Open Data Strategy

January 2021– December 2021

Department of Environment and Science

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Queensland
Government

Contents

Our Principles

Principles

Department of Environment and Science shares the Queensland Government's commitment to open data as outlined in the Queensland Government Open Data Policy Statement[1].
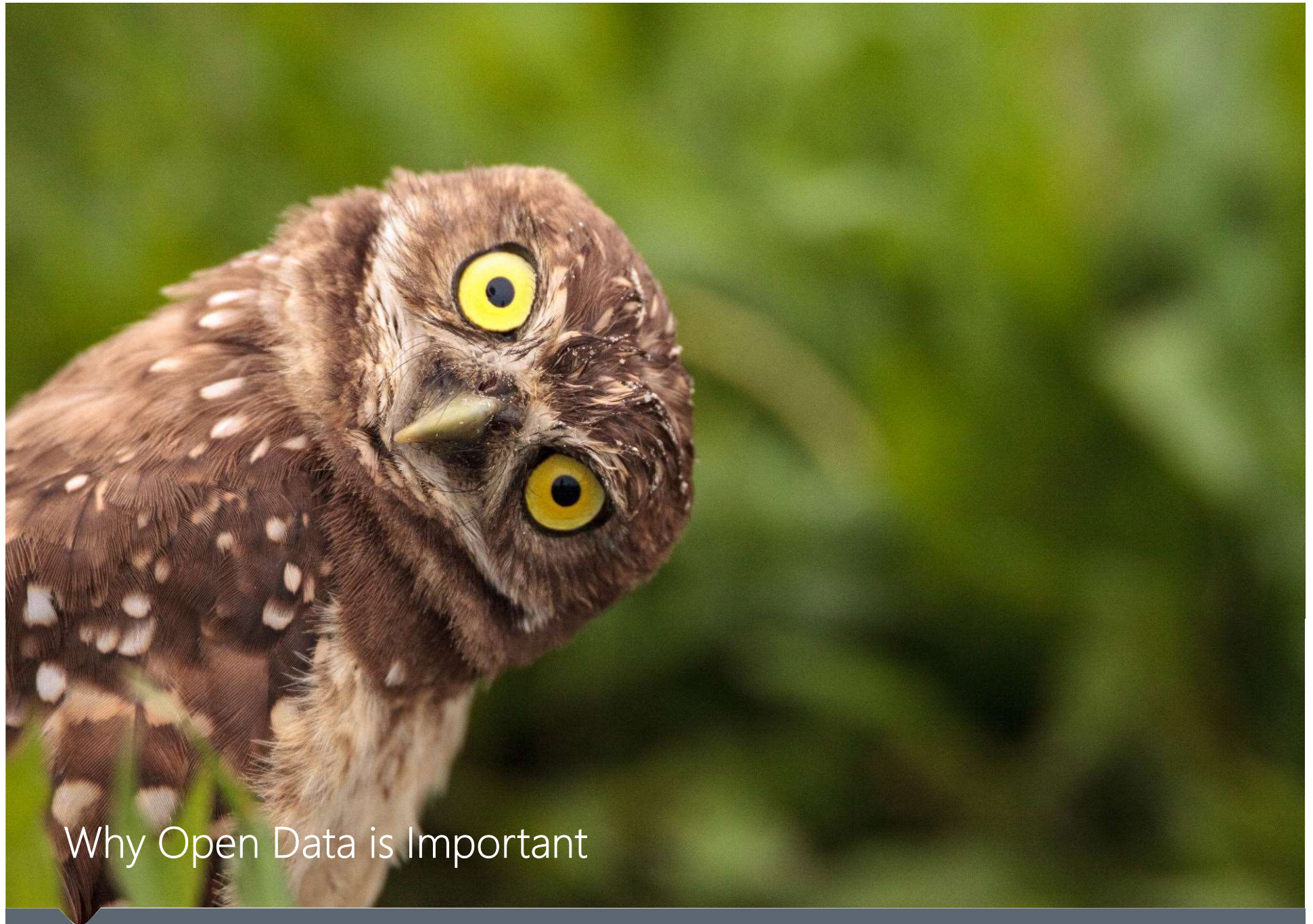
The Policy Statement commits to the six principles from the International Open Data Charter. These principles are:

1. Open by default
2. Timely and comprehensive
3. Accessible and usable
4. Comparable and interoperable
5. For improved governance and citizen engagement
6. For inclusive development and innovation

In continually improving the way we publish open data, Department of Environment and Science follows these principles.

