# DRAFT FOR FEEDBACK

# OEH DIGITAL STRATEGY

Services

delivery of services

Systems

enabled by technology

Governance

supported by processes



This digital strategy was driven by an effort to redesign the Office of Environment and Heritage (OEH) website.

A redesign alone would not have addressed many of the deep-rooted issues our business and customers were facing with our old website. Nor would it have ensured that we didn't end up in the same situation in a few years. A strategic overhaul of the website's customer experience and underpinning technology was required to help us deliver better digital services now and in the future.

The research and planning work completed as part of the website redesign informed this strategy, which will guide ongoing development and support of digital services.

The OEH Digital Strategy outlines how we will:

- respond to customer needs
- support business objectives
- invest in enterprise systems
- take a consistent, strategic approach to digital services.

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## OEH digital principles

Guidance on designing digital content and services that meet the needs of our customers and support business objectives.

PRIORITISE USER NEEDS	MAKE IT EASY TO USE AND UNDERSTAND	FEEL DYNAMIC AND UP TO DATE	ENCOURAGE DISCOVERY	BE CONSISTENT, NOT UNIFORM
<ul> <li>Start every initiative with a clear idea of who your audience is and what motivates them.</li> <li>Don't make assumptions: conduct research, analyse data and talk to your audience.</li> <li>Always be mindful of user needs and journeys.</li> <li>Support multiple channels and devices.</li> <li>Test on real users, devices and connection speeds.</li> </ul>	<ul> <li>Users shouldn't have to understand the organisation or read lengthy explanations to use our services.</li> <li>Enable self-service by supporting complete tasks, both online and offline.</li> <li>Support our customers' intended journey by making processes visible and predictable.</li> <li>Avoid jargon and specialist terminology so that information can be understood by non-experts.</li> </ul>	<ul> <li>Promote our latest projects, announcements and initiatives in relevant content areas throughout the website.</li> <li>Clearly display details about the freshness and recency of data and information.</li> <li>Plan for how your content will be maintained and remove any old content when it is not relevant.</li> </ul>	<ul> <li>Plan for different ways for users to find our services.</li> <li>Help users discover other things they may be interested in by displaying related content and cross-promoting services.</li> </ul>	<ul> <li>Use the same design patterns and language wherever possible.</li> <li>If you have to deviate, make sure to do it in a consistent manner so users know what to do.</li> <li>Test on different browsers and devices to ensure consistency and compatibility.</li> </ul>
MAKE IT ACCESSIBLE	RESPOND TO ISSUES AND FEEDBACK	MEASURE SUCCESS	DESIGN FOR FLEXIBILITY AND REUSE	BE TRUSTWORTHY
<ul> <li>Make digital services available to and usable by all people whatever their abilities.</li> <li>Design for the different ways people use websites, applications and mobile devices.</li> <li>Complete an accessibility review prior to releasing new styles or functionality.</li> </ul>	<ul> <li>Provide an easy way for users to report issues or make suggestions.</li> <li>Improve information and services based on user feedback.</li> <li>Plan for maintenance and ongoing management – both scheduled and when unexpected issues arise.</li> </ul>	<ul> <li>Identify early on how different stakeholders plan to measure the success of an initiative.</li> <li>Plan for how this information will be captured, shared and reported.</li> <li>Use the insights to make decisions and improvements.</li> </ul>	<ul> <li>Consider digital products that can adapt to inevitable changes in government structures and funding.</li> <li>Structure, publish and share information in a way that enables reuse over time and across different pages, websites and other channels.</li> </ul>	<ul> <li>Confirm and maintain accuracy of all published information.</li> <li>Protect users' information by collecting, storing and sharing in compliance with legal requirements.</li> </ul>

## Strategic objectives

The *OEH Digital Strategy* prioritises our digital initiatives based on government priorities, business objectives and customer needs. It provides rationales, principles and guidelines for OEH activities in the digital sphere.

## OEH digital strategy

## Services

delivery of services

Deliver engaging content

Enable productive online interactions

Understand customer needs, measure service outcomes

## Systems

enabled by technology

Invest in enterprise digital systems

Integrate key systems

Develop new applications and functionality

## Governance

#### supported by processes

Work together productively and collaboratively

Develop and adhere to standards and procedures

Gain insights through reporting and analysis

## Key drivers

Before we could start planning for the future, we had to get an understanding of the problems with the old website.

The OEH digital team and U1 Group worked together to review our current digital presence. This review included an analysis of data from Google Analytics, page rating feedback and requests to web support.



## Hard to find things

The website redesign will improve the site search and reorganise menus so that users can find what they're looking for in fewer clicks and without understanding the structure of government.

## Difficult publish and keep up to date

New processes and tools will be developed to make it easier for staff to update, change, add and remove content from the website.

### Too many words, too many pages

A content audit will review the 12,000+ webpages and 19,000+ documents currently on the website. This will include a major clean up of old content, a new approach to content development, new content standards and training for content contributors.

## Unengaging

The content strategy and underlying technology will support better use of visually engaging content like images, video and maps. Newly developed content will be shareable, have clear calls to action and be personalised based on user behaviours.

## Outdated and inconsistent design

New visual design will give the site an updated look and feel and new page templates will give content authors more options for displaying content while maintaining consistency across the website.

## Poor experience on mobile

Mobile optimisation of webpages will improve navigability and readability for the 40% of external users who view the OEH website on a mobile device or tablet.

#### More information

Business discovery findings: <a href="http://ehub/resources/info/business-discovery-findings.pdf">http://ehub/resources/info/business-discovery-findings.pdf</a> Customer research findings: <a href="http://ehub/resources/info/external-research-findings.pdf">http://ehub/resources/info/business-discovery-findings.pdf</a>

# Approach

Our approach involved extensive research, planning and consultation with stakeholders to ensure that what we design now and in the future meets customer needs and business objectives.

Discovery	Review digital systems	Audit current digital presence	Gather internal stakeholder requirements	Research external customer needs	Gather requirements for new website
Design	Reorganise navigation	Design new look and feel	Plan content strategy	Test prototype with real users	Define specifications for website build
Build	Reskin old website	Build new website functionality	Redevelop content	Build pages in new CMS	Launch new website in phases
Support	Adopt internal procedures	Adehere to standards and guidelines	Integrate applications and systems	Follow digital initiatives roadmap	Develop new web services strategically

## Requirements for the new website

The internal stakeholder research and external customer research informed requirements for a new website that supports both internal business objectives and external customer needs.

## **Business** needs

## Customer needs

Highlight our work

Flexibility and future-proofing

Guidelines and best practices (that we adhere to)

Processes and tools to support our work

Meaningful metrics



Find and use resources easily

Clear, concise, quality content

Engaging photos and infographics

Share data

Consistency

Fewer PDFs

Break down silos

Contact details

Use mobile device or tablet

Complete a specific task

Find info that's relevant to me

See related topics together

Save, print and share resources

Provide feedback and get a response



More information

Business discovery findings: <a href="http://ehub/resources/info/business-discovery-findings.pdf">http://ehub/resources/info/business-discovery-findings.pdf</a> Customer research findings: <a href="http://ehub/resources/info/external-research-findings.pdf">http://ehub/resources/info/business-discovery-findings.pdf</a>

## Organising information

Information architecture (IA) is how we categorise and label information on the website.

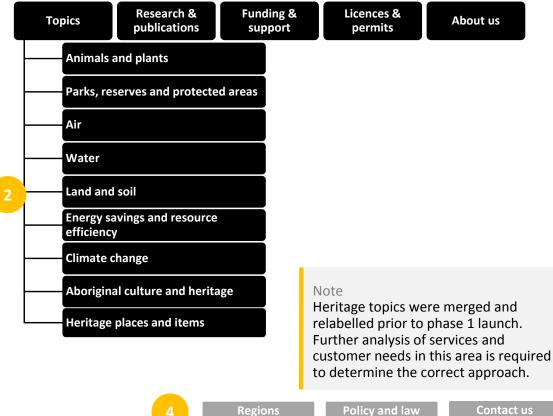
**Education resources** 

News & media

#### New information architecture

The new IA is based on an analysis of our current services and research with internal customers and external stakeholders. Staff across the organisation were consulted before the high level structure was finalised.

