# Guidelines for meeting the land suitability and economic viability requirements for high-value and irrigated high-value agriculture applications

**Version 2.1 – 3 July 2017**

Queensland Government

This publication has been compiled by Land and Mines Policy, Department of Natural Resources and Mines

# Contents

# 1. Introduction

This guideline supports the *Guidelines for applying for high-value and irrigated high-value agriculture* by providing additional information requirements to assist with the preparation of the land suitability and economic viability parts of the development plan (i.e. parts 6 and 7).

You should work through the *Guidelines for determining high-value and irrigated high-value agriculture* **first** before you start using this guideline. This is because proposed vegetation clearing in some areas (i.e. Category 1 land suitability areas) do not have the additional information requirements outlined in this guideline.

The additional information that is required in certain situations for land suitability and economic viability is outlined below in Table 1. This information needs to be prepared by a suitably qualified person.

### Table 1: Additional information requirements

| Land suitability category | Information requirement | |
|---|---|---|
| | Land suitability | Economic viability |
| **Category 2:** Detailed land resource mapping/information available (up to 1:100,000 scale) showing land suitable for proposed crop and management system. | Nil – detailed information already available | Certification of business plan by a suitably qualified person |
| **Category 3:** Some land resource mapping/information available (up to 1:100,000 scale). | Land suitability report prepared and signed by a suitably qualified person | Certification of business plan by a suitably qualified person |
| **Category 4:** No suitable land resource mapping available (no land resource mapping available ≤1:100,000 scale) | Land suitability report prepared and signed by a suitably qualified person | Business plan prepared and certified by a suitably qualified person. |

Section 2 of this guideline outlines the land suitability requirements and Section 3 outlines the economic viability requirements.

Because there are different criteria for suitably qualified persons for economic viability to those for land suitability, it may be necessary to engage a suitably qualified person in each field.

# 2. Land suitability (development plan template part 5)

Land suitability Categories 3 and 4 require further information from a suitably qualified person to confirm the land is suitable for the proposed crops. Category 3 areas have some land resource mapping available however Category 4 areas have no, or suitable land resource information available (e.g. only 1:250 000 scale). This further information should be incorporated into a land suitability report prepared and certified by a suitably qualified person.

For applications for irrigated high-value agriculture in land suitability categories 2, 3 and 4, confirmation from a suitably qualified person that the volume of water the applicant holds, is authorised or has access to hold is sufficient for the proposed development is required. Specifically, for category 2 a signed statement form a suitably qualified person that the volume of water that the applicant holds, is authorised or has access to hold is sufficient for the proposed development and any existing irrigated agriculture. For categories 3 and 4, the land suitability report prepared and certified by a suitably qualified person, must demonstrate and confirm that the volume of water the applicant holds, is authorised or has access to hold is sufficient for the proposed development and any existing irrigated agriculture.

## 2.1 Suitably qualified person

To be a suitably qualified person under this section, a provider must:

1. have a demonstrated and current background of experience in providing professional advice or consultancy services in relation to farming systems, for example soil survey, and/or land resource management services; and
2. hold tertiary qualifications appropriate to providing relevant advice; and
3. have a minimum of 5 years' experience in the field of soil assessment and agricultural land suitability analysis; and
4. have experience and / or knowledge of the proposed crops.

It would also be highly desirable to—

1. hold membership with the Australian Institute of Agricultural Science and Technology; or
2. hold membership with Soil Science Australia; or
3. be a Certified Professional Soil Scientist (CPSS); or
4. be a Certified Practicing Agriculturalist (CPAg).

Note that current employees of the Queensland Government are not eligible to act as a suitably qualified person for the applicant under this Guideline.

The suitably qualified person will need to provide documentation that demonstrates their experience in providing professional advice or consultancy

services, their tertiary qualification, their experience in soil assessment and land suitability analysis, and experience and knowledge of the proposed crops in the area.

## 2.2 Mapping tools for land suitability

Two mapping tools have been developed to assist in the land suitability assessment:

1. **Land Suitability Maps available online at www.qld.gov.au/environment/land/vegetation/map-request/**
   By entering your lot and plan, and selecting the crop type, you will receive a series of PDF maps by email. This mapping tool identifies the land resource information and mapping the Queensland Government has available in the vicinity of your property to help determine if your land is suitable for the proposed crops and management systems.

