Department of Environment and Heritage Protection – Open Data Strategy

2013-2017

Scope

This document defines the department's strategies and subsequent timeframes for meeting the government's Open Data Initiative including the definition, approval, publishing and management of departmental data sets to support the Open Data Portal – www.qld.gov.au/data

Strategy statement

In line with the Queensland Government's Open Data Initiative, the department will contribute to the continued growth of the State's environment, land and water management activities through the delivery of data sets to the Open Data Portal (www.qld.gov.au/data) in a timely and managed manner and in formats that meet the contemporary needs of our customers.

Purpose

The purpose of this document is to articulate a roadmap to allow the department to deliver data sets to the public, free to anyone who wishes to use it.

Goals

Better services for Queenslanders through innovation, research and development of new data-enabled services and products by researchers, business and industry using Government data.

Increased community participation in government decision making through improved access to Government data and greater levels of interaction between policy-makers and the wider community.

A stronger knowledge economy by unlocking the social and economic value of Government data through sound data infrastructure.

Evolving data sophistication and functionality through ongoing engagement with data users and perpetual review.

Our data

We collect, store and maintain a diverse range of datasets to support the delivery of environment and heritage protection services to the community. These datasets can be grouped into the following categories:

- Environment
- Heritage
- Water
- Land
- Coastal
- Wildlife
- Plants
- Ecosystems
- Biodiversity
- Essential habitats

Background

On 9 October 2012, the Premier announced an 'open data revolution' for the Queensland Government with the aim of releasing as much government data as possible to encourage the private sector to develop innovative new services and solutions for the State. An Assistant Minister to the Premier on e-government was appointed to work alongside the Minister for Science, Information Technology, Innovation and the Arts to drive the initiative.

Principles of the Open Data Portal

The rapidly emerging digitally-rich environment provides opportunities to:

- improve services to the community

- inform government decision making

- contribute to the economic development of Queensland

- assist in making the Queensland public service more customer-focused.

The portal in its initial implementation is not primarily focussed on delivering dynamic (real time or near real time) data as has traditionally been delivered via departmental web sites. The purpose of the portal is to increase transparency and accountability through increasing availability to government data sets and drive innovation through providing easy access to government data.

Information delivered through the portal will be provided in machine readable formats (such as CSV, XML, KML, Shape Files etc.) for re-use by third parties undertaking application development or data analysis.

Governance

The Director-General, Department of Environment and Heritage Protection is responsible for the success of the department's Open Data initiative by creating and sustaining an open data culture within the department.

Execution of our Open Data Strategy will be governed by the department's Executive Management Group, sponsored by the Deputy Director-General, Corporate Services.

Progress against the success criteria of the initiative will be reported in the Queensland Government rolling six month action plan to be prepared by the Department of the Premier and Cabinet and overseen by the whole of government Open Data Reform Group (CEO Leadership Team).

This strategy is a four year forward plan to be reviewed annually. The department will also provide a quarterly progress report to the Open Data Reform Group.

Key Considerations

Definition of data

For the purpose of the Open Data Portal, data is described as:

- Machine readable data such as:
    - CSV – Comma Separated Values
    - XLS – Microsoft Excel Spread sheet
    - XML – eXtensible Markup Language
    - RDF – Resource Description Framework, modelling information
    - KML/KMZ – Keyhole markup language, suitable for viewing in Google Earth, Google Maps or other supported applications
    - Shapefiles – ESRI shapefile overlays (spatial data)
- Data is **NOT** PDF files, Annual Reports, Briefs etc.

The identification of data sets for release and ongoing management of data

The department has identified and published an initial grouping of data sets in line with this initiative, http://www.ehp.qld.gov.au/data-sets/index.html as well as including a 'Data sets' area to the home page of the departmental internet site.

A data set identification process was undertaken within the department and the data identified for inclusion in the portal is included as **Attachment A**.

Accessibility and release standards

The Queensland Government Enterprise Architecture (QGEA) information principles define the standards by which the Queensland Government manages and releases information, and these principles apply directly to the open data initiative:

- Transparent - The public has a right to information.