- Top level provides straightforward paths to our core services.
- Topics menu, makes it easy for users to see at a glance all of the areas OEH works in.
- Entry points for specialised audiences: students, teachers and media.
- Footer provides links to key resources and contact details.



## Why the new IA works

**Highlights our core service offering:** At a high level, it gives users get a clear idea of the services we provide and the areas we work in.

**Reflects what our this organisation does now**: It doesn't attempt to explain our relationship with other websites or reflect our history of organisational change.

**Is future-proofed:** It's scalable and will be able to adapt to future organisational restructures and changes in business priorities.

Has clear labels: Labels are easy to read because they use plain language and avoid jargon.

**Doesn't reflect our structure:** Customers don't need to understand the structure of government or to access services.

**Reflects customer needs:** Supports customers' journeys on the website by providing clear navigation and multiple pathways.

## Validating the IA with user testing

We tested the IA with external users by asking them to complete key tasks using the navigation. Based on their experiences, relabelled and restructured parts that weren't working well. User feedback was largely positive and most tasks were able to be successfully completed.

### Maintaining a well-structured navigation

The Digital and Content teams have developed a set of guidelines for navigation that supports the user journey and enables our users to have access to quick, logical pathways to meet their task or informational needs.



These guidelines will be used when working with business areas on content redevelopment for lower levels of the IA and whenever pages are added to the website.



#### Standards for navigation

- ✓ Labels in navigation must be short and plain language
- ✓ Navigation should not reflect organisational structure
- Navigation should support multiple pathways
- ✓ Top level navigation items should not include external website
- ✓ Side navigation must not be deeper than 3 levels
- Primary navigation must not be replaced by local navigation
- ✓ Changes to high level IA must be backed by customer research
- ✓ All pages must have a breadcrumb
- ✓ Labels in navigation cannot include special characters

- ✓ Labels in navigation cannot include acronyms
- ✓ Labels in navigation must use sentence case capitalisation
- ✓ Navigation should reflect customer needs and terminology
- ✓ Navigation labels should avoid brand/program names
- ✓ Navigation label should be similar to page title
- ✓ Navigation items must not be for a single announcement or publication
- ✓ Limit the number of navigation items that will be displayed on the page
- ✓ Navigation items should point to pages, not digital assets

#### More information

User testing findings: <a href="http://ehub/resources/info/user-testing-findings.pdf">http://ehub/resources/info/user-testing-findings.pdf</a>

Navigation standards and guidelines: <a href="http://ehub/resources/info/Navigation-standards.pdf">http://ehub/resources/info/Navigation-standards.pdf</a>

## New look and feel

Guided by the business and customer research conducted by U1 Group, the OEH Digital, Brand Content and Design and Marketing teams worked with external design agency Razorfish to develop the website's visual design.

## Design goals

- 1. Create engagement and interest through visual appeal
- 2. Inspire conversation, action and engagement
- 3. Create a perception of OEH as being easy to work with
- 4. Show that we are part of the NSW Government
- 5. Show the wealth of relevant information
- 6. Show authority and expertise
- 7. Make it look simple to use
- 8. Create visual separation
- 9. Create a feeling of trust through expertise
- 10. Make it about them and their community, not us
- 11. Give people a desire or reason to return
- 12. Show the real difference that OEH (and people) have made

## Validating the design with user testing

U1 Group conducted user testing to confirm that the look and feel developed supported the 12 goals of the visual design. Based on the feedback from users, changes were made to the look and feel to improve usability. Overall, the response to the look and feel was positive and demonstrated that the design goals had been met.





#### Standards to support look and feel

- ✓ Colours used on website must be drawn from colour palette
- ✓ Colours must be used as intended in the design
- ✓ Website fonts must be used as intended in the design
- ✓ Icons used on the website should be from the icons library
- ✓ All visual elements must be accessibility compliant



## Reskinning the old website

Due to the volume of content on the old website, content redevelopment and build on the new website is expected to last over a year.

In. order to support a consistent user experience across two different web environments, the old content, which remains in TeamSite CMS, has been "reskinned" and made mobile responsive to look and behave similarly to the new website.



## New templates

**Layout flexibility**: Pages will be made up of discrete content blocks that can be combined in different ways to create a variety of layouts.

**Styling options**: A pattern library has been developed and features many options for engaging display of content.

## Website style guide

A new style guide has been developed to help website contributors apply the new design.

## Use of imagery

The design can accommodate a range of photography styles and image sizes.

Images used are vibrant and reflect NSW's natural beauty and rich heritage.

Preference is for images used on the website to be sourced from the OEH image library.

"The pictures are beautiful. Photos tell a story about what OEH does - showing people, animals, natural environment."

### Mobile optimisation

Pages are designed to look good and function on any screen size.

This will improve the user experience for the 40% of users on tablets and mobile phones.

Mobile-friendly pages also rank better in search results.



#### More information

Creative brief: http://ehub/resources/info/creative-brief.pdf

Website style guide: http://www.environment.nsw.gov.au/content/styles

## Meeting customer needs

Understanding the user's motivation helps us plan their journey through the website and deliver services that meet their needs.

## Customer expectations

The *OEH Corporate Plan* defines the key expectations of OEH customers. Our website should help ensure that we meet these expectations and help us improve overall customer satisfaction.

- We are easy to work with
- We understand them
- We work together
- Our expertise and services add value
- They know what to expect
- They understand how we work

#### Website customer motivations

Based on our customer research, seven key tasks have been identified for OEH website users.

To contribute to our work	People who supply OEH with feedback, data and information.
To plan an experience	People who use information provided by OEH to have an enjoyable or informative experience.
To help someone else	People who use our tools and resources to act as an intermediary between OEH and other customers.
To get information	People seeking information provided by OEH such as online tools, data and publications.
To understand regulation	People who need to lodge a complaint or are seeking advice around regulation administered by OEH.
To complete a transaction	People who need to complete a specific business interaction, which is often automated.
To support their work	People who are looking for OEH to provide resources to support the work that they do.

Overlapping strategy in development

The Customer Experience Division is leading the development of a Customer Centric Program for OEH. These motivations align closely with OEH's understanding of our customers as described in the Customer Centric Program segments.

## User personas

Personas and user journeys are useful artefacts for teams to refer to when designing customer experiences. They are conversation starters for the team to take inspiration from and to drive discussion.

During the customer research, personas were developed to represent five of OEH's key customer groups:



It is important to note that OEH serves a wide range of customer groups. And the organisation's relationship with each customer/group can vary depending on the topic. The personas do not attempt to cover every customer or interaction. When developing services for a customer group not covered by one of these personas, the personas may be useful as a framework for considering an audience's motivations, needs and journeys.



#### Standards for meeting customer needs

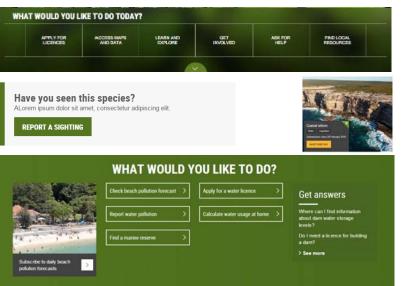
- ✓ New services must be backed by customer research and tested with users
- ✓ Navigation should reflect customer needs and terminology
- ✓ Changes to high level IA must be backed by customer research
- ✓ Content on homepage must be backed by customer research

#### More information

OEH website user personas: <a href="http://ehub/resources/info/OEH\_website\_user\_personas.pdf">http://ehub/resources/info/OEH\_website\_user\_personas.pdf</a> How to use audience personas: <a href="http://ehub/resources/info/how-to-use-personas.pdf">http://ehub/resources/info/OEH\_website\_user\_personas.pdf</a>

#### Task-oriented content

Newly designed task areas and calls to action are intended to help highlight key user tasks on landing pages. The tasks highlighted in these task areas should reflect our key customer motivations and the labels should reflect actions that the customer can take.



User motivation	Example tasks
To contribute to our work	Report a species sighting, Record soil information
To plan an experience	Stay in a national park, Visit a heritage site
To help someone else	Confirm energy savings, Find a heritage professional
To get information	Calculate energy usage, Download soil maps
To understand regulation	Report air pollution, Learn about e-waste disposal
To complete a transaction	Apply for a permit, Register for air quality alerts
To support their work	Download development forms, Search for grants

### Designing services

The new website takes a fresh approach: rather than simply publishing webpages, we will design services. When developing new pages we will consider:

- What's the business need?
- What's the customer trying to do?
- How will users find this info?
- What should the user do next?