Why Open Data is Important

Benefits of Open Data

We recognise our important obligation to publish data about spending, operations and performance to...

- Foster transparent, accountable, efficient responsive and effective government.
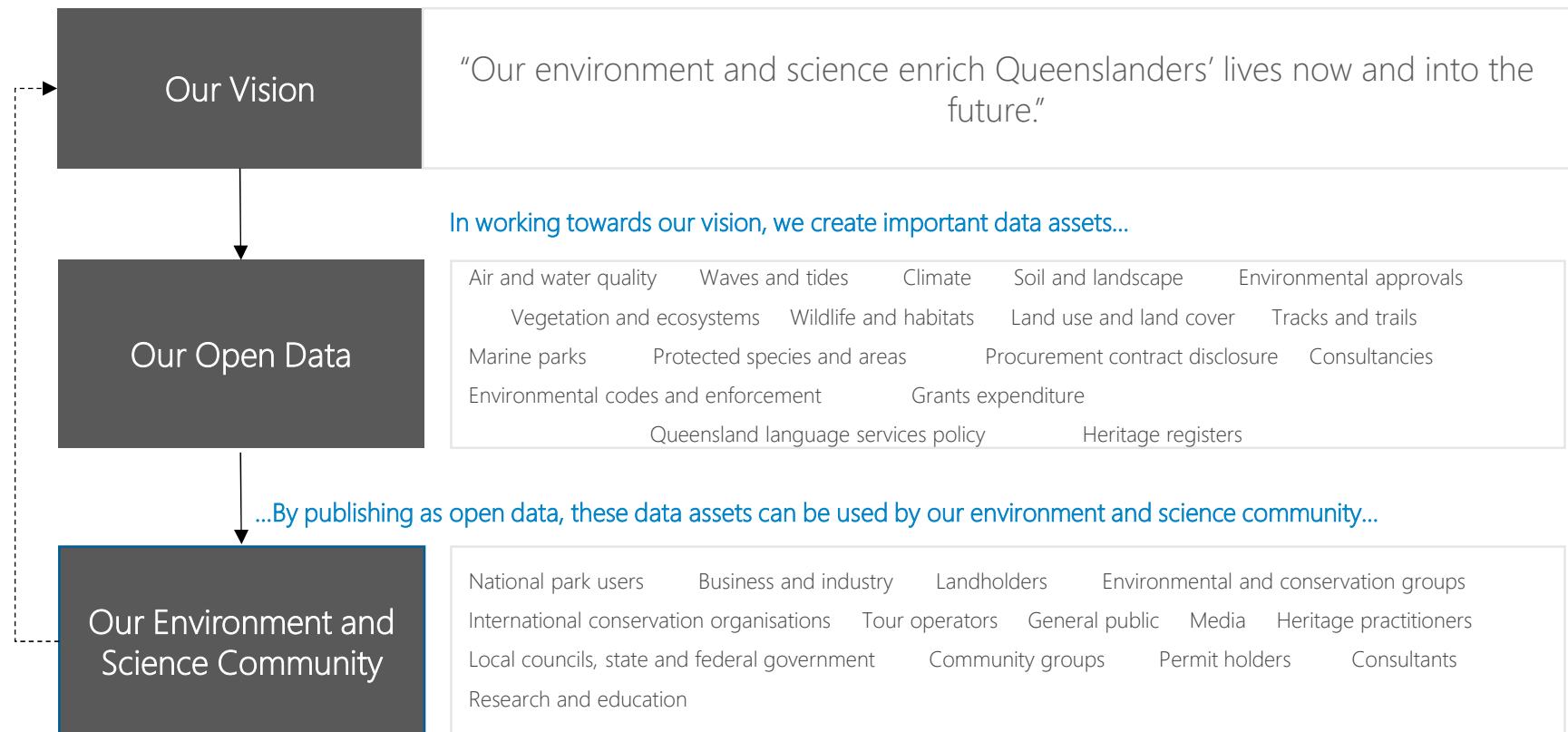
We also recognise how open data can be used to benefit Queensland...

