The Department subsequently:

- notified the residents in the vicinity of the site who could be affected by the proposal;
- notified Tweed Shire Council and the relevant State government agencies;
- advertised the exhibition of the DA and EIS in the Tweed Daily News on 2 occasions; and
- exhibited the DA and EIS from 22 July 2005 until 26 August 2005.

This satisfies the requirements for public participation in the EP&A Regulation.

5.1 Submissions Received

In response to the exhibition period, the Department received 9 submissions on the DA: 4 from government authorities (Tweed Shire Council, Department of Primary Industries, Department of Lands, and Roads and Traffic Authority), and 5 from the general public. None of the government authority submissions objected to the proposal, whilst all 5 public submissions objected to the proposal.

Tweed Shire Council

Council does not object to the development, but provided a comprehensive list of matters for the Department's consideration, including:

- ensuring the development is consistent with environmental planning instruments and the existing consents;
- noise management and hours of operation;
- visual amenity and lighting;
- truck movements, traffic impacts and road upgrades;
- soil and water related issues, including contamination, acid sulfate soils, monitoring, dewatering, erosion/sediment control;
- flooding;
- site rehabilitation; and
- section 94 contributions.

Department of Primary Industries

DPI-Minerals considers that, given the significance of the sand resource, the proposal is in the community's interest provided that it is found to be environmentally acceptable. The DPI raised a small number of issues, including:

- the depth of the resource;
- the potential for the sand to be used for low value filling; and
- the potential for resource to remain following the end of the proposed quarry life.

DPI-Agriculture considers that the proposed development would not have a significant impact on agriculture in the region, given its localised nature and that the EIS suggests the development can be conducted without significant environmental impact. DPI-Agriculture raised a small number of issues for the Department's consideration, including:

- groundwater drawdown;
- erosion of pond banks / long term stability; and
- cumulative impacts of additional sand quarrying proposals in the region.

Department of Lands

The Department of Lands does not object to the proposal, and has forwarded its conditional landowner's consent for that part of the proposal that constitutes Crown Road. The Applicant has subsequently notified the Department that it has purchased the Crown Road from the Department of Lands.

Roads and Traffic Authority

The RTA does not object to the proposal, but raised the following issues:

- impacts on the existing road network, including reassessment of the junctions of Crescent Street, Chinderah Road and the site access road;
- design of road infrastructure to be to AUSTROAD and Tweed Council standards;
- the access road should be upgraded to Council's standards for two-way traffic flow, including an upgrade to the access road/site driveway junction;
- sand mining and tourist operations to be clearly separated; and
- maintenance contributions should be payable based on haulage rates.

Public Submissions

All 5 public submissions objected to the proposal, on grounds including:

Issue	No. of submissions raising issue
Noise (dredging and trucks)	5
Traffic impacts (safety and road damage)	5
Soil and water impacts (groundwater drawdown, water pollution, flooding)	4
Dust	3
Hours of operation	3
Scale of the development, duration, and buffers	3
Site rehabilitation	2
Agricultural impacts	2
Visual impacts	2
Compliance with existing consent	2

Table 1: Issues Raised in Public Submissions

Copies of all the submissions received are attached in Appendix C, and the Applicant's response to the issues raised in the submissions is attached in Appendix D.

The Department has assessed all of the relevant issues raised in the various submissions in Section 6 of this report.

6. ASSESSMENT

6.1 Environmental Impacts

Key issues raised in the submissions to the proposal and/or identified during the Department's assessment include:

- scale and duration of the proposal;
- groundwater and surface water effects, including water pollution (especially blue-green algae), watertable drawdown, and flooding;
- acid sulfate soils;
- rehabilitation, landform and long term management;
- noise and hours of operation; and
- traffic.

The Department's assessment of these key issues, as well as other issues associated with the proposal, is presented in the following sections.

6.1.1 Scale and Duration of Sand Extraction

Issue

The application seeks approval for a considerably long sand extraction timeframe of 58 years, with the quarry ultimately covering an area of around 70 hectares.

Consideration

The three phases of the quarry extension would involve the following timeframes:

- Phase 3 – years 1 to 5;
- Phase 4 – years 6 to 29; and
- Phase 5 – years 30 to 58.

The Department generally limits consents for extractive industry and mining projects to between 20 to 30 years. These limitations are necessary given long term regional growth and planning timeframes, and the inherent difficulty in predicting the impacts of such development over the very long term. Notwithstanding, each proposal is assessed on a case-by-case basis on its merits.

In relation to this proposal, the Department has a number of concerns regarding the granting of a significantly extended consent timeframe. These concerns include:

- potential cumulative impacts with planned development nearby (which include a wastewater treatment plant to the north adjacent the Phase 5 pond, an aquaculture project to the west, and another sand quarry to the east);
- the proximity of the site to urban centres including Cudgen and Kingscliff;
- long term water quality impacts; and
- potential changes to the environs of the subsequent quarrying phases (especially Phase 5) over time.

Given the uncertainty associated with these aspects, the Department believes that a precautionary approach should be applied to the proposal, and has therefore recommended limiting the proposal to Phases 3 and 4 only. The granting of consent for Phases 3 and 4 would give the Applicant adequate long term security of resource supply (30 years approval for a total sand resource of some 4.5 million cubic metres), whilst reducing the potential long term impacts of the development.

Conclusion

The Department is not satisfied that the proposed 58 year timeframe represents orderly development of the land. Therefore, the Department recommends limiting the proposal to Phases 3 and 4 only, or 30 years of sand extraction/rehabilitation.