#### More information

Page elements: <a href="http://www.environment.nsw.gov.au/content/styles/page-elements">http://www.environment.nsw.gov.au/content/styles/page-elements</a>

Page planning form: http://ehub/resources/info/page-planning-form.pdf

## Homepage

Our old homepage was stale, cluttered and cumbersome to manage. The redesigned homepage supports the user journey, presents OEH as a dynamic organisation and engages users in the work we do.

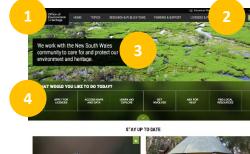
### Purpose

The homepage needs to answer key questions:

- What is OEH and why should I care?
- How can this website help me?
- How do I find things?
- What are the latest issues concerning NSW's environment and heritage?
- How can I learn more about my local environment and heritage?

Content featured on the homepage should be aimed at answering one of these key questions.

If the content does not answer one of these questions, it doesn't belong on the homepage.









## Standard for homepage

✓ Changes to homepage must be backed by customer research

#### Content

- Reorganised navigation supporting browsing by topic or service type.
- Prominent search field, for navigating a site with a large amount of content and resources.
- A one liner that explains what we do, responding to research findings that uncovered a low awareness of OEH's responsibilities.
- Task area, offering a clear pathway to support popular user journeys.
- Current information and engaging imagery featuring latest news, new initiatives and opportunities for involvement.
- 6 Social media activity.
- Regional map, providing navigation to localised information.
- Infographics based on regularly updating data feeds.

## Topic areas

Topics are designed to break down silos between business areas and organise resources by theme.

### Topics mega-menu



The topics mega-menu makes it easy for users to see at a glance all of the areas OEH works in.

It uses plain-language labels that are easy to understand and is supported by imagery that's reused throughout the topic areas.

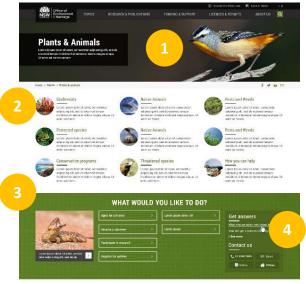
Importantly, the topics menu does not reflect OEH's organisational structure and avoids jargon and brand names.

Customer research showed that the topics mega-menu helps users understand the breadth of OEH's work and discover services they didn't know existed.

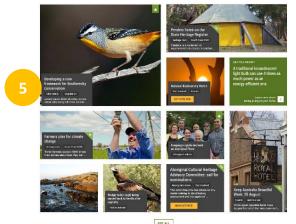
## Topic landing pages

Topic landing pages provide a single entry point for all info related to a topic. They include:

- Engaging image related to the topic.
- Images and descriptions to support navigation to subtopics.
- Task area, highlighting key tasks related to this topic.
- Frequently asked questions and contact details for this topic.
- 'Stay up to date' section provides insight into OEH's latest work on this topic.
- 'Related resources' section to feature key resources, including publications, legislation or other websites related to this topic.









## Regional content

Research with external customers highlighted a demand for localised content. Customers want to see information relevant to the area where they live or work.

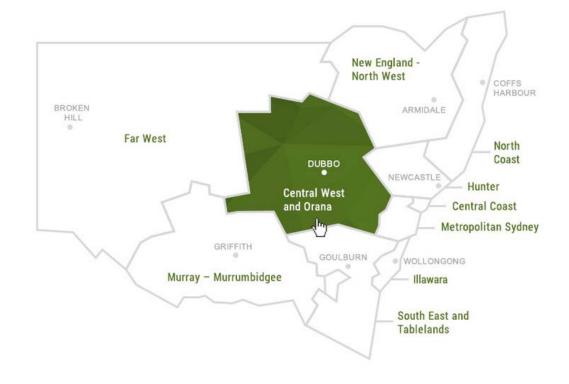
The audit of the current website showed that while OEH has many resources that are geographically based, they have not been presented in a way that provides an overview of the environment and heritage of a region.

## Defining regions

Many different sets of regional boundaries were considered before deciding on the 10 regions used on the new website.

These regions reflect NSW Planning regions. The boundaries of these regions align with local government area (LGA) boundaries, which will enable us to map the regions to other regional boundaries used by OEH.

- Metropolitan Sydney
- Central Coast
- Central West and Orana
- Far West
- Hunter
- Illawarra
- Murray-Murrumbidgee
- New England-North West
- North Coast
- South East and Tablelands



More information

Mapping of regions used on the website to other sets of regional boundaries: http://ehub/resources/info/Regions.pdf

## Region landing pages

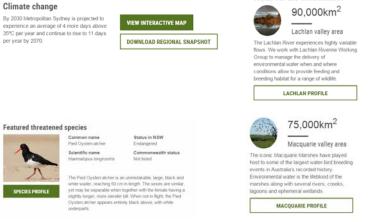
Region landing pages provide an entry point to resources for a local area.

- Engaging image of the region's local environment or heritage and a map showing location.
- Brief description of the region and a detailed map showing major cities and towns.
- Key facts and figures related to the environment and heritage of the region.
- Task area, highlighting key tasks for users in the region.
- Contact details for the local OEH office.
- 6 'Stay up to date' section provides insight into OEH's latest work in the region.
- 7 Things to do and see in the region, promoting local heritage sites and park attractions.



## Regional highlights

Interesting statistics and features highlight regional data and encourage the user to explore further.



Water for the environment

## Spatial metadata

Tagging content with spatial metadata will support region landing pages and geographic search functionality.

## News content

News articles are used to showcase our work, promote information and engage our customers.

#### What is news?

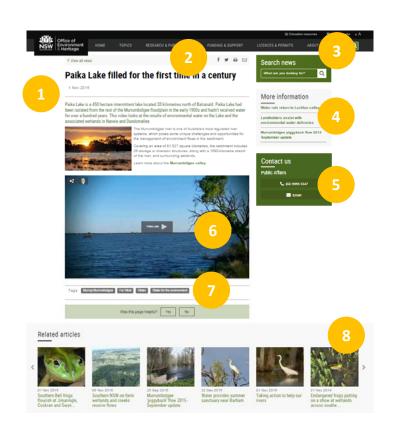
News articles can take a number of formats - ranging from formal announcements to less formal stories. This includes:

- Ministerial media releases
- OEH media releases
- announcements from business areas
- engagement opportunities
- public consultations
- interesting facts
- articles
- e-newsletter articles
- events

### News pages

News pages use a special template designed to highlight the article. To emphasise the story as the most important thing on the page, they do not include a banner image or left navigation like standard content pages do.

- 1 Prominent headline and introduction.
- Toolbar for sharing the news article on social media or by email.
- Search box providing quick access to other news articles.
- Links to content on the website related to this news.
- Media or business area contact details for this story.
- A variety of options are available for layout, including embedded images and video.
- Subject and location tags that improve article's search rankings and link it to related content.
- Related news articles, encouraging the user to explore further.



### How news gets promoted

News articles provide more visibility for announcements and make it easier to promote them.

Add metadata

Promote in relevant content areas

Share via e-news and social

Archive old news

- Each article has a unique title and description which appear in search results
- Articles are tagged with location, audience and subject
- Tags support crosspromoting the news on related pages

North Coast

Education

Parks reserves and protected areas

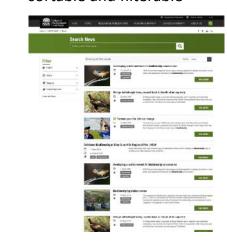
Tags

- Articles automatically appear in 'stay up to date' feeds on relevant landing pages
- News can also be promoted as a featured story on relevant content pages
- Selected news articles can be promoted on homepage

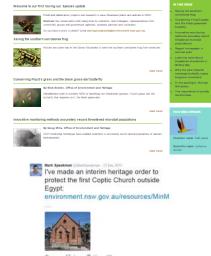
- Individual articles can be linked to
- News articles can be shared on social media by OEH or by our customers
- Collection of articles can be used for e-newsletter content

 New articles automatically replace older ones

- All articles are added to a centralised archive and individual archives can be created for each area
- Can be used as a blog or an e-newsletter archive
- Archives are searchable, sortable and filterable



Saving our Species Update



More information

News pages: http://www.environment.nsw.gov.au/content/styles/page-types

## **Publications**

OEH makes many of its print publications available on the website.