- Support the design, delivery and assessment of better services for citizens and businesses

- Improve the evidence-base for policy and programs

- Provide major opportunities for innovation and underpin growth of the digital economy.

Alignment to our Vision

Open Data supports our Department's strategic vision when we make our open data accessible to the environment and science community.

Our Vision	"Our environment and science enrich Queenslanders' lives now and into the future."

In working towards our vision, we create important data assets…

Our Open Data	Air and water quality • Waves and tides • Climate • Soil and landscape • Environmental approvals • Vegetation and ecosystems • Wildlife and habitats • Land use and land cover • Tracks and trails • Marine parks • Protected species and areas • Procurement contract disclosure • Consultancies • Environmental codes and enforcement • Grants expenditure • Queensland language services policy • Heritage registers

…By publishing as open data, these data assets can be used by our environment and science community…

Our Environment and Science Community	National park users • Business and industry • Landholders • Environmental and conservation groups • International conservation organisations • Tour operators • General public • Media • Heritage practitioners • Local councils, state and federal government • Community groups • Permit holders • Consultants • Research and education

…To create products and services that contribute to a sustainably managed environment and promote engagement with science and heritage.
…And to make more informed decisions about how to safeguard the state's environmental values and reduce impacts from environmental harm.

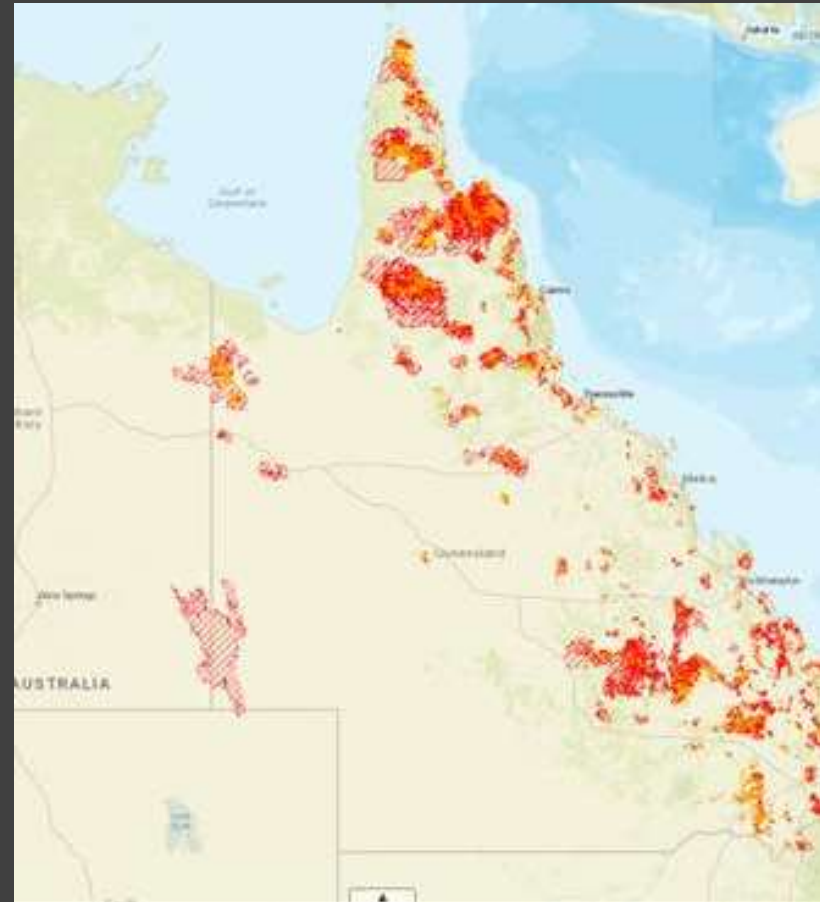# Alignment to our Vision - Case Study

An example of open data supporting our Department's vision.

