

Infrastructure and minerals

How can we improve the management of infrastructure and minerals in our regional plans? This is a summary of our initial ideas.

What is infrastructure and mineral extraction?

The focus of this topic is on regionally significant infrastructure and large-scale mineral extraction activities on land, and all types of infrastructure and mineral extraction in the coastal marine area.

On land, infrastructure and mineral extraction are managed under regional and district plans. However, regional plans tend not to manage small-scale infrastructure and mineral extraction activities (for example, farm quarries) therefore these are not included in this topic.

In the coastal marine area, the regional coastal plan operates like a 'district plan' – hence the topic's inclusion of all types of infrastructure and mineral extraction in this area.

Regionally significant infrastructure is defined in the Proposed Regional Policy Statement and includes electricity generation/transmission, municipal waters (water, wastewater, stormwater), solid waste, roads, and rail. Infrastructure in the coastal marine area includes pipelines, wastewater outfalls, electricity transmission lines, and road bridges.

Large-scale mineral extraction activities can include both mining and quarrying, which in Northland is dominated by aggregates, limestone and china clay. Mineral extraction in the coastal marine area can include sand mining, gas and petroleum extraction.

Overview of the regional plans review

This is one of 10 summary reports for the review of Northland's regional plans.

Northland has three regional plans:

- Regional Air Quality
- Regional Coastal Plan
- Regional Water and Soil Plan

We are required to review the regional plans every 10 years. We have reviewed all three regional plans at the same time.

The review is the first step to prepare a new regional plan. The review looks at:

- What we know about our resources and their use;
- Lessons learnt from administering the regional plans
- Current legal and policy drivers; and
- Feedback from key stakeholders and tangata whenua

The review concludes with options or recommendations for the new regional plan.

We've split the review up into 10 topics:

- Water quality
- Water quantity
- Marine ecosystems and biodiversity
- Coastal water space
- Air quality
- Significant natural heritage values
- Māori participation in resource management
- Natural hazards
- Infrastructure and mineral extraction
- Hazardous substances

For more information go to - nrc.govt.nz/newregionalplan

What needs to change in the regional plans?

1 Current regional plans do not adequately recognise the benefits of infrastructure

Since the development of the regional plans there have been a number of national policy documents and national environmental standards that have become operative concerning infrastructure. These changes have generally resulted in a need to better recognise and provide for the benefits of infrastructure. These include the following:

- National Policy Statement Electricity Transmission 2008 – plans and policy statements required to recognise and provide for the benefits of electricity transmission.
- National Environmental Standards Electricity Transmission 2010 – includes standards that provide for electricity transmission, including discharges to air and water.
- New Zealand Coastal Policy Statement 2010 – plans and policy statements required to recognise that the provision of infrastructure/energy is an important socio-economic activity, recognise the functional need of activities to locate in the coastal marine area, recognise renewable energy resource potential, and provide for the effective operation of ports.
- National Policy Statement Renewable Electricity Generation 2011 – plans and policy statements required to recognise and provide for the benefits of renewable electricity generation.
- National Policy Statement Freshwater Management 2014 – exceptions to be developed for nationally important infrastructure in meeting freshwater bottom lines, use of water for hydroelectricity is an identified national value.

To reconcile national policy direction, the Proposed Regional Policy Statement includes policy direction on regionally significant infrastructure and renewable electricity development. It attempts to balance the need to develop, operate and maintain regionally significant infrastructure against the protection criteria, including the strict avoidance regime, of the New Zealand Coastal Policy Statement (for more detail on this see the Significant Natural and Historic Heritage topic and the Marine Biodiversity topic).

The Regional Coastal Plan performs the function of a 'district plan' as well as that of a regional plan. Therefore, matters normally subject to district council jurisdiction, such as location, are considered alongside other matters such as water quality. The current Regional Coastal Plan has a policy on network utilities which provides some direction for decision-making, however it is silent on renewable electricity/energy development. There is no policy guidance to address instances where there is a conflict between providing and operating infrastructure against the requirement to protect significant natural and historic heritage resources (those matters of national importance in Section 6 of the Resource Management Act). This is important in the light of the New Zealand Coastal Policy Statement which requires us to provide for activities such as infrastructure, whilst at the same time protecting matters of national importance in Section 6 (including by avoiding adverse effects on 'outstanding' values).

The Regional Water and Soil Plan and the Regional Air Quality Plan do not have any policy on infrastructure or renewable energy in a general sense, although they do have policy on particular activities which concern infrastructure, for example, managing the effects of municipal wastewater discharges. The documents are of less overall importance than the Regional Coastal Plan due to the fact that they do not function as a 'district plan'; however the use of resources by infrastructure is of relevance. Both documents could benefit from

more policy direction in this regard, to better recognise the benefits of infrastructure and to provide guidance as to how to manage conflict with Section 6 matters where it arises.