## What is a publication?

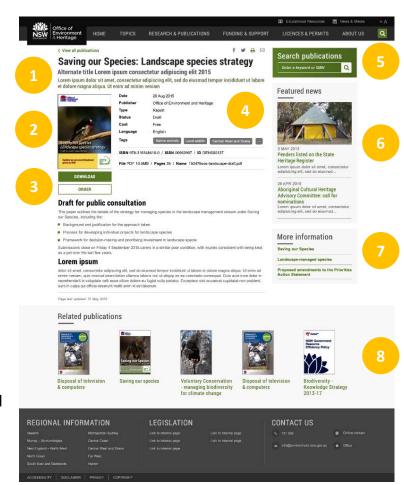
#### Publications include:

- official publications with an OEH publication ID
- publications without an OEH publication ID
- reports
- management plans
- strategies
- policies.

## Publication pages

Publication pages use a special template designed capture valuable metadata about the publication.

- Title of publication, alternate title and brief description.
- Cover image.
- Link to order and/or download a copy.
- Details about the publication.
- 5 Search for other publications.
- Featured news related to the publication (e.g. media release announcing the release of the publication).
- Links to content on the website related to this publication.
- Related publications, encouraging the user to explore further.



## How publications get promoted

Publication pages provide structure to information about publications and make it easier to find and promote them.

Add metadata

Promote in relevant content areas

Syndicate to DataNSW Keep publication lists up to date

- Each publication has a unique title and description which will appear in search results.
- Publications are tagged with publication type, location, audience and subject.
- Tags support crosspromoting the publication on related pages.

Tags: North Coast Education

Parks reserves and protected areas



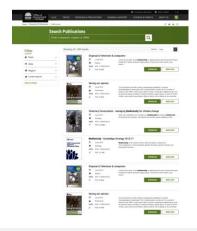
- Publications automatically appear in 'related publications' feeds on relevant landing pages.
- Publications can be promoted as a featured publication on relevant content pages.
- Each publication page includes a list of related publications.



 Publication metadata is shared with DataNSW so that publications are listed in a central repository of NSW Government publications.



- New publications are automatically added to publication lists.
- All publications are added to a centralised publication list.
- Individual publication lists can be created for each area.
- Archives are searchable, sortable and filterable.



More information

News pages: http://www.environment.nsw.gov.au/content/styles/page-types

## Data and maps

OEH holds a wealth of useful data that is not used to its full potential. This data should be used to develop interactive tools on our website that engage our customers in learning about the environment and heritage of NSW.

## Data and mapping needs

#### OEH staff and customers want:

- data presented in a way that's interesting and easy to understand
- data highlights data that encourage deeper exploration
- quick, easy access to raw data for use in their own work
- ways for external customers to share their data with OEH
- professional looking maps for displaying spatial data
- interactive maps that make it easy to filter, search, zoom and turn on and off data layers.

## Infographics

During the first phase of the redesign, we developed engaging infographics for air quality and beach water quality. These tested well with users, who said they were easy to understand and highlighted interesting information.



## Sharing data

The digital strategy research highlighted a need for both internal staff and external customers to share data sets. Allowing for open access to data not only makes customers' journeys easier. It also opens up for potential partnerships with other organisations, businesses and agencies - and it signals transparency.

#### Overlapping strategy in development

The Open OEH program is driving an organisation-wide effort to make data sets available and the BIS Spatial team is in the process of redeveloping the OEH maps and data portal.

The Digital team will work with BIS to ensure that the new maps and data portal aligns with the OEH Digital Principles.

## Interesting facts

The new 'Stay up to date' module designed for landing pages is redesigned to feature interesting facts that inform our customers and encourage them to explore a particular topic.



## Digital systems

OEH's past investment in systems used to support its various websites has been piecemeal. Before building the new website, we reviewed the current technologies and evaluated them against our requirements for the new website. We made strategic decisions about which systems to use and how they should integrate with each other.

### Systems review

External consultants Business Aspect conducted a review of our core digital systems. The research process included interviews with users, support and training staff, technical support staff, and vendors. The review delivered recommendations for platform consolidation focussed on the future delivery of websites which can grow to meet changing agency and customers' needs. These recommendations provided a foundation for the redevelopment of the OEH website.

Web content management system (WCMS)

#### **Review findings (current state)**

## Recommendations (future state)

What are the requirements for a WCMS to support the future needs of the OEH website?

Does TeamSite or Sitecore better meets these requirements?

- Two enterprise level web content management systems (TeamSite and Sitecore)
- Duplication of content
- Duplication of development effort
- Duplication of effort to integrate other systems

- Build and manage all websites in Sitecore.
- Get the most value by starting from scratch with a complete WCMS rebuild and content redevelopment (not a migration from TeamSite).
- Govern and design for standardisation and reuse.

## Defining appropriate use of CMS

The Digital team and BIS will establish principles to gate permissible use of the CMS and guide future development of CMS and application functionality.

### Maintaining architectural boundaries

We need to define the boundaries of the WCMS to ensure it is not being used to deliver other areas of information management or document management functionality or being customised to deliver functionality that already resides in other OEH systems.

Likewise, other systems or custom applications should not be developed to deliver functionality that the WCMS delivers.

#### Search

Search platforms are used to deliver site search, specialised content searches and filtering and custom application search.

	Review findings (current state)	Recommendations (future state)
Which search solution(s) best meets the requirements and integrates with the recommended WCMS?	<ul> <li>Three search solutions (IDOL, Google, Lucene/SOLR)</li> <li>Triplicate license and upgrade costs</li> <li>Lack of product support</li> </ul>	<ul> <li>Use Google for site search.</li> <li>Develop with Lucene/SOLR for advanced search functionality.</li> </ul>

#### Overlapping strategies in development

Through a separate review of OEH enterprise architecture, BIS will deliver recommendations for an enterprise search solution for custom applications. BIS will also separately evaluate requirements for site search on intranet as part of the eHub redevelopment project.

## Infrastructure

The infrastructure review extended beyond just the OEH website to include the National Parks site and other websites that OEH supports. It delivered recommendations for our web servers and their support. .

	Review findings (current state)	Recommendations (future state)
What is the recommended hosting and support arrangement for all OEH websites?	<ul> <li>Two separate hosting environments</li> <li>Duplicate license costs</li> <li>Support split between two different teams with different technical skillsets</li> <li>Two different publishing models</li> </ul>	<ul> <li>Move to cloud hosting.</li> <li>Consolidate licences.</li> <li>OEH BIS take responsibility for managing web infrastructure.</li> <li>Separate applications deployment from the CMS.</li> </ul>

## System integrations

In their review of our core digital systems, Business Aspect highlighted several key systems that should be integrated with the CMS.

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	Review findings (current state)	Recommendations (future state)
DIGITAL ASSET MANAGEMENT (DAM) SYSTEM  For managing corporate owned images and video and using these on the website.	<ul> <li>OEH owns or holds copyright licences for many thousands of digital assets.</li> <li>These digital assets are currently stored, managed and accessed in different ways across different systems, without a strategic, consolidated approach and with a considerable amount of double-handling.</li> </ul>	Gather full requirements for DAM, including CMS integration requirements and assess Media Equation's ability to meet these requirements. Depending on this assessment, either integrate Media Equation with Sitecore or select a new solution that meets DAM requirements and integrate that.
CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM  For managing customer data and information about our interactions with customers.	For personalisation to work there is a requirement to integrate the customer's web experience with their profile in Salesforce CRM to keep track of their preferences.	Integration between Salesforce and Sitecore is planned to deliver personalisation on the National Parks website. OEH can leverage this work.
FORMS SOLUTION  To support the development of forms that allow online submissions.	The OEH website currently uses Blue Arc/Ignition Suite for embedded web forms. This solution is problematic for a number of reasons including:  accessibility issues are present in forms  administration is cumbersome  product support is poor  serious usability issues are present  security risks have been identified  functionality that has now become a standard part of form solutions is lacking.	Forms on the new website to be developed using Sitecore's Web Forms for Marketeers solution. Advantages will include:  • integration with CRM (via Eloqua) so that customer data collected on forms is held and managed centrally.  • mobile optimised forms.  • easier to manage forms administration.  A separate solution will be required to support surveys and event registration forms.
SPATIAL	Approach to spatial services on the website is inconsistent. User experience and visual design of many maps is poor.	The development of a spatial strategy is underway by BIS. The Digital team will work with BIS to ensure that spatial services on the website align with the OEH Digital Principles.