Queensland Parks burnt area mapping

Queensland Parks burnt area mapping has been available as Open Data through the Queensland Spatial Catalogue for some time. Interest in wildfire mapping dramatically increased during the severe fire season of 2019-2020. This interest came from members of the public, other government agencies both within Queensland and interstate and researchers interested in mapping impacts to threatened species and ecosystems.

Queensland burnt areas including historical and regularly updated fire mapping from the QPWS fire management system FLAME were published as publicly available GIS webservices updated automatically at regular intervals. The data were also harvested by Geoscience Australia to augment the national bushfire boundary webservice.

The burnt area mapping has proven to be an incredibly valuable and well utilised Open Data product which QPWS&P will continue to support and look to improve the quality through enhanced quality management.

Alignment to our Vision - Case Study

An example of open data supporting our Department's vision.

DES Contract Disclosure Reporting – publication to Open Data Portal

In 2019 changes were made under the Queensland Procurement Policy (QPP) requiring agency's to publish Contract Disclosure reporting to the Open Data Portal. DES has worked diligently to meet these new requirements; adapting to the new reporting format, building a new data collection method using Microsoft eForms, and seeing great collaboration between BCP Procurement (custodians of the data) and Web Services (Open Data Publishers) as the dataset requires monthly updating.

Alignment to our Vision - Case Study

An example of open data supporting our Department's vision.

Sharing Queensland wildlife data

The Atlas of Living Australia, a major national partnership of Australian museums, herbaria, the CSIRO, a range of government agencies and other entities with biological collections, accesses Queensland's wildlife information using the wildlife data API.

Since making 1,116,475 WildNet fauna records available in the Atlas on 29 May 2014, there have been more than 288,000 downloads, delivering over 241 million records to researchers, policy makers and anyone interested in Australia's unique plants and animals.

The Queensland Government will make additional WildNet data available through the Queensland Government's Open Data portal.

Alignment to our Vision - Case Study

An example of open data supporting our Department's vision.

Using multiple soil datasets to inform client decision-making

O2 Environment + Engineering, a specialist provider of soil and water consulting services to Queensland's mining, gas, infrastructure and development industries, accesses the soil and mapping datasets to complete environmental assessments on behalf of their clients.

O2 Environment + Engineering Senior Soil Scientist, Jon Walton, describes these datasets as being fundamental and critical to the assessments he makes for his firm's clients. His soil assessments support strategic investment and development decision-making.

The government's Open Data website fulfils his requirement for quick and reliable access to this information. As well as soil data, Jon uses the Open Data website to download the latest digital cadastral database (DCDB) information compiled by the government.

Obligations

We also have specific obligations to publish open data.