   It also provides a link to relevant land resource reports that will contain key crop and soil information to help you assess your proposal against the land suitability categories.

2. **Queensland Globe vegetation management maps available online at www.dnrm.qld.gov.au/mapping-data/queensland-globe**
   This interactive mapping product contains the same mapping data as the land suitability mapping tool however it also has an image base to assist with identifying property features. Other related vegetation management maps are also available on this globe.

## 2.3 Category 3: Some land resource mapping/information available (up to 1:100,000 scale)

This category applies to applications where there is some land resource mapping or information available (up to 1:100,000 scale), however it either does not cover the entire area that is proposed to be cleared, or the land suitability mapping and information does not identify the land as suitable for the proposed crop and management systems. Therefore, further information is required from a suitably qualified person to demonstrate and confirm that the land is suitable for the proposed crops and management systems. This additional information needs to fill in the gaps between the available land resource mapping and information to make it clear that the land is suitable for the proposed high-value agriculture development.

The mapping information provided on either the land suitability online mapping tool or Queensland Globe Vegetation Management maps or that can be requested online at the Department of Natural Resource and Mines (DNRM) website (www.dnrm.qld.gov.au/environment/land/vegetation/management/) will indicate the land resource studies and information available for your area. Some of the land resource studies used to create these maps, are unlikely to crop or group of crops, or particular management systems.

A land suitability report prepared by a suitably qualified person and developed with reference to the *Guidelines for agricultural land evaluation* and

associated *Regional land suitability evaluation frameworks* for Queensland (available at https://www.dnrm.qld.gov.au/__data/assets/pdf_file/0005/111686/regional-land-suitability-frameworks.pdf ), the *Australian soil and land survey field handbook* and *Guidelines for surveying soil and land resources* is required to fill the gaps and certify that the land is suitable for the particular crops and management systems proposed.

A list of the information that should be included in the land suitability report is provided in Attachment 1. The level of detail required in the report will depend on the availability of existing studies, the scale of mapping and complexity of the application. Suitable levels of detail, observation types and guidance on collecting field data is set out in category 4.

## 2.4 Category 4: No suitable land resource mapping available

This category applies to applications in locations where land resource data is either unavailable or at such a broad scale that it does not provide sufficient information for the purposes of this assessment.

Category 4 areas should be identified on the land suitability overview map provided on either the land suitability online map tool or Queensland Globe vegetation management maps.

A detailed land suitability study of the area the subject of the application must be undertaken by a suitably qualified person. The suitably qualified person must also prepare a land suitability report, developed in accordance with the *Guidelines for agricultural land evaluation* and associated *Land evaluation frameworks* (available at www.qld.gov.au ), the *Australian soil and land survey field handbook* and *Guidelines for surveying soil and land resources* to demonstrate the area you are proposing to clear will be suitable (i.e. suitability class 1, 2 or 3) for establishing, cultivating and harvesting your proposed crop/s and management system/s.

A list of the information that should be included in the land suitability report is provided in Attachment 1.

To assist data collection, a field description site sheet is provided in Attachment 2.

The density of soil sampling sites and scale of mapping for the land suitability report for the size of the area proposed to be cleared should be consistent with national standards which are provided in Table 2. Soil sampling involves observing the soil profile (often by digging a hole) and conducting simple field tests. Soil sample holes should be dug to a reasonable depth (100-120cm deep for dryland agriculture; and 150cm deep for irrigated agriculture). Laboratory analysis is required only if there is uncertainty. If laboratory analysis is required, ensure that the laboratory is accredited by the National Association of Testing Authorities.

Table 2 also lists the appropriate mapping scale to show where sampling was undertaken.