- Trustworthy - Information is accurate, relevant, timely, available and secure.

- Private - Personal information is protected in accordance with the law.

- Equitable - Information is accessible to all.

- Valued - Information is a core strategic asset.

- Managed -Information is actively planned, managed and compliant.

AusGOAL[1] Principles suggest that data be made available in machine readable formats that can be read by freely available software and publication in more than one (open) format is recommended.

The department supports these principles and this strategy will assist the department to move through the generations of maturity and deliver data in multiple formats (such as CSV, XML, SQL etc.) that best suit the type of data being delivered and meet the identified expectations of the users consuming the data.

Licensing framework and intellectual property impacts

The Queensland Government has an intellectual property framework in place governing the release of public sector information, which includes the Queensland Public Sector Intellectual Property Principles (version 2) (IP Principles) and an information licensing framework. The IP Principles recommend that all copyright public sector information should be released for free and open re-use and adaptation under a Creative Commons licence as a default position, unless there are specific reasons to restrict access.

The department is moving toward providing all of its online content through appropriate Creative Commons Licensing. The default licence applied to content will be the CC-BY licence with other licences being applied to content that requires restrictions. This approach aligns with the delivery of departmental web content via the whole-of-government web franchises. Any data released to the Open Data Portal by the data custodian will have the relevant Creative Commons licence applied to it as part of the approval and public process.

[1] AusGoal is the Australian Governments Open Access and Licensing Framework, provides support and guidance to government and related sectors to facilitate open access to publicly funded information.

Confidentiality and personal privacy requirements

Government holds substantial amounts of data about its citizens. Accordingly, the relationship between government and its citizens requires government to be a responsible custodian of its citizens' data and not to unnecessarily expose that data. Privacy is one mechanism for satisfying these obligations.

In addition Government holds other confidential information such as commercial-in-confidence and operational information. How to best manage confidentiality in light of an agenda to promote open data will need to be determined. Clearance by the department's Privacy Unit group will form part of all approvals for data sets to be published.

Legislative changes that may be required to facilitate and promote release of information

Queensland Government legislation supports the proactive release of government information. The *Right to Information Act 2009* (Qld) (the RTI Act) establishes, as a default position, the proactive release of government information into the public sphere, unless, on balance, the release of this information is determined to be contrary to the public interest, or it falls under legislative limitations to access, such as those in the *Information Privacy Act 2009*.

As part of its terms of reference the internal Working Group for Open Data within EHP will identify any instances where this is likely to be an issue and escalate them to the responsible Deputy Director-General and/or Executive Management Group for consideration and decision as appropriate.

Strategy

The following broad fundamental strategies outline how the department will implement the move to Open Data. These strategies will be supported by a set of Operational implementation processes to drive business change for the benefit of the people of Queensland as well as achieve best practice and generational maturity for the department's data sets.

Fundamental strategies

The department will:

- Adopt a default position of making all relevant data held by the department available to the public of Queensland through the Open Data Portal

- Undertake appropriate business transformation processes to enable the delivery of relevant data sets to the Open Data Portal

- Consider the value of data to the people of Queensland and strive to be a leader in delivery of data

Operational implementation:

The department will:

- Consider data in any and all online publishing activities as they occur

- Adopt an approach of enabling automated publishing of data sets to the Open Data Portal for any data that is used in delivering EHP online content.

Web Services will:

- Lead the process and serve as evangelists for data availability in their dealings with business areas of the department

- Lead the process to re-engineer data to be available to the Open Data Portal as part of the whole-of-government web franchise implementation,

Release strategy

Our release strategy contains four main components:

Identification: We will proactively identify information assets by surveying departmental publications and business systems for underlying data sources, gathering information from business units about stand-alone data collections and engaging with stakeholders about their needs and interests.

Assessment: We will assess the suitability of data for release in accordance with relevant legislation, administrative instruments, policies and guidelines. The release of data will be prioritised according to its value to the public, such as allowing new products or services to be developed, increasing openness and transparency of government and its processes, and use by researchers or non-government organisations.