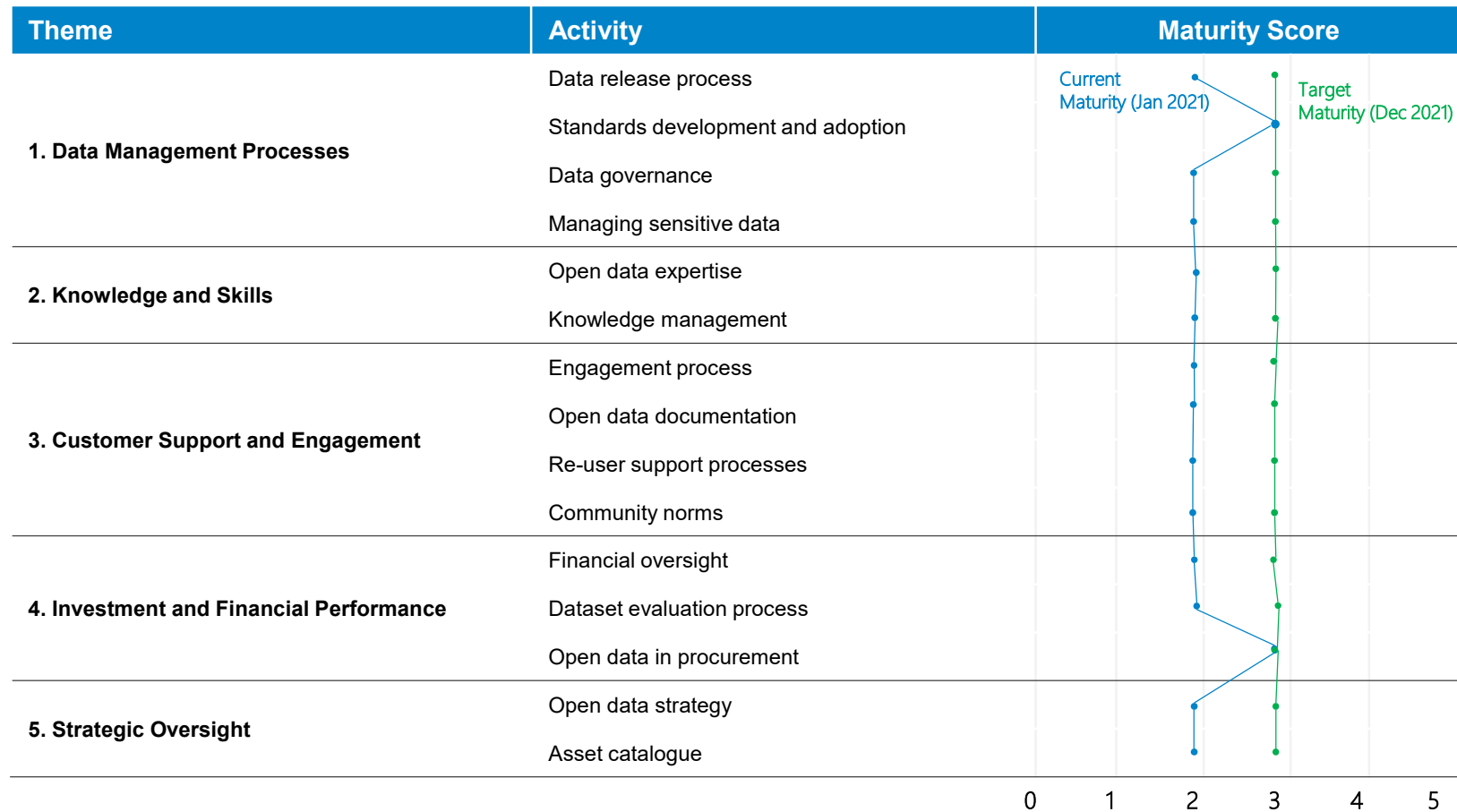| Document	Summary of Relevance to Open Data	Citation
Queensland Government Open Data Policy Statement (2017)	The cabinet endorsed Queensland Government commitment to open data, including various specific obligations for all agencies.	Queensland Government, Open Data Policy Statement, available at https://www.qld.gov.au/data/qld-data-policy-statement.pdf accessed 25 June 2019
Information access and use policy (IS33)	The Policy mandates Departments to "provide government information to the public to the maximum extent possible", free of charge and with consistent licensing.	Queensland Government, Information access and use policy (IS33), available at https://www.qgcio.qld.gov.au/documents/information-access-and-use-policy-is33
Right to Information Act 2009	Queensland Government's obligation to give access to information in the government's possession or control unless it is in the public interest not to.	Queensland Government, Right to Information Act 2009, available at https://www.legislation.qld.gov.au/view/pdf/2015-06-11/act-2009-009, accessed 25 June 2019
Information Privacy Act 2009	Various responsibilities to protect personal information, including not disclosing personal or identifying information as open data.	Queensland Government, Information Privacy Act 2009, available at https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2009-014, accessed 25 June 2019
Queensland Procurement Policy 2018	Requirements for the disclosure of procurement contracts over $10,000.	Department of Housing and Public Works, Queensland Procurement Policy, available at http://www.hpw.qld.gov.au/SiteCollectionDocuments/QLDProcurementPolicy.pdf accessed 25 June 2019
Annual Reporting Requirements	Various open data requirements to support annual reporting activities.	Queensland Government, Annual Reporting Requirements, available at https://www.forgov.qld.gov.au/sites/default/files/annual-report-requirements.pdf accessed 25 June 2019
DIGITAL1ST: Advancing our digital future	Commitment to this Queensland Government strategy to provide access to information, foster innovation, collaboration and build trust in Government.	Queensland Government, Digital1st Strategy, available at https://www.forgov.qld.gov.au/digital1st
Various Acts specific to the activities and services of the Department of Environment and Science	Various Acts stipulate the open publishing of data. A comprehensive list is under development.	