## Web applications

The OEH website includes 70+ web applications.

### Goals for applications

Consistent

As our user personas demonstrate, a single customer often moves between different parts of our website accessing content and applications from different areas.

We can support users as they move between different areas of our website by reusing familiar design patterns and functionality.

Meeting customer needs

The development of new services should be backed by customer research to ensure that needs are being met.

When designing services, we must consider the full user journey.

Adhering to standards The *OEH Digital Standards* have been developed as guidance on best practices.

They are aimed at delivering a good user experience and standardising approaches.

## Review of existing applications

Past application development has not inconsistent in its approach and application of standards. As a result, many applications have issues related to:

- · cross-browser compatibility
- accessibility issues
- poor user interfaces
- dependencies on outdated technologies
- over-complicated support arrangements.

The Digital Team will work with BIS and business areas that own applications to complete a review and make recommendations for improvements.

## Process for new digital projects

The OEH Executive has mandated that all new digital initiatives be registered with the Customer Experience Division.

The CED teams responsible for digital service delivery and BIS will work together to ensure that new digital initiatives are properly evaluated, adequately resourced and adhere to standards.

More information

Web applications style guide: <a href="http://www.environment.nsw.gov.au/content/styles">http://www.environment.nsw.gov.au/content/styles</a>

**OEH Digital Standards:** 

New digital initiatives: http://ehub/publishing/digitaldesignproduction/StartingDigitalProject.htm

## Applying digital principles to application development

The digital team has developed guidelines for application development to align our efforts with the OEH Digital Principles.



## Standards for application development

PRIORITISE USER NEEDS	MAKE IT EASY TO USE AND UNDERSTAND	FEEL DYNAMIC AND UP TO DATE	ENCOURAGE DISCOVERY	BE CONSISTENT, NOT UNIFORM
<ul> <li>✓ New services must be backed by customer research and tested with users</li> <li>✓ New applications must undergo user testing prior to release</li> </ul>	<ul> <li>✓ Make the process efficient for the user</li> <li>✓ All pages and applications should have an introduction</li> <li>✓ Help users avoid and correct mistakes</li> <li>✓ Error messages must be obvious, clear, helpful and accessible</li> </ul>		✓ All pages must have a breadcrumb	<ul> <li>✓ Application developers must use a standard toolkit</li> <li>✓ Web applications must use global files</li> <li>✓ Web applications must apply the same standards as their parent websites</li> <li>✓ Styles and functionality must be consistent across browsers and devices</li> <li>✓ Icons used on the website should be from the icons library</li> </ul>
MAKE IT ACCESSIBLE	RESPOND TO ISSUES AND FEEDBACK	MEASURE SUCCESS	DESIGN FOR FLEXIBILITY AND REUSE	BE TRUSTWORTHY
<ul> <li>✓ Web pages must satisfy level AA requirements of WCAG 2.0</li> <li>✓ New applications must undergo an accessibility review prior to release</li> </ul>		✓ Use Google Tag Manager for tracking	✓ Content within applications must be editable by CMS authors	<ul> <li>✓ When collecting private information, use a https</li> <li>✓ All pages must use standard header and footer</li> <li>✓ Sub-domains are used for externally hosted sites</li> <li>✓ Third party solutions must be integrated in a way that provides a consistent user experience</li> </ul>

## Mobile apps

Applications should be developed to work on mobile devices, but this rarely requires the development of a native iPhone or Android app. Standalone mobile apps will only be considered once the core web service works well on mobile devices, data has been made available and customer research demonstrates a genuine user need.

#### RESPONSIVE WEB DESIGN

Responsive web design optimises users' viewing experiences across a wide range of devices. Responsive websites are built using open web standards and run inside a device's web browser.

#### Pros of responsive web design

- One version, one place to make updates
- Improvements become available to desktop and mobile users
- Uses open standards (HTML5, CSS, javascript, etc.)
- No gatekeepers to restrict access so OEH retains complete control over release process
- In-house development and support skills

#### Cons of responsive web design

- Not continuously on device
- Some device features unavailable
- Requires internet connection

#### **OPEN DATA**

There's a vibrant market of third party native app developers using government data and APIs. Before developing our own apps, we should make our data available to them.



If an unmet need remains after a service has been designed to be mobile responsive and the data is openly available, business areas can propose the development of a native mobile app.

The proposal must be supported by evidence from customer research and a plan for long term support and maintenance.



#### NATIVE MOBILE APP DEVELOPMENT

Native mobile apps are downloadable software that runs using the device's operating system code and APIs.

#### Pros of native app development

- Have a constant presence on device
- Can access all functions on device
- Can be used offline, in some cases

#### Cons of native app development

- Expensive to develop and maintain
- No in-house development/support expertise
- Needs several different versions (iPhone, Android, Windows, etc.)
- Updates required whenever new devices and operating systems are introduced
- Improvements to mobile apps not reflected on desktop version of app
- Updates must be duplicated across all versions
- Release approval and timings controlled by app stores

#### Note

Adopted from UK Government mobile app standards: https://www.gov.uk/service-manual/making-software/standalone-apps.html

## Content redevelopment

Developing high quality content involves strategic planning, web writing skills, subject matter expertise and editorial oversight.

## Approach

Start from scratch

After a thorough review of system functionality, the digital systems review recommended that in order to fully utilise the new CMS, OEH needs to completely redevelop content – not just migrate from TeamSite to Sitecore.

Develop tools and skills

New content standards and CMS functionality bring a major shift in how we develop web content. Staff involved in website contributions will be upskilled in workshops and supported by a toolkit and standards.

Work in teams

Content redevelopment teams will bring together staff with a variety of skills. Teams align with topic areas defined by the information architecture, cutting across our organisational structure and facilitating collaboration.

Create quality content

Valuable web content is:

- findable
- readable
- understandable
- actionable
- shareable.

Release in phases

A phased release of functionality and content has been planned to help us start seeing improvements right away while we take the time we need to redevelop such a large amount of content.

Manage content effectively

The new CMS will provide tools to help OEH effectively manage website content including details about content ownership, content expiration, improved publishing workflows and regular content reviews.

## Writing for the web

Writing web content is different from writing for print. The Content Team has developed a copywriting style guide to help website contributors write and edit content that aligns with the goals of the new website.

The OEH Writing for the Web guidelines focus on:

- knowing your audience
- using the right language
- using the appropriate voice and tone
- structuring content.

The *Quality Content Checklist* is a quick reference tool to ensure that the guideline is being followed and content goals are met.



#### Standards to support quality content

- ✓ All content must conform to the OEH style guide
- ✓ All pages and applications must have an introduction
- ✓ Writing style and tone should be suitable for web

## Search engine optimisation (SEO)

We can make our content easier to find by writing better page titles, adding page descriptions, using keywords in the content and adopting best practices for file names.

The SEO Guide for Content Authors explains how to write pages that rank well in search results.



### **Standards to support SEO**

- ✓ File and folder names should be meaningful and easy to read
- ✓ Use meaningful keywords in the file name
- All webpages and applications must have a descriptive and unique meta title
- ✓ All webpages and applications must have a meta description

### More information

Writing for the web: http://ehub/resources/info/writing-for-the-web.pdf

Quality content checklist:

SEO guide for content authors:

Modifying the tone of voice for each persona: <a href="http://ehub/resources/info/how-to-use-personas.pdf">http://ehub/resources/info/how-to-use-personas.pdf</a>

When (not) to use PDFs:

#### The tone of the OEH website should be:

Tone of voice



The Content Team has developed a *How to use* audience personas guide that describes how to adjust the tone of voice for each of the user personas.

## Key areas for new content development

Our research highlighted several areas in need new content to support important customer groups and their tasks.