### Table 2: Soil sampling densities and mapping scales

| Area proposed to be cleared | Scale of map | Sampling range (hectares per soil sample) |
|---|---|---|
| ≤ 10 hectares | 1 : 2 500 | 0.25 – 1 |
| 10 -100 hectares | 1: 5 000 | 1 - 4 |
| 100 -250 hectares | 1: 10 000 | 1 – 4 |
| 250 -1 000 hectares | 1: 25 000 | 6.25 - 25 |
| 1 000 -5 000 range | 1: 50 000 | 25 - 100 |
| ≥ 5 000 range | 1: 100 000 | 100 - 400 |

Note: sampling intensity should be graduated in accordance with whether the area to be cleared is at the upper or lower end of the above ranges (that is, if the area proposed to be cleared is at one end of the range, the number of hectares per sample should also be at that end). For example, if the area proposed to be cleared is 10 hectares, there should be a soil sample each hectare (not a sample every 0.25 hectare).

The types of observations made will necessarily vary but all observations should conform to the standards outlined in Tables 3 and 4 (sourced from the *Guidelines for surveying soil and land resources*). All observations must be carried out on the ground (not remotely).

### Table 3: Main classes of observation

| Class | Observation type | Description |
|---|---|---|
| 1 | Detailed soil profile description | Detailed morphological and site descriptions that can be used to characterize the main soil and landscapes in a survey area |
| 2 | Deep borings | Deep borings examine the material below the normal depth and are important when subsolum and substrate properties influence land use. They are essential if irrigated land uses are proposed. Deep boring allows consideration of factors such as deep impermeable layers, salt accumulation, groundwater depth and salinity. |
| 3 | Profiles for sampling | Profiles where samples are taken for analyses. These may be done off site in the case of chemical and some physical analyses, or on site for other physical measurements (e.g. hydraulic conductivity). Sampling is usually conducted to characterize typical or reference soils in a survey, or to target selected soil attributes such as fertility, sodicity or salinity.<br><br>Physcial and chemical analyses are expensive and must be well targeted and clearly specified. |
| 4 | Mapping observations | Mapping observations are brief observations to confirm mapping boundaries, soil-type distributions or other |

| | | |
|---|---|---|
| | | characteristics being mapped in the survey. They are always brief and make up most sites in most surveys. |

For applications that are for irrigated high-value agriculture, you will need to measure the pH and Electrical Conductivity at each site, at 0.3 metre increments.

**Table 4: Recommended percentages of ground observation classes for general purpose surveys**

| Survey intensity and cartographic scale | I Detailed profile descriptions | II Deep borings | III Profiles for sampling | IV Mapping observations |
|---|---|---|---|---|
| Very high intensity (>1:10 000) | 10-30% | 1-5% | 1-5% | 60-88 |
| High intensity (1:10 000 to 1:25 000) | 10-30% | 1-5% | 1-5% | 60-88 |
| Medium intensity (1:25 000 to 1: 100 000) | 15-35% | 1-5% | 1-5% | 55-83 |
| Low intensity (1:100 000 to 1:250 000) | 15-40% | 1-5% | 1-5% | 50-83 |
| Reconnaisance/overview (1: 250 0000) | 30-90% | 1-5% | 1-5% | <60 |

# 3. Economic viability (development plan template part 6)

For proposed vegetation clearing in Category 2, 3 or 4 land suitability areas, a detailed business plan, prepared by a suitably qualified person must be attached to your development plan, to establish economic viability of the new crop development.

A signed statement must also be provided by the suitably qualified person, outlining how they meet the suitably qualified person requirements and that the business plan was prepared in accordance with these guidelines and the proposal is likely to be economically viable.

## 3.1 Suitably qualified person

Suitably qualified personnel must possess knowledge and skills in both farming systems and rural business financial analysis. This may include:

- agribusiness consultants

- accountants that have experience in rural enterprises or agribusiness
- financial planners with agribusiness experience

Specifically, to be a suitably qualified person under this economic viability section, the provider requires all of the following:

1. a demonstrated and current background of experience in providing professional advice or consultancy services in relation to farming systems, for example agronomic, property viability or benchmarking advice; and
2. a demonstrated and current background of experience in providing professional advice or consultancy services in relation to business financial management, for example financial analysis, finance applications, succession planning, taxation advice; and
3. tertiary qualifications appropriate to providing advice or a consultancy service.
4. membership with a recognised professional financial body, for example:
    a. for financial planners, recognised degree qualifications and membership of the Financial Planning Association of Australia
    b. for accountants, recognised degree qualifications and membership of the Institute of Public Accountants, CPA Australia or the Institute of Chartered Accountants of Australia.