Our Strategic Plan January 2021 – December 2021

Maturity

To improve and sustain our cost-effectiveness we plan to improve our maturity in targeted areas over the 12 months from January 2021 to December 2021.

The Open Data Institute Maturity Assessment[2] was used to assess the current state of our overall Department's maturity as well as to identify a target state maturity. However, it must be noted where divisions also conducted individual maturity assessments, some divisions scored higher levels of maturity than others.

Theme	Activity	Maturity Score
1. Data Management Processes	Data release process	
	Standards development and adoption	
	Data governance	
	Managing sensitive data	
2. Knowledge and Skills	Open data expertise	
	Knowledge management	
3. Customer Support and Engagement	Engagement process	
	Open data documentation	
	Re-user support processes	
	Community norms	
4. Investment and Financial Performance	Financial oversight	
	Dataset evaluation process	
	Open data in procurement	
5. Strategic Oversight	Open data strategy	
	Asset catalogue	

Current Maturity (Jan 2021)

Target Maturity (Dec 2021)

0 1 2 3 4 5

Objectives

To realise value, our specific focus will be to...

Target policy priorities using open data

There are policy priorities relevant to our agency that we think open data can contribute to solving. We will work with the private and/or academic sector on an initiative to identify and contribute to solving one of these policy priority with open data.

Success Metric:
- *Value delivered to Queensland*

Improve the quality of our open data

We recognise it is important to users that our open data is high quality and easy to understand. We will identify our most valuable open datasets and actively improve the quality, frequency and metadata of these datasets.

Success Metrics:
- *Data Usability Rating – Tick rating 0 - 5*
- *User data quality feedback*

Improve the availability of spatial data

We undertake a number of activities for which spatial data exists. We will proactively identify and publish this data.

Success Metrics:
- *Number of spatial datasets made available*

Proactively open more data

We have a number of datasets we have not yet opened to the public, which we think could provide value to Queensland. We will proactively identify and publish these datasets.

Success Metric:
- *Number of datasets on data.qld.gov.au*

Stocktake datasets currently published

We have a number of datasets published, which may not be current or provide value to Queensland. We will proactively identify, cease or continue frequent publishing.

Success Metrics:
- *% of datasets reviewed for currency and value*

Improve the currency of our open data

We recognise it is important to users to have access to data that is as current as possible. We will identify our most valuable open datasets and actively move from static to real/near real time, using Automated Programming Interfaces (APIs).

Success Metrics:
- *Number of datasets available by API*

Responsibilities

We also have a number of day-to-day responsibilities.

- Publish open data as committed to in our open data publishing schedule
- Update/refresh our open data as specified for each dataset
- Monitor our open data email inbox
- Respond to data.qld.gov.au data requests and general enquiries
- Support and train new open data publishers
- Participate in Government open data forums – Senior Officers Working Group and Open Data Practitioners Community
- Contribute to and adopt Queensland Government Enterprise Architecture policies and other documentation
- Engage with industry and the open data community
- Review and re-publish open data strategy annually
- Conduct open data maturity assessment annually
- Provide support and mentoring at GovHack events

Action Plan

Our action plan includes delivering the initiatives we have planned to improve maturity and meet our objectives.

Category	Initiative Title	Jan – Jun 2021		Jul – Dec 2021	
Maturity	M1: Establish our data management processes/tools	■	■		
	M2: Create opportunities to improve our staff's knowledge and skills	■	■		
	M3: Improve our engagement with customers	■	■		
	M4: Identify opportunities to reduce costs of not proactively releasing our data	■	■		
	M5: Implement information governance for our open data	■	■		

Action Plan cont.

Category	Initiative Title	Jan – Jun 2021		Jul – Dec 2021	
Objectives	O1: Target policy areas for open data release				
	O2: Improve the quality of our open data				
	O3: Improve the availability of our spatial data				
	O4: Proactively release more of our data				
	O5: Continue to stocktake our open data currently published				
	O6: Improve the currency of our published open data				
Data Publishing and other day-to-day responsibilities	N/A	As specified in Appendix 2 – Data Publishing Schedule			

Team and Requirements

Closed

Our current open data team consists of...