#### Education resources

The new information architecture creates a high level centralised location for all of OEH's educational resources. Educational resources should also be available within the topic areas that they were created for, but making this area their primary home will allow for better cross-promotion of educational resources and will help OEH better serve students and teachers.

Customers have praised the quality of the resources, but work is required to make them easier to find, professional in appearance and up to date.

## Research and publications

The Science Division has identified areas for new content development aimed at promoting OEH scientists as leaders in their fields.

#### This includes:

- sharing case studies
- publishing scientist profiles
- promoting publications
- highlighting interesting facts throughout topic areas.

Functionality has been developed during the website redesign to support these requirements, but significant content development effort is involved in order to achieve Science Division's goals.

Overlapping strategy in development Science Communications Strategy

### Funding and support

Seeking support for their work was identified in the customer research as one of the seven key motivations for OEH website visitors. The new information architecture surfaces resources to support the work of key customer groups, but the underlying content requires redevelopment to better serve customers.

Resources in this area should be organised by theme or audience not by organisational structure. This will support better cross-promotion to target audience groups.

## Heritage

The Heritage Division's existing content was migrated from a separate website and reflects a former organisational structure. Much of the content is duplicated and outdated. With over 600 items in the side menu, navigation is disjointed and the side menu contains over 600 items.

Customers were confused about OEH's role in "both protecting and destroying" Aboriginal heritage. The Digital Services Strategy recommends additional customer research to better understand customer needs in this area.

The relationship between Aboriginal heritage content and built heritage content needs to be evaluated. While the customer research recommended that Aboriginal heritage be lifted to the top level, internal opposition to this approach meant that in the phase 1 launch, Aboriginal heritage appears in the third level.

## Content redevelopment responsibilities

Roles and responsibilities of key teams involved in each stage of the content redevelopment process.

Note: Not intended to cover full responsibilities of each team: only as they relate to content redevelopment. General information about CED team roles and responsibilities: http://ehub

#### **WEBSITE DESIGN**

Build CMS and website functionality to support OEH's new content requirements.

#### Digital team

- Gather requirements for website to support new content.
- Define specifications for website build based on internal requirements, best practices and external customer needs.
- Manage website development and testing.
- Contribute toolkit resources to support the use of new website functionality.

#### **Content team**

- Share requirements for new website through workshops, team meetings, requests to web support and Basecamp.
- Provide feedback on website design plans.
- Suggest improvements to CMS functionality.
- Develop content redevelopment toolkit to support content authoring.

#### Brand and design team

- Guide development of new look and feel.
- Enforce guidelines for use of corporate brand.
- Provide guidance on visual identity for sub-brands.
- Provide feedback on toolkit resources to support the new design.

#### **Business areas**

- Share content requirements through workshops, surveys, Yammer and suggestion box.
- Read project e-newsletter for updates on design process and provide feedback.
- Use the content redevelopment toolkit.

#### **CONTENT AUDIT**

Review content on the old website to decide what can be culled and what needs to be redeveloped.

#### Digital team

- Provide master spreadsheet that lists all pages, traffic, last modified date and TeamSite details.
- Configure redirects for culled content as requested by content team.

#### **Content team**

- Distribute individual audit spreadsheets to business areas with instructions for review.
- Analyse traffic, currency and quality to inform recommendations.
- Work with business areas agree on content to be culled or redeveloped.
- Delete pages and assets to be culled.
- Advise digital team of redirect requirements.

#### **Business areas**

- Review full list of content belonging to business area and nominate pages to be culled or redeveloped.
- Work with content team to make finalise audit decisions.

#### **WORKSHOPS**

Equip staff with the tools and skills they need to create quality web content.

#### Digital team

- Attend workshops to provide expertise on website functionality.
- Reinforce digital strategy goals.
- Make suggestions for improving workshops.
- Liaise with business areas following workshops to address queries about application integration or functionality.
- Identify analytics requirements during workshops and complete setup of tracking and reporting.
- Develop and run workshop for business areas about website analytics.

#### Content team

- Develop and run workshops for business areas focused on content audit, restructure and authoring.
- Liaise with business areas before and after workshops to progress content redevelopment.
- Refer any queries about application integration or complex functionality to the digital team.
- Refer any queries about brand and logos to Brand and design team.
- Work with content owners to develop local information architecture.

#### **Business** areas

- Participate in workshops to gain an understanding of the goals and functionality of the new website.
- Liaise with content team before and after workshops to progress content redevelopment.
- Identify metrics required to measure performance of content area and work with Digital team to gain access to reports.

#### **CONTENT REDEVELOPMENT**

Create high quality web content that meets business and customer needs.

#### Digital team

- Make suggestions for improvements to pages based on CMS functionality and best practices.
- Ensure that new content meets digital standards and digital strategy goals.
- Plan for integration of applications with new content.
- Provide support for use of complex modules.

#### **Content team**

- Write new web content and structure pages based on customer need, business requirements and content standards.
- Editorial review of all new pages based on OEH style guide.
- Ensure that new content meets the goals of the digital strategy.
- Create Sitecore load instructions for each new page to be created.

#### Brand and design team

- Source imagery as requested by content team and business areas.
- Source imagery for homepage and top level landing pages.

#### **Business areas**

- Act as subject matter experts.
- Work with content team to ensure that new content meets business needs.
- Ensure that content meets the needs of external customers (based on evidence and research).

#### **QUALITY ASSURANCE**

Confirm that new content meets the goals of the digital strategy.

#### **Digital team**

- Review Sitecore load instructions for landing pages, high profile pages and complex pages prior to Sitecore load and provide feedback.
- Ensure compliance with digital QA checklist.

#### **Content team**

- Review Sitecore load instructions for every page prior to Sitecore load.
- Ensure compliance with content QA checklist.

#### **Business areas**

 Review Sitecore load instructions to confirm information accuracy.

#### **CONTENT PUBLISHING**

Create, approve and publish the new pages to the live website.

#### **Digital team**

- Preview new content areas as a whole and suggest improvements.
- Configure redirects from old URLs to new ones.
- Develop launch plan and manage deployment of new content areas to ensure a smooth transition from TeamSite to Sitecore.

#### **Content team**

- Load new content to Sitecore.
- Manage approvals process for publishing new content.
- Support Digital team on deployment of new content.
- Review new content area after it's been published and work with Digital team to resolve any issues.

#### Brand and design team

- Preview all new uses of sub-brands and logos.
- Approve all use of logos and sub-brands prior to publishing.

#### **Business areas**

- Preview new content area as a whole and manage business area approvals.
- Review new pages after they've been published and report any issues to content team.

#### **CONTENT MANAGEMENT**

Maintain and update the content

#### **Digital team**

- Develop Sitecore user support documentation and curriculum
- Run training sessions.
- Provide support for complex pages and modules.

#### Content team

- Manage content in Sitecore in the roles of power-author and approver.
- Provide support for standard pages and modules.
- Approve changes to existing pages.
- Manage content calendar.
- Make updates to homepage stories.
- Suggest improvements to workflows and functionality based on experience using the CMS.

#### Brand and design team

 Refresh imagery on homepage and top level landing pages.

#### **Business areas**

- Attend Sitecore training.
- Manage content in Sitecore in the role of author (or in some cases power-author).
- Update existing pages.

## Content reuse and promotion

Our content management system has been configured in a way that enables us to reuse a single piece of content on multiple pages – reducing the need to duplicate content and improving our ability to link related content together.

#### Modular content

Modules are building blocks for a webpage that:

- are reusable
- can be used to create a variety of page layouts
- help link related content together
- eliminate the need to duplicate content
- can be used to create dynamic pages that automatically update content.



#### Metadata and tagging

Metadata is data about resources that we publish to our website.

Content will be tagged with:

- general topics
- specific subjects
- locations
- audiences
- content types
- publisher.

Tags enable the cross-promotion of related content and support discovery for our customers.

### Standards to support metadata and tagging

✓ All webpages must be tagged with subject, location and type

## Sharing content with the NPWS site

The new OEH site is built on the same system as the National Parks Visitor site, which makes it possible to share content between the two sites.

The two sites continue to have distinct goals and there will be no effort to duplicate content on two different sites. However, several key areas for content sharing have been identified such as highlighting park attractions on OEH region pages and sharing park office contact details.