Not all data are suitable for release. The process of identifying and assessing data for publication acknowledges the need for it to be accessible to external audiences. Datasets subject to valid privacy, security or privilege limitations may be restricted or released in a modified form.

Publication: We will publish data in line with set standards and prioritised having regard to public interest; feedback from stakeholders; potential social or economic value; and ability to restore accountability in government, with the approval of the data owner.

Management: We will maintain datasets as fit-for-purpose, identify opportunities to improve data quality, seek feedback from data users and review our processes to ensure maximum efficiency.

Timelines

This strategic plan for Open Data within EHP will look to meet the timeframes for maturity by moving from the current 2nd Generation to 3rd Generation by December 2014, with further maturity to 4th Generation by December 2015 and 5th Generation by July 2017.

The data delivered through the portal may be post event data but it is still likely to be in the public interest. Examples of this could be the number of environmental authorities issued within a particular timeframe.

Licensing approach

Government data will be available for open use: Open access to Government data drives innovation and entrepreneurial activities. Where appropriate, data will be made available under the least restrictive licence allowing for its use and re-use in accordance with the Australian Government Open Licensing framework.

Publishing process

The department will continue to be responsible for the publishing and hosting of its data sets with the portal providing relevant metadata about the data set and a link to the data. The department's web content management system will be used to publish all data sets to the EHP web site. A customised data workflow will be used to achieve this publishing. The workflow will ensure recording of all approvals to publish and also ensure that the department meets it requirements in relation to recordkeeping.
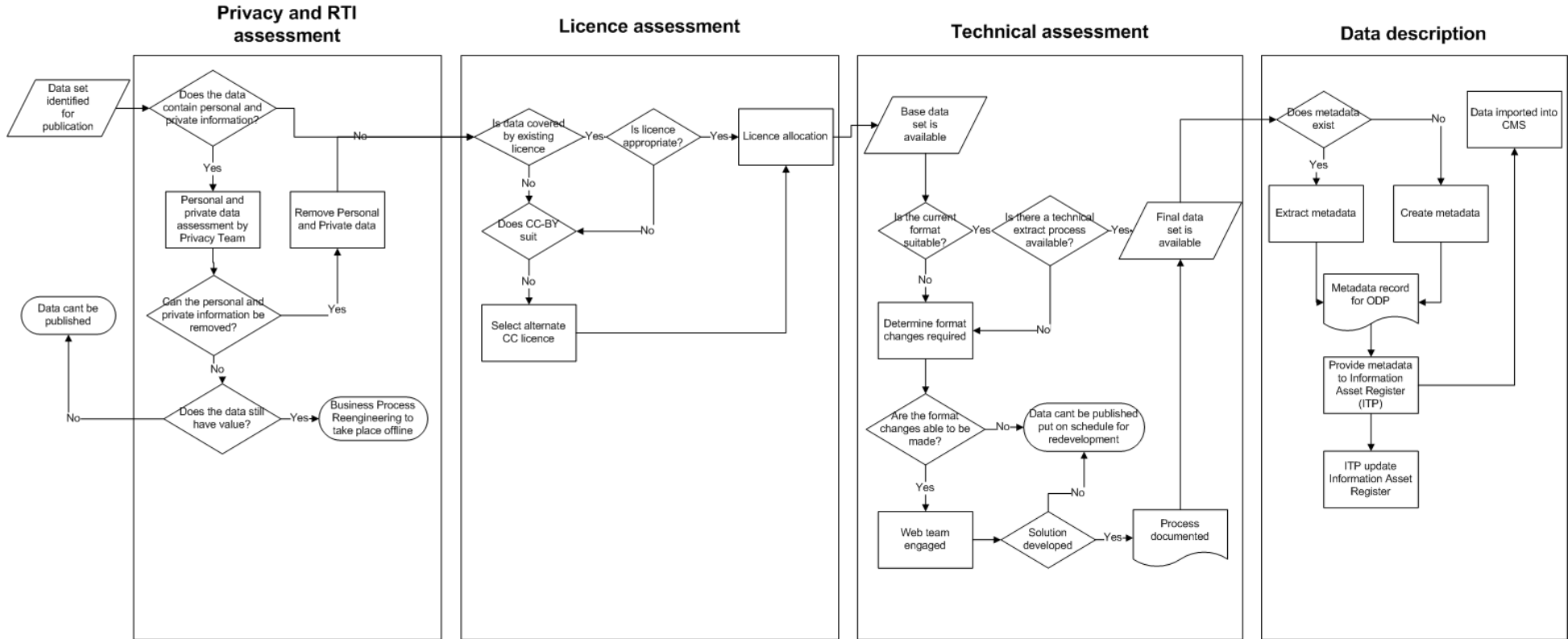
Attachment A – EHP data sets identified for immediate release