1.1 Possible changes to the regional plans

- We could include in a new regional plan a consistent ‘overarching’ policy framework to guide decision-making for regionally significant infrastructure proposals. Such an approach should include consideration of the benefits of regionally significant infrastructure along with recognition of the constraints on location and design, any positive effects offered by the proposal (for example, a net gain from offsetting) and use of tools such as adaptive management to address unknown effects. This is particularly relevant for proposals with more significant adverse effects, especially where these effects may impact on sensitive natural resources. Although this approach is a part of the Proposed Regional Policy Statement, the regional plan could refine this to a greater level of detail – for example by providing guidance on how to make the trade-offs between the benefits of infrastructure with key adverse environmental effects, and how infrastructure can/should work within environmental bottom lines. At the infrastructure and minerals stakeholder workshop there was general support for this approach, noting there needs to be a hook that gives regionally significant infrastructure a chance to locate in an area. There was also support for clearly identifying, through mapping, where restrictive policy in the NZCPS applies – reducing conflict and debate at the resource consent stage.
- We could recognise in plans the renewable resource potential of the region including discussion as to where there are areas of particular significance – for example geothermal energy at Ngāwhā, tidal energy at Kaipara Harbour and the narrows in Hokianga Harbour, and integrating the findings of the Northland Renewable Energy Assessment (produced by the Energy Efficiency and Conservation Authority, 2009).
- We could direct decision-makers by providing specific policy on the benefits and constraints associated with the development and renewable electricity generation, including large and small-scale uses.

2 Reducing compliance costs and improving consistency for infrastructure development.

Infrastructure confers a particular benefit on society as a whole. Where infrastructure has been working well with minor effects, new regional plans should look at ways of reducing compliance costs by taking more of a risk-based approach. The Proposed Regional Policy Statement provides direction to this effect requiring us to examine opportunities to reduce compliance costs by utilising agreed performance standards, reducing notification and information requirements or using a less strict consent activity status where appropriate. It is also important for our plans to recognise that technology has moved on since our plans were originally drafted 20 years ago. Therefore specific rules governing the establishment and operation of infrastructure should be closely examined to see if new construction methods can control the level of risk and reduce the possibility of adverse effects.

2.1 Possible changes to the regional plans

- We could recognise that there is a ‘cost’ to the community in requiring continuous upgrading to existing infrastructure and minor effects can generally be discounted to avoid excessive community cost.
- We could outline circumstances where re-consenting proposals can be progressed on a non-notified basis. Other methods could include reducing information requirements by using a more relaxed consent activity status for activities that are

working well, have minor adverse effects and comply with objectives and policies in the new Proposed Regional Policy Statement.

- We could give effect to the National Policy Statement Renewable Electricity Generation by recognising the importance of resources, such as water, for the ongoing operation of renewable electricity generation. Participants at the workshop felt that in general, policy and rules governing renewable electricity generation need to be flexible enough to enable the assessment and approval of future technologies and responsive to changes in energy demand.
- We could consider policy direction that recognises that short-term effects from maintenance or upgrading activities associated with infrastructure, where effects are not significant, can generally be tolerated. This gives effect to Policy 5.3.3 of the Proposed Regional Policy Statement. Workshop participants generally agreed with this approach, noting that from an infrastructure provider's point of view, it is better to maximise value from existing networks than build anew. Established infrastructure should also be seen as part of the existing environment – especially where it exists in a mapped significant area.
- We could re-examine rules for the placement, maintenance and upgrading of network utilities crossing (over, under and through) freshwater bodies and coastal waters. In respect of coastal activities, attention was drawn at the workshop to the difference in effects between temporary and permanent occupation of space – current coastal plan rules do not make this distinction and it would be useful if they did at least for the purposes of maintaining and upgrading infrastructure. Additionally it was felt that rules need to recognise that often, the short term effects that arise from construction (from the use of heavy machinery for instance) can be well managed by infrastructure providers. In respect of network utilities crossing freshwater, technological advances mean that network activity where there is currently a high degree of precaution in rules (e.g. construction and maintenance of sewer lines) may now have much less of an impact.
- We could consider incorporating any acceptable performance standards or developing our own with infrastructure providers where appropriate, in order to streamline consenting. This gives effect to Policy 5.3.4 of the Proposed Regional Policy Statement. Performance standards could be incorporated into, for example, a controlled activity rather than requiring a full discretionary activity.
- For established infrastructure, we could consider 'spot zoning' to enable certain activities to continue to take place without requiring a consent (or to be processed as a controlled activity) subject to performance standards (see above). This provides more certainty if rules are otherwise tightened (for example, land disturbance rules in flood plains – see the Natural Hazard topic for more detail).

3 Community concern about mineral extraction activities

Mining is a big issue for many people in Northland as it brings jobs and opportunities but can also be subject to high impact but low probability environmental effects. It is therefore important to have an effective regulatory regime in place, taking a precautionary approach where this is appropriate. The type of 'mining' that is the subject of community concern relates to crown minerals (e.g. oil, gold, silver), not 'quarrying' which is typically understood to involve the extraction of aggregates, limestone and china clay.

Mining of crown minerals is managed in a variety of ways in the current regional plans through existing rules on, for example, discharges and land disturbance. In general there is no evidence that these rules are inadequate to manage mining activities that take place on land, should they arise in future. However, there is a high degree of community concern

about this issue and there are New Zealand examples of legacy issues involving high clean-up costs and on-going management problems, long after certain types of mining activity have ceased. The debate on mining of crown minerals is therefore centred on the extent to which a prohibited approach is appropriate in plans, noting the approach that has been taken in the Coromandel District where a prohibited approach was seen as a management tool in itself (*Coromandel Watchdog of Hauraki Inc v Chief Executive of the Ministry of Economic Development, 2007*). The Court of Appeal ruling suggested that councils can use the prohibited approach where they have insufficient information while developing a plan to determine how an activity should be provided for; where it seeks to take a deliberate staged approach; and/or where it wants to direct in a strategic way the sustainable management of resources and where it represented an expression of social or cultural outcomes or expectations (for example prohibition of nuclear energy generation).

There are no major issues with the rules for quarrying activities. The main issue identified at the stakeholder workshop was that there are a number of rogue operators (i.e. those without a Health and Safety licence or certificate of competence) operating in the region although addressing this is best achieved from an enforcement standpoint rather than any rule changes. There was a desire by workshop participants to re-examine land disturbance thresholds to recognise that quarrying is a distinct activity (from other land disturbance activities) where the effects are known and concentrated in a particular area. It was also recognised however that there might be a tension between a more permissive regime for quarrying if it 'lowered the bar' for rogue operators as well.

In the coastal marine area, the current Regional Coastal Plan mainly focusses on sand mining rather than wider mineral extraction activities – there is no specific policy or rules on gas and oil extraction for example. The New Zealand Coastal Policy Statement Policy 6 however requires regional plans to recognise the benefits of mineral extraction in the Coastal Marine Area (and this includes oil and gas extraction). This consideration however also needs to be balanced against other policies in the New Zealand Coastal Policy Statement that require us to protect sensitive areas such as outstanding natural character and significant indigenous biodiversity by 'avoiding' adverse effects (for more detail on this, see the Significant Natural and Historic Heritage topic and the Marine Ecosystems and Biodiversity topic).

3.1 Possible changes to the regional plans

We could include a general overarching policy or series of policies on mineral extraction covering land and marine activities. The policy could provide guidance where activities are likely to be inappropriate (for example, where there is a clear conflict with Section 6 matters of national importance and direction in the New Zealand Coastal Policy Statement to 'avoid adverse effects'). In terms of specifically using a prohibited approach for crown mineral extraction activities, a Section 32 assessment could determine whether this is an appropriate tool in a new regional plan. The Coromandel example however was specifically related to a district plan change, not a regional plan and associated with the protection of outstanding natural landscapes.

Some specific changes to plan rules that could be considered include:

Regional Coastal Plan

- Referencing the '*code of conduct for minimising acoustic disturbance to marine mammals from seismic survey operations*' produced by the Department of Conservation. This is relevant for noise producing marine seismic surveying activities.
- Making small-scale sampling for minerals in the Coastal Marine Area a permitted activity – currently it is a controlled activity in the Regional Coastal Plan but the effects are typically minor.

- Large-scale mineral extraction involving disturbance to the foreshore and seabed potentially could be made a non-complying activity in ‘outstanding’ areas. Currently all disturbance to the foreshore and seabed associated with mineral extraction (other than small-scale sampling), even in Marine 1 Management Areas, is a discretionary activity (by default). Tightening the rules would also implement any protection policies in the plan thus giving full effect to the New Zealand Coastal Policy Statement.

Regional Water and Soil Plan

Although there are rules for bore construction activities in the plan, these rules are primarily concerned with bore drilling for the purposes of groundwater extraction. In fact the definition of a ‘bore’ in the plan does not incorporate exploration activities for the purpose of investigating rock types and collecting core samples. Although drilling fluids associated with the drilling activity require consent if they contain hazardous substances, the act of drilling the bore does not. These exploration activities however run the risk however of intercepting a groundwater resource but, as a permitted activity, the Council cannot act until after this has happened (by requiring retrospective consent). To clear this up, a change to the definition of a ‘bore’ could be considered to capture the full range of bore drilling activities – this would result in this activity requiring consent.