More information

Modular content and page types: http://ehub/resources/info/modular-content-and-page-types.pdf Sitecore modules: http://www.environment.nsw.gov.au/content/styles/page-elements

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"I'm actually more interested in this

website after looking

around it ... I want to

come back and look at other parts."



### E-newsletters

Use of digital marketing tools by business areas pre-empted the development of a digital marketing strategy. Guidelines are needed to streamline digital marketing efforts across divisions and integrate with the website.

The digital marketing strategy should include:

- platform for easy authoring of e-newsletters
- management of subscriber lists
- mobile responsive e-mail templates
- use website data in email campaigns.

#### Overlapping strategy in development

The development of a digital marketing strategy is underway by the Marketing and Campaigns Unit. Although it was outside of the scope of this piece of work, it is mentioned here to highlight requirements that surfaced during our research.

# Social media

Use of social media by business units has pre-empted the development of guidelines and a corporate social media presence.

Overlapping strategy in development

Social media strategy is being developed by Marketing and Campaigns Unit.

### Automated content feeds

By using content feeds based on tags, landing pages get updated automatically, always appear current and require minimal maintenance.

## Dynamic lists

New functionality has been developed to create indices that automatically update and are searchable and filterable.

These will replace former text based lists that required manual updates, including:

- publications lists
- media release lists
- blog archives
- funding opportunities
- legislation lists
- resource directories.

# Internal communications

Internal stakeholder research uncovered several internal pain points that are currently affecting organisational processes and the end customer experience.

### Intranet resources

The research highlighted staff frustrations with understanding roles and responsibilities and finding contact details for units and individuals throughout the organisation.

Digital contributors require:

- A staff directory that is searchable and includes details about individuals' roles and kept up-to-date
- Contact details for business units
- Description of business units' responsibilities (particularly digital services provided by CED and BIS).

Website redevelopment in progress

The OEH employee intranet is currently being redeveloped by BIS and Public Affairs.

Communications between CED and BIS teams responsible for digital services

Workflow management for digital projects

# Digital contributors network

# Brand and sub-brands

In many cases, the sub-brand has stronger recognition with customers than the corporate brand. But in the past program, application and campaign sub-brands are used inconsistently throughout the website.

The new website design supports sub-branding in a way that aligns with our corporate brand and our digital standards.

#### Overlapping strategy in development

The website redesign preceded the development of an overarching brand strategy for OEH. Early work on a corporate strategy for sub-brands was considered in the development of templates that support sub-brands and website designs will be used to drive the visual design of other OEH-branded materials.

# Templates that support sub-brand identity

OEH Brand and Design team worked closely with the Razorfish designers to ensure that new webpage templates support the incorporation of sub-brand logos in a way that does not compete or conflict with the OEH parent brand.





# Website style guide

A new style guide has been developed to help website contributors apply the new design. This will support the corporate brand by ensuring that web services look consistent and professional.



### Standards for branding digital services

- ✓ New domain names must not be created
- ✓ Sub-domains are used for promotion or externally hosted sites
- ✓ Vanity URLs can be created for marketing purposes
- ✓ Micro-sites will not be created for campaigns
- ✓ NSW government branding guidelines must be used
- ✓ Webpages requiring a sub-brand must use templates designed for this purpose
- ✓ Navigation labels should avoid brand/program names
- ✓ NSW government branding guidelines must be applied

More information

Website style guide: http://www.environment.nsw.gov.au/content/styles/

Options for banners with sub-branding: http://www.environment.nsw.gov.au/content/styles/page-elements/banners

# Relationship with other websites

The OEH website should support smooth transitions to and from partner and 3<sup>rd</sup> party websites.

National parks visitor site: www.nationalparks.nsw.gov.au

Research findings (current state)	Recommendations (future state)
Until recently, park visitor content accounted for half of the overall traffic to the OEH website and much of the information was duplicated across the two sites.	Where content needs to be shared across the two sites (media releases, contact details, cross-promotion of regional things to do, imagery) the content should be reused, not duplicated.
When the parks visitor site was developed, the content that was moved across to the new site underwent planning and content redevelopment, but the pieces that were left behind and not assessed for how they fit together. Internally and externally, there is confusion about what information is on which site.	National parks site hosts all content aimed at park visitors. The OEH site will continue host B2B content, including:  strategies (park management, environmental, co-branding, etc.)  doing business with NPWS  ministerial and media releases  During phase 1 of the OEH redesign, the high level information architecture restructured the parks-related content that remained on the OEH website. Later, content redevelopment will improve this content.
The OEH website contains an external link in the top navigation that points visitors to the national parks visitor site. This is against best practices for navigation and does not match the style of the OEH website	Don't include an external link in the top navigation. Instead, direct users to the national parks site from relevant content areas and by including parks pages in the search results.
User journeys can sometimes bounce users between the two sites several times.	Consider the user journey when planning content on both sites to limit how much a user must go back and forth to complete a task.  Maintain a visual design on both sites that compliment each other and make them look like part of the same family (while still ensuring that the visual design of each site meets its own objectives).

Research findings (current state)	Recommendations (future state)
Formerly a function of OEH, the EPA is now an independent authority with its own separate website.	Since the changing structure of government is unclear to website visitors, it is important that visitors to the OEH website be able to find EPA resources related to OEH topics. The EPA website should be indexed so that resources appear in OEH site search.
At times, the division between OEH and EPA is unclear to customers, particularly in areas where there is overlap (e.g. air, recycling, reporting pollution).	EPA services should be linked to from OEH landing pages and content pages using OEH standards for plain language navigation labels.
Some content is currently duplicated on both sites while other content that should be shared cannot be due to limitations with the current websites.	In the future, if the EPA website is redeveloped in Sitecore, content can be reused rather than duplicated across the two websites. Specific areas that would benefit are:  • air quality data  • Ask Environment Line Q&As  • contact numbers for reporting pollution  • contact details for offices.
Backend dependencies between the OEH and EPA websites complicate global changes to both sites.  Sometimes changes intended for one website have unintended impacts on the other site.	The new OEH website completely severs all dependencies on files shared with the EPA. In the short term, the re-skinned TeamSite content on the old OEH website will still reference shared files.  The EPA website redevelopment should be done in a way that makes it a free-standing site with no dependencies on global files from other websites.

Research findings (current state)	Recommendations (future state)
A small selection of OEH services are listed on ServiceNSW.  The services are handled inconsistently (e.g. online applications for wildlife licences are actually processed in the ServiceNSW system, but online parks pass purchase links back to the OEH site).	<ul> <li>OEH Digital Team should reach out to Service NSW team to:</li> <li>understand strategy and process for listing additional services</li> <li>learn more about approach for transitioning online services to centralised system</li> <li>provide input on future design of OEH services on ServiceNSW.</li> </ul>
Service NSW has asked government agencies to add a homepage or footer button that points to their website. This highlights the issues above – not all of our services are listed there and some that are just point back to the OEH website.	Do not add Service NSW button to OEH homepage or footer.  Link from OEH site to Service NSW when that is the next logical step in the user journey. Always link directly to the most relevant page.
Confusing processes on ServiceNSW mean that the OEH website contains instructions on how to complete Service NSW forms (e.g. wildlife licensing). Users must go back and forth between the two sites to view instructions and complete the form.	OEH Digital Team and Wildlife Licensing Unit to work with Service NSW to make online licence application process easier.

# Custom applications and 3<sup>rd</sup> party integrations

Research findings (current state)	Recommendations (future state)
Some functionality on the OEH site is delivered using custom or 3rd party applications which are not seamlessly integrated with website content and result in an inconsistent user experience	Whenever possible, web content should be managed in the WCMS.  However some cases may require the use of custom applications or 3rd party systems. When used, these systems should be integrated with the WCMS to provide a seamless transition for the user between website content served by Sitecore and services provided by other applications.

# Project team

The OEH Digital Strategy was developed by the Customer Experience Division in consultation with staff throughout the organisation and with expertise from several specialist digital agencies.

### Core project team

The work has been led by the OEH Customer Experience Division's Digital, Brand & Design, Content and Marketing teams.

## Steering committee

OEH Executive and CED Director acting as steering committee and provide direction, funding and support.