The table below contains a list (as at time of publication) of data owned by the department to be published to the Open Data Portal, additional data sets will be published to the Open Data Portal over time as they are created or become available.

Dataset	Description	Custodian
Aquatic Conservation Assessments (ACA)	Assessment of relative aquatic biodiversity significance values. Completed for riverine and non-riverine wetlands in the Great Barrier Reef, Queensland Murray Darling Basin, Wide Bay-Burnett and Cape York catchments.	DDG, Conservation and Sustainability Services
Biodiversity Planning Assessments (BPA)	Assessment of relative terrestrial biodiversity significance values. Completed for Southeast Queensland, New England Tableland, Brigalow Belt, Central Queensland Coast, Mulga Lands, Desert Uplands, Channel Country, Mitchell Grass Downs, Einasleigh Uplands and Cape York bioregions.	DDG, Conservation and Sustainability Services
Coastal Hazard Maps	Provides mapping in PDF and spatial format to support the State Planning Policies and coastal management policies of the Queensland Coastal Plan 2011.	DDG, Environmental Policy and Planning
Coastal Plan Maps	Provides mapping in PDF and spatial format of areas where policies of the Queensland Coastal Plan apply.	DDG, Environmental Policy and Planning
Directory of Important Wetlands	Wetland locations for Queensland wetlands described in A Directory of Important Wetlands in Australia, 3rd Edition, Environment Australia 2001 by Wetland Inventory Team, Northern Region, EPA. Updated by Resource Assessment Unit, Qld. EPA 2005.	DDG, Conservation and Sustainability Services
Ecological Significance Maps	Provides AES maps in PDF and spatial format using information from a range of biodiversity mapping assessments and from spatial information associated with legislation administered by EHP.	DDG, Conservation and Sustainability Services
EPP Water	Datasets that comprise the spatial context for the Environmental Values (EVs) and Water Quality Objectives (WQOs) scheduled under the Environmental Protection (Water) Policy 2009, made under the Environmental Protection Act 1994 including Water types, Management Intent for Waters, Sub-Catchments and Scheduled Plan Outline.	DDG, Environmental Policy and Planning
GBR Wetland Protection Areas Mapping	Provides non-statutory mapping in PDF format of wetlands to support the draft SPP for GBR Wetlands.	DDG, Environmental Policy and Planning
Ground Cover Disturbance Index (GCDI)	Assesses aspects of rangeland biodiversity condition using ground cover time series statistics from SLATS.	DDG, Conservation and Sustainability Services
Habitat Suitability Models	Species habitat models used in the Biodiversity Planning Assessments, Aquatic Conservation Assessments, VMA Essential Habitat and VMA Essential Regrowth Habitat.	DDG, Conservation and Sustainability Services
Heritage Grant Projects and Program Register	Agency information on cultural heritage grant projects and programs published to the Internet. The latest grant program consists of 800 applications which are recorded here.	DDG, Environmental Policy and Planning
Koala Habitat Values - Western SEQ LGAs	Koala research and monitoring	DDG, Conservation and Sustainability Services
Koala Plan 2006-2016	Provides mapping of koala habitat in South East Queensland under the Koala Plan.	DDG, Conservation and Sustainability Services