Open Data is led by...

With support from....

Chief Digital Officer (Sponsor)	Manager, Information Management & Digital Portfolio Officer

0.5 FTE EQUIV

Open Data Community Divisional representatives	Divisional staff who manage data and information

1.0 FTE EQUIV

AS REQ'D

To implement this action plan we require....

Maturity Improvements 1 to 5 – Improve Sustainability and Cost-Effectiveness of Open Data processes	Deliver with current resourcing
Objective 1 – Target policy areas using open data	Deliver with current resourcing
Objective 2 – Improve the quality of our open data	Deliver with current resourcing
Objective 3 – Improve the availability of spatial data	Deliver with current resourcing
Objective 4 – Proactively open more data	Deliver with current resourcing
Objective 5 – Stocktake of datasets already published	Deliver with current resourcing
Objective 6 – Improve the currency of our open data	Deliver with current resourcing
Day-to-Day Responsibilities To continue to publish open data	Deliver with current resourcing

Governance

To ensure we are meeting our commitment, we will report progress to the following committees.

Committee	Frequency	Reporting Requirements
Open Data Senior Officers Working Group (Whole of Government Open Data Committee)	Every 2 Months	DES Open Data Community representative to provide general update on DES open data initiatives/progress
DES Digital Investment Strategy Committee	Every 3 Months	Divisional representatives of the DES Open Data Community report to the Information Management Working Group - status updates, review of action plan and data publishing schedule against committed timelines
DES Divisional Investment Committees / Senior Leadership Teams / Governance Boards	Every 3 Months	Divisional representatives of the DES Open Data Community report to divisional governance groups - status updates, review of action plan and data publishing schedule against committed timelines

Appendix 1 – Published Data

At 01/01/2021 we have 591 datasets published to data.qld.gov.au. For a updated list of all our datasets click here.

Appendix 2 - Data publishing schedule

We plan to publish the following datasets to data.qld.gov.au over the next 12 months. This is not an exhaustive list. We will update this list as we identify more datasets to publish and when this strategy is next refreshed.

Dataset name	Description	Target Publishing Date	Frequency of Update	Licence
The Queensland Heritage Register	The Queensland Heritage Register		Annually	CCA 3.0
WWII historic places	WWII historic places		Annually	CCA 3.0
Qld Heritage Register boundaries	Qld Heritage Register boundaries		Non-regular	CCA 3.0
Qld Heritage Council Remuneration details	Qld Heritage Council Remuneration details		Annually	CCA 3.0
Environmental Authorities Register	Register of Environmental Authorities under Environmental Protection Act 1994.		Annually	CCA 4.0
Contaminated Land Register	Contaminated land register.		Annually	CCA 3.0
Suitable Operator Register	Ongoing upkeep of the Registered Suitable Operators register.		Weekly	CCA 4.0

Appendix 2 - Data publishing schedule cont.

Dataset name	Description	Target Publishing Date	Frequency of Update	Licence
Camping and vehicle permits	This tabular data contains details of the permits issued for camping and vehicle access to the Protected Areas, Recreation Areas and Great Walks managed by Queensland Parks and Wildlife Service.		Quarterly	CCA 4.0
Protected Areas of Queensland	Protected areas of Queensland represent those areas protected for the conservation of natural and cultural values and those areas managed for production of forest resources, including timber and quarry material. These areas are defined spatially using cadastral parcels.		Non-regularly	CCA 3.0
Fire Management	Fire management zones show the principal purpose(s), in terms of fire management, for any given part of a reserve and therefore the way in which the area will generally be managed for fire. They are a component of the Queensland Parks and Wildlife Service Fire Management System.		Non-regularly	CCA 3.0
State Marine Parks	Zonings within Queensland's marine parks.		Non-regularly	CCA 4.0
Fish Habitat Areas	The 72 Fish Habitat Areas in this dataset are declared under Section 120 - Fisheries Act-1994 and Schedule 3-Queensland Fisheries Regulations 2008, effective 17 March 2017. This is a composite of ALL Fish Habitat Area boundary areas gazetted/re-gazetted between 1998-2017.		Non-regularly	CCA 3.0

Appendix 2 - Data publishing schedule cont.