Note that current employees of the Queensland Government are not eligible to act as suitably qualified persons for the applicant under this Guideline.

## 3.2 Economic viability business plan

The business plan must contain an analysis of financial information on the proposed activities, as well as previous activities (where relevant) to allow for determination that the proposed native vegetation clearing and subsequent cropping activity will be economically viable.

This financial information includes:

- schedule of the vegetation clearing and associated development costs
- past cropping and financial information
- resource and cash flow statement

Attachment 3 details the information that must be provided in your business plan.  Part 1 of the business plan report format is mandatory as it is a requirement of the development plan (part 6 of the development plan template). Guidance on preparing a resource and cash flow statement is provided in Attachment 4. Business plan templates are provided in Attachment 5.

The business plan templates have been provided to give guidance on what should be included, however other information or another format may also be considered appropriate.

# Attachment 1: Land suitability report

Your land suitability report will need to include the following:

1. **Signed statement by Suitably qualified person**
    a. Qualifications and experience
    b. Statement of land suitability for high-value or irrigated high-value agriculture

2. **Site location/description and proposed activity**
    a. Lot number and registered plan number
    b. Current site plan with scale bar, showing north, lot on plan boundaries, and location of soil sampling sites
    c. Proposed crop/s or crop group to be grown,
    d. Management practices for growing/harvesting crops to ensure limitations are considered when determining land suitability i.e. irrigation method

3. **Assessment and findings**
    a. Address information requirements specific to level/option
    b. Identify the assessment methodology (should include frequency and depth of sampling undertaken, location of all sampling sites, land resource studies etc. - for example, referring to the Guidelines for agricultural land evaluation and associated land evaluation framework for the locality).
    c. Include a description of the proposed crops requirements in terms of climate and seasonal variability, and link this to the climatic and seasonal conditions at the site location.
    d. Include a description of the landscape element, landscape pattern, slope, drainage, permeability, surface rockiness (abundance, size), rock outcrop (abundance) and microrelief of each site sampled.
    e. Include a description of each soil horizon at every site, including the horizon name, depth (upper and lower), texture class, colour, coarse fragments and segregations.
    f. For applications for irrigated cropping or irrigated pasture provide data on the pH and Electrical Conductivity at each site, at 0.3 metre increments
    g. Clearly identify any links or correlation between the sites sampled to the soil mapping units and how the soil attributes relate to the land use limitations and overall land suitability
    h. For applications for irrigated high-value agriculture, demonstrate that the volume of water the applicant holds, is authorised or has access to hold is sufficient for the proposed crop and any existing irrigated cropped areas.
    i. Findings

4. **Conclusions and recommendations**
    a. Statement that the subject site is/is not suitable for the identified crop/s or crop group
    b. Identification of any limitations and constraints on the use of the site (where applicable)
    c. Land suitability mapping

5. **Attachments**
    a. Laboratory results from an accredited laboratory (e.g. NATA) (where relevant)

# Attachment 2: Field description site sheet

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Site #** | | **Slope** | | **Permeability** | | **Erosion** | |
| **Desc. By** | | **Element** | | **Drainage** | | **Surface Coarse Fragments** | |
| **Date** | | | | | | | |
| **Datum** | | **Pattern** | | **Microrelief** | | **Rock Outcrop** | |
| **Zone** | | | | | | | |
| **Easting/Lat** | | **Northing/Long** | | | | | |
| **Notes:** | | | | | | | |

| Horizon Name | Depth | Texture | Moisture Status | Colour | Mottles | Coarse Frags | Segregations | Structure | Test Depth | pH | EC | Sample Depth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

# Attachment 3: Business plan

**General instructions**

a) Sources of information used for prices, crop yields etc. are to be credible, explained and documented in the business plan.

b) Assessment conclusions may be made on an on-balance basis of relevant factors identified during the assessment process.

c) Sensitivity analysis, for instance of crop prices or yields, may be used to support conclusions.