Nature Refuges	Gazetted Nature Refuges as per the Nature Conservation(Protected Areas) Regulation	DDG, Conservation and Sustainability Services
Queensland Biodiversity and Vegetation Offsets Special Features	Biodiversity Planning Assessment-derived Offsets Special Feature datasets, to be utilised in the Ecological Equivalence Methodology.	DDG, Conservation and Sustainability Services
Ramsar sites – Qld	Internationally important wetlands listed the Convention on Wetlands (Ramsar, Iran, 1971)—called the "Ramsar Convention".	DDG, Conservation and Sustainability Services
Referable Wetland Maps	Provides mapping in PDF and spatial format of wetlands in State Planning Policy 4/11: Protecting Wetlands of High Ecological Significance in GBR Catchments	DDG, Environmental Policy & Planning
South East Queensland Koala Planning Areas Version 1.2 (Data Package)	Provides mapping of Assessable Development areas under the State Planning Regulatory Provisions (SPRP) and of Koala Habitat Values over seven SEQ LGAs.	DDG, Conservation and Sustainability Services
State of Environment Report	Data on air quality for SoE online and SoE Report	DDG, Environmental Policy & Planning
Statewide Ecological Corridors	Terrestrial and aquatic corridors across Queensland based on those identified in the Biodiversity Planning Assessments.	DDG, Conservation and Sustainability Services
Threatened Species Content (Listed and non-listed)	Details information on Threatened Species (eg, Species profiles, Species legislative status, Species Back on Track ranks).	DDG Conservation Sustainability Services
Threatened Species Recovery Actions Content	Details information on Recovery Actions for Threatened Species.	DDG Conservation Sustainability Services
Threatened Species Recovery Actions Outcomes Reports	Reports on Recovery Actions for Threatened Species.	DDG Conservation Sustainability Services
Threatened Species Threat Content	Details information about threatening processes acting on Threatened Species.	DDG Conservation Sustainability Services
VMA Essential Habitat deattributed polygons	Identification of NCA listed threatened species essential habitat for remnant through species records and habitat models. Attributes have been removed due to sensitivities with confidential records.	DDG, Conservation and Sustainability Services
VMA Essential Regrowth Habitat deattributed polygons	Identification of NCA listed threatened species essential habitat for high value regrowth through habitat models. Attributes have been removed due to sensitivities with threatened species habitat.	DDG, Conservation and Sustainability Services

Attachment B – Dataset approval process workflow

Privacy and RTI assessment

- Data set identified for publication
- Does the data contain personal and private information?
  - Yes → Personal and private data assessment by Privacy Team
  - No →
- Can the personal and private information be removed?
  - Yes → Remove Personal and Private data
  - No → Does the data still have value?
    - Yes → Business Process Reengineering to take place offline
    - No → Data cant be published

Licence assessment

- Is data covered by existing licence
  - Yes → Is licence appropriate?
    - Yes → Licence allocation
  - No → Does CC-BY suit
    - No → Select alternate CC licence

Technical assessment

- Base data set is available
- Is the current format suitable?
  - Yes → Is there a technical extract process available?
    - Yes → Final data set is available
    - No → Determine format changes required
  - No → Determine format changes required
- Are the format changes able to be made?
  - No → Data cant be published put on schedule for redevelopment
  - Yes → Web team engaged → Solution developed
    - Yes → Process documented
    - No →
- Process documented

Data description

- Does metadata exist
  - Yes → Extract metadata
  - No → Data imported into CMS
- Create metadata
- Metadata record for ODP
- Provide metadata to Information Asset Register (ITP)
- ITP update Information Asset Register

Attachment C – Web publishing approval workflow

```
Data now in          Submitted for
TeamSite       →      approval
                         ↓
                     Endorsed by
                     Privacy Team
                         ↓
                     Sent to ED for
                     approval
                         ↓
                     ED approves ──Yes──┐
                         │ No           │
                         ↓              │
                     Escalate to DDG    │
                         ↓              │
                     DDG Approves ─Yes──┤
                         │ No           │
                         ↓              │
                     Escalate to DG     │
                         │ No           │
                         ↓              │
                     DG Approves ──Yes──┘
                         │ No
                         ↓
                     Data cant be
                     published
```

Data published → Data available on dept site → Notification to Open Data Portal → ODP add data set to list based on metadata provided → Data available via link on ODP