## Agency partners

U1 Group, Razorfish and Business Aspect have provided expertise during the research and development phases.

# Staff throughout the organisation

Across every division, staff have provided input, contributed content and worked with the project team make their content and applications align with the new look and feel.

# Technical support

OEH BIS and Orbsys have provided technical support.

# Cross-divisional working group

Key digital stakeholders and representatives from each division of the organisation who have made sure that everyone's needs are being met.

#### **Division representatives**

- Dilini Berg | Office of the Chief Executive
- Caroline Ford and Sarah Thomson | Policy
- Brian Leahy and Kristy Lawrie | National Parks and Wildlife Service
- Kalina Koloff | Regional Operations
- Anthony Hanna | Heritage
- James Elks | Statewide Programs
- Angela McCormack | Science
- Ryan Verzosa | Legal
- Adam Cooke and Sarah Scroope | Public Affairs

#### **Key digital stakeholders**

- Anthony Hutchings | Manager, Digital Design and Production
- Mary Gaudry | Manager, Brand, Content and Design
- Jo Munnelly | Team Leader, Brand and Design
- Dave Annesley | Manager, Marketing and Campaigns
- Amit Chandra | Team Leader, OEH Digital Team
- Paul Mitchell | Team Leader, OEH Content Team
- Tim Pullen and Tony Richardson | Business Partner, BIS
- Linda Roy and Barbara Maciejewski | Environment Line
- Renee Packham | OEH Digital Team
- Danielle Warby | Content Strategist
- Susan Williamson | Content Redevelopment Coordinator
- Sara Walsh Mulligan | Project Manager

# Internal stakeholder research

OEH worked with U1 Group to conduct internal stakeholder research to explore business pain points and needs.



### What we did

- Workshops with core project team to establish a current state understanding
- Interviews with 9 senior stakeholders to assist in understanding current business needs
- Workshops with 46 staff across the organisation to help envision a future state
- Staff survey with 135 respondents to gather requirements for the new website
- An online 'card sorting' exercise with 72 staff to understand how they group and label OEH topics.
- **Discussion groups on Yammer** to get feedback and clarification on business requirements

### What we learned

- 1. Restructure(s) have left a mess behind on the website.
- 2. Many internal cultural and political issues surfaced.
- 3. There is very little collaboration across our business units.
- 4. The current website offers limited opportunities to promote the great work we do.
- 5. We need a design that's flexible and future-proof.
- 6. The way we currently manage web content is frustrating for almost everyone involved.
- 7. There is no clear ownership and accountability for keeping web content up-to-date.
- 8. There are no clear guidelines for what gets published and why.
- 9. Meaningful website metrics are lacking and not used to make decisions.
- Internal politics and personal preference often outweighs usability, evidence-based decisions and best practices.

More information

Business discovery findings: http://ehub/resources/info/business-discovery-findings.pdf

# External customer research

OEH worked with U1 Group to conduct external customer research to identify customer needs. The customer groups included actual OEH customers as well as NSW residents representative of OEH customer groups.

### What we did

- Review of existing research to understand what we know about OEH customers
- Review of website feedback and analytics to learn about how customers use our website
- Survey of 180 website users, providing a 'moment in time' picture of website usage
- Workshops with NSW residents in Sydney and Dubbo
- An online 'card sorting' exercise with 39 customers to understand how they group and label OEH topics
- Observations with the Environment Line to gain a better understanding of phone enquiries
- Interviews and meetings with representatives of key stakeholder groups:
  - Local councils
  - Local Land Services
  - Aboriginal communities
  - Educators
  - Researchers and scientists

### What we learned



- 1. There are many different groups, each with very different needs.
- 2. The relationship with each customer/group can vary depending on the topic.
- 3. Many customers use our services (regularly), but don't know who we are.
- 4. They feel confused and frustrated when they are transferred between business units or agencies.
- 5. They do not want to have to understand the structure of government to access our services.
- 6. They want to be able to save and print resources, but PDF is not the best format for this.
- 7. They want to know who to contact within the organisation.
- 8. They want to have a two-way communication with us.
- 9. They find the current experience of using our website to be 'jarring and disjointed'.
- 10. Our website users seek to complete specific tasks, which can be grouped into 7 categories.

More information

Customer research findings: <a href="http://ehub/resources/info/external-research-findings.pdf">http://ehub/resources/info/external-research-findings.pdf</a>

# User testing

OEH worked with U1 Group to run user testing sessions using a prototype of the new website design. The testing measured the effectiveness of the new information architecture and visual design.

### Who we tested with

12 users, representative of OEH key customer groups:

- 3 employees of other government organisations (heritage, environment and planning officers)
- 2 researchers (student and research professional)
- 2 teachers (primary and high school)
- a NSW resident who holds a wildlife licence
- a NSW resident concerned with energy savings
- a NSW resident concerned with conservation
- a business owner
- an environmental consultant

Mix of actual OEH customers and representative customers recruited by an agency.

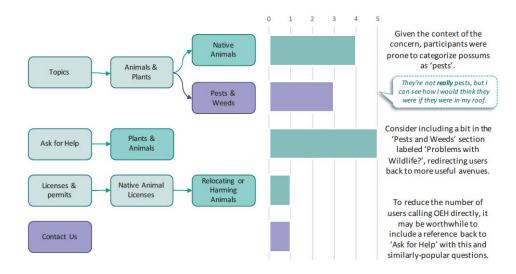
### What we did

- 90 minute moderated sessions
- Tasks specific to each demographic
- "Think out loud" approach while using prototype of new website
- Interviews before and after
- Observed by CED staff

#### TASK 12— ROOF POSSUM

Oh no, there's a possum nesting in your roof!

Where would you expect to get advice about dealing with that?



More information

User testing findings: <a href="http://ehub/resources/info/user-testing-findings.pdf">http://ehub/resources/info/user-testing-findings.pdf</a>

# Accessibility review

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What we did

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What we learned

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More information

Accessibility review findings:

# Full reports and background materials

# New research conducted as part of this project

Business Aspect. (April 2015). *Digital Systems Review: Web Content Management System & Infrastructure Office of Environment and Heritage NSW.* http://ehub/resources/info/Review-of-Core-Digital-Systems Business-Aspect.pdf

U1 Group. (June 2015). OEH Digital Services Strategy. http://ehub/resources/info/digital-services-strategy U1.pdf

U1 Group. (May 2015). Business Discovery Key Findings and Insights. http://ehub/resources/info/business-discovery-findings.pdf

U1 Group. (May 2015). External Customer Research: Key Findings and Insights. http://ehub/resources/info/external-research-findings.pdf

U1 Group. (August 2015). User Testing Findings. http://ehub/resources/info/user-testing-findings.pdf

Vision Australia. (December 2015). Accessibility Review Findings.

Existing research reviewed for background

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# Specifications for website build

CMS and functional specification:

Creative brief: <a href="http://ehub/resources/info/creative-brief.pdf">http://ehub/resources/info/creative-brief.pdf</a>

# Resource toolkit

### User personas

OEH website user personas: <a href="http://ehub/resources/info/OEH">http://ehub/resources/info/OEH</a> website user personas.pdf
How to use audience personas: <a href="http://ehub/resources/info/how-to-use-personas.pdf">http://ehub/resources/info/OEH</a> website user personas.pdf

## Writing for the web

Writing for the web: <a href="http://ehub/resources/info/writing-for-the-web.pdf">http://ehub/resources/info/writing-for-the-web.pdf</a> Quality content checklist: SEO guide for content authors:

### Navigation

Navigation standards and guidelines: <a href="http://ehub/resources/info/Navigation-standards.pdf">http://ehub/resources/info/Navigation-standards.pdf</a> Information architecture spreadsheet:

## Website style guide

Website style guide: <a href="http://www.environment.nsw.gov.au/content/styles">http://www.environment.nsw.gov.au/content/styles</a>

# Digital standards

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# Content planning

Page planning form: <a href="http://ehub/resources/info/page-planning-form.pdf">http://ehub/resources/info/page-planning-form.pdf</a>

Mapping of regions used on the website to other sets of regional boundaries: <a href="http://ehub/resources/info/Regions.pdf">http://ehub/resources/info/Regions.pdf</a>