Your business plan must include all of the following:

1. **Signed statement by suitably qualified person (this statement is required in part 6 of the development plan template)**
    a. outlining how they meet the suitably qualified person requirements; and
    b. certifying that a business plan has been prepared in accordance with the Guideline – land suitability and economic viability requirements for high-value and irrigated high-value agriculture and the proposal is likely to be economically viable.

2. **Site location/description and proposed activity**
    a. Lot number and registered plan number
    b. Current site plan with scale bar, showing north, lot on plan boundaries
    c. Proposed crop/s or crop group to be grown,
    d. Management practices for growing/harvesting crops
    e. Details of any environmental offset or significant beneficial outcome (where relevant)

3. **Economic assessment**
    a. Assessment of schedule of vegetation clearing and development costs
    b. Assessment of past cropping and financial history
    c. Assessment of costs associated with providing an environmental offset or significant beneficial outcome (where relevant)
    d. Assessment of the resource and cash flow statement (refer to Attachment 4 for further information), including the percentage of the area to be cropped each year;
    e. Assessment of the risks associated with the proposed crop, and the expected frequency of producing a viable crop (for example, that a viable crop will be produced at least 7 out of every 10 years)
    f. Providing the source of the prices, crop yields and other information used as the basis for the economic assessment.

4. **Conclusions**
    Provide comments and conclusions on the likely viability of the business plan having regard to the following:

    a. Suitability of proposed cropping for the area.
    b. The credibility of the data used as a basis for the economic assessment.
    c. The outcomes of the internal rate of return assessment.

d. The potential for good economic returns and whether proposed activities represent good use of the land relative to potential alternative uses.

**5. References**

List the references used to prepare the business plan.

**6. Attachments (where applicable):**

a. Profit and loss statements for the past three financial years
b. Quotes, invoices and cost estimates to support the schedule of vegetation clearing and development costs

# Attachment 4: Resource and cash flow statement

A resource and cash flow (RCF) statement shows:

- the resources invested in the vegetation clearing and development of the proposed area;
- the resources generated by the investment in vegetation clearing and development; and
- the cash flows associated with funding the investment and resource flows.

### Table 3: Example of resource and cash flow statement

| | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|---|
| **Income** *(Resources generated)* | | 50,000 | 50,000 | 55,000 | 60,000 | 68,000 |
| **Operating costs** *(Resources used)* | | 25,000 | 30,000 | 35,000 | 35,000 | 40,000 |
| **Investment costs** *(Resources used)* | 100,000 | | | | | |
| **Net Cash Flow** | **-100,000** | **25,000** | **20,000** | **20,000** | **25,000** | **28,000** |

The first step of the assessment is to confirm and verify whether the RCF statement is realistic and accurate.

This assessment may be undertaken using:

- if available and relevant, the past financial statements and cropping information of the land holder (refer to Attachment 5, Template 2), and/or
- credible information concerning crop production including suitability, yields and prices, and/or
- credible information concerning land development expenses.

The next step is to document any adjustments identified through the above assessment.

The final step is to run the RCF statement through an internal rate of return (IRR) analysis. An IRR analysis is a standard and commonly used method to assess the viability of projects and inform capital investment decisions.

The IRR is the rate of return that discounts the cash flows of a project so that the present value of inflows equals the present value of outflows. The IRR provides both a value for the projected return from developments and a measure of efficiency for the development.

From this analysis, conclusions should be made on the likely viability of the proposed vegetation clearing.

The IRR can be calculated using Microsoft Excel as shown in the example in Table 4 which produces the IRR from the example RCF statement in Table 3.

### Table 4: Internal rate of return calculation using Microsoft Excel

| | A | B |
|---|---|---|
| **1** | **Data** | **Description** |
| **2** | -$100,000 | Investment in vegetation clearing and development |
| **3** | $25,000 | Net cash flow year 1 |
| **4** | $20,000 | Net cash flow year 2 |
| 5 | $20,000 | Net cash flow year 3 |
| **6** | $25,000 | Net cash flow year 4 |
| **7** | $28,000 | Net cash flow year 5 |
| | **Formula** | **Result** |
| | =IRR (A2:A6) | Investment's IRR after 5 years = 6% |

The basic test for likely viability of vegetation clearing activities will be a positive IRR result over an investment period relative to the type of development.