Dataset name	Description	Target Publishing Date	Frequency of Update	Licence
Tracks and Trails	Queensland Parks and Wildlife Service estate access data including roads, tracks and trails, and associated data.		Non-regularly	CCA 3.0
Regional Boundaries	Boundaries delineating Queensland Parks and Wildlife Service regions.		Non-regularly	CCA 3.0
CrocWatch	Summary of estuarine crocodile reports across the state under the Queensland Crocodile Management Plan from 14 March 2007	Monthly	Annualy	CCA 3.0
Conservation status of Queensland Wilfdlife	The authorities register lists approvals issued for prescribed activities issued under the Nature Conservation Act 1992.	2019-2020	Annually	CCA 4.0
2020 State of the Environment Report	Data sets from the report.	2019-2020	Annually	CCA 3.0
Recycling and Waste in Queensland 2019	Data sets from the report.	2019-2020	Annually	CCA 3.0
Air Quality	Air Quality at Queensland monitoring stations.	30/06/2019	API	CCA 4.0
Digital images of plant specimens	Queensland collection as digitised.	2019-2022	As digitised	CCA 4.0
Biodiversity datasets	Sightings and surveys.	2019-2022	API	CCA 4.0
3D models of skeletons	The 3D model of the dinosaur skeleton and Fish skeleton	2021-2022	Annually	CCA 4.0

Appendix 2 - Data publishing schedule cont.

Dataset name	Description	Target Publishing Date	Frequency of Update	Licence
3D models of skeletons	The 3D model of the dinosaur skeleton and Fish skeleton	2021-2022	Annually	CCA 4.0
Ambient estuarine water quality monitoring	Half hourly in-situ estuarine water quality readings by station updated daily.	2021-2022	hourly	CCA 4.0
Board of Qld Museum Report	Queensland Museum Network Consultancies for the financial year 2019-2020	2021-2022	Annually	CCA 4.0
Botanical Dictionary Qld	Botanical dictionary based on the Queensland Herbarium's Census of the Queensland Flora	2021-2022	Annually	CCA 4.0
Coastal Data Systems	Datasets ranging from Waves to Storm Tidal Information	2021-2022	Annually	

Appendix 3 – Closed Data

Some data is not in the public interest to release publicly. The following datasets are closed and we will not release them as open data. This is not an exhaustive list. We will update the list as more closed datasets are identified when this strategy is next refreshed.

Dataset Title	Reason for not publishing
Commercial-in-confidence information	Data that relates to any commercial-in-confidence documents
Cabinet-in-confidence information	Data that relates to any cabinet-in-confidence documents
Environmental Authority holders' personal details	Personal information of Environmental Authority holders including names and addresses are to be kept in confidence unless required by the Public Register to be released
Financial Provisioning Schemes	Data relating to the financial provisioning schemes not releasable under Environmental Protection Act 1994
Current court proceedings	Information relating to matters that are undergoing a court proceeding
Current litigation proceedings	Information relating to matters that are undergoing a litigation process
Documents that are not publicly available under the Environmental Protection Act 1994	Documents not available under s540 and s540A of the Environmental Protection Act 1994
Procurement contracts kept on the non-disclosure register	
Property owner details	Privacy Act 1988 requirements
Heritage applications	The nature of the information associated with applications is complex and some of it is sensitive. Heritage makes certain details about applications available through the DES website, through a controlled program of release, for the purpose of inviting submissions. This data is associated with a statutory process.

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Dataset Title	Reason for not publishing
Development assessment information	This is information involved in a statutory process under the Queensland Heritage Act 1992 and other legislation. There is no legislative obligation to make open this data, and some sensitivities are involved. Some of the data does not belong to the Department of Environment and Science and is provided to enable to Department of Environment and Science to provide advice.
Compliance information	State heritage place management information related to Department of Environment and Sciences' regulatory role is private & confidential.