The IRR should be set based upon normal expectations of returns from investment in cropping enterprises.

The time point at which the IRR is to be calculated should be set on time frames commensurate with investment return periods for various enterprise types as set out in Table 5.

### Table 5: Investment periods

| Development type | Investment period |
|---|---|
| Dry land cereal cropping | 5 years |
| Irrigated broadacre cropping | 7 years |
| Perennial horticulture | 10 years |

The IRR outcomes should not provide an absolute test of likely economic viability. Assessors may apply expert knowledge and discretion in making conclusions with respect to potential economic viability. For example, conclusions based on an on-balance assessment of various factors including whether the cropping activities represent a good economic use of the land may be acceptable.

The use of sensitivity analysis may also be acceptable for marginal assessments. As an example, a marginal assessment could be presented on outcomes based for instance, a 5 per cent higher price for production.

The best available information should be provided for all assessments. This information may include items such as crop prices, yields and development costs.

# Attachment 5: Economic viability business plan templates

### Template 1: Resource and cash flow statement

The resource and cash flow statement is to be completed:

- on the basis of normal seasons and prices
- with reference to past financial statements with respect to crop expenditure items and expense levels.

| Description | Area (ha) | Expected yield (ha) | Expected price (unit) | Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Crop outputs** | | | | | | | | | | | | | | |
| Crop 1 | | | | | | | | | | | | | | |
| Crop 2 | | | | | | | | | | | | | | |
| Crop 3 | | | | | | | | | | | | | | |
| Crop 4 | | | | | | | | | | | | | | |
| **Crop revenue** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| **Crop inputs** | | | | | | | | | | | | | | |
| Fertiliser and chemicals | | | | | | | | | | | | | | |
| Planting and seed | | | | | | | | | | | | | | |
| Harvesting | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| **Crop costs** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| ***Finance costs** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| **Project costs** | | | | | | | | | | | | | | |
| Pulling and stick raking | | | | | | | | | | | | | | |
| Earthmoving | | | | | | | | | | | | | | |
| Irrigation infrastructure (pipes, pumps etc.) | | | | | | | | | | | | | | |
| Water costs (electricity, purchase etc.) | | | | | | | | | | | | | | |
| Transport to point of sale | | | | | | | | | | | | | | |
| **Total project costs** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| **Net financial revenue** | | | | | | | | | | | | | | |

* Financing costs relative to finance raised for the development project.

## Template 2: Past cropping information

This information will be used to confirm and verify information provided in the resource and cash flow statement.

| | Last complete financial year | | | Prior financial year 1 | | | Prior financial year 2 | | | Prior financial year 3 | | | Prior financial year 4 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Area (ha) | Total production (e.g. tonnes) | **Gross income ($)** | Area (ha) | Total production (e.g. tonnes) | **Gross income ($)** | Area (ha) | Total production (e.g. tonnes) | **Gross income ($)** | Area (ha) | Total production (e.g. tonnes) | **Gross income ($)** | **Area (ha)** | **Total production (e.g. tonnes)** | **Gross income ($)** |
| **Outputs** | | | | | | | | | | | | | | | |
| Crop 1 | | | | | | | | | | | | | | | |
| Crop 2 | | | | | | | | | | | | | | | |
| Crop 3 | | | | | | | | | | | | | | | |
| Crop 4 | | | | | | | | | | | | | | | |
| Total gross income | | | | Total gross income | | | Total gross income | | | Total gross income | | | **Total gross income** | | |
| **Inputs** | | | **Costs** | | | **Costs** | | | **Costs** | | | **Costs** | | | **Costs** |
| Fertiliser and chemicals | | | | Total costs **Surp/def** | | | Total costs **Surp/def** | | | Total costs **Surp/def** | | | **Total costs Surp/def** | | |
| Planting and seed | | | | | | | | | | | | | | | |
| Harvesting | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | |
| Total costs | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |