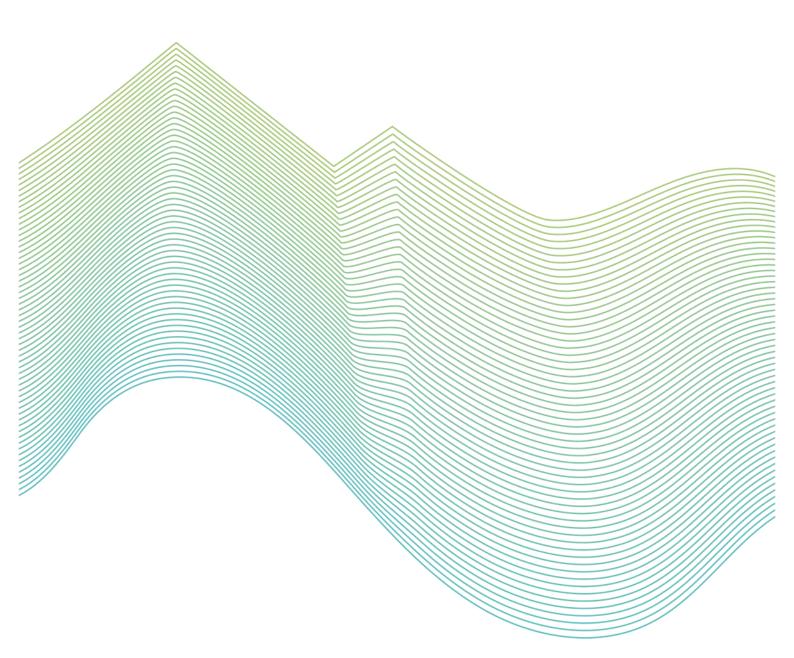


# Pieman Sustainability Review

**Outcomes and Commitments Report** 

November 2017





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## **1.0 Introduction**

The Anthony–Pieman hydropower scheme provides a highly valued and reliable source of electricity. The total water storage in the hydropower scheme is 512 gigalitres and the average annual generation is 1867 gigawatt hours which is 20% of the total hydro system. Construction of the Anthony–Pieman hydropower scheme has resulted in creation of water storages (lakes) and alterations to the natural flow of existing rivers and streams.

### 1.1 Background

Sustainability is a core value for Hydro Tasmania underpinned by a commitment to create a sustainable future. Being sustainable involves the application of economic, social and environmental considerations to business decisions and activities.

Hydro Tasmania believes that these considerations will help drive long-term business success and allow successive generations to enjoy the benefits of a clean energy future. Our Sustainability Code and Environmental Policy are available on Hydro Tasmania's website at <u>www.hydro.com.au</u>.

Hydro Tasmania's commitment to support and collaborate with our customers and the community is captured in Hydro Tasmania's Recreation Principles. These principles provide direction for Hydro Tasmania to facilitate recreation on its land and waterways for the benefit of all.

### 1.2 Hydro Tasmania's Water Management Review Program

Our Water Management Review program was initiated in 1999. It aims to review water and land management activities across the six major hydropower catchments in Tasmania.

Part of sustainable management is making sure that this precious resource is available for all to use for years to come. As such, the assessment is done in consultation with stakeholders and considers impacts on social, environmental and economic conditions within the catchments. actions are recommended and evaluated. It is then determined which actions can be implemented to improve management of the resource and deliver the greatest benefit most efficiently. Hydro Tasmania makes a commitment to the community about specific actions that lead to improved management of environmental and social values in the catchment.

In 2013, at the conclusion of the Mersey Forth Review, Hydro Tasmania evaluated and updated its approach to catchment reviews. This review resulted in changes, including the name, which has changed from 'Water Management Review' to 'Sustainability Review'. The new approach applies the International Hydropower Association (IHA) Sustainability Assessment Protocol as the basis for the sustainability framework.

The IHA Sustainability Assessment Protocol was used during Stage 1 to assess current sustainability practises. The structured and standardised approach to identifying issues and opportunities provided by the protocol has been beneficial. In addition it applies internationally accepted hydropower industry protocols for sustainability performance.

## 2.0 The Pieman Sustainability Review Stages

The Pieman Sustainability Review is the fourth catchment review undertaken by Hydro Tasmania. The review focused on the Anthony–Pieman hydro catchments on the west coast of Tasmania.

The review was completed in four stages:

Once a catchment has been assessed, a series of



- 1. Information review
- 2. Stakeholder consultation
- 3. Technical and social studies
- 4. Final outcomes and commitments

# 2.1 Stage 1 – Information review

Stage 1 commenced in mid-2014 and focused on collecting, summarising and publishing the consolidated information on operational, social and environmental aspects of the Anthony-Pieman hydropower scheme.

In addition, the IHA Sustainability Assessment Protocol was applied to asses the hydropower scheme. The assessment was noted as unofficial as it was conducted by an internal team of Protocol Accredited Assessors. The protocol is designed to be applied to a single hydropower project. However, it was adapted in this instance to assess the whole Anthony-Pieman hydropower scheme.

This stage was completed in 2015 and culminated in the completion of the Pieman Sustainability Review Information review of the Anthony-Pieman hydropower scheme and a number of facts sheets which can be found on our website

# 2.2 Stage 2 – Stakeholder consultation

Stage 2 commenced with a forum held at Rosebery District High School in December 2014. Attendees included representatives from the West Coast Council, community and recreation groups, students and Hydro Tasmania personnel.

In autumn 2015 a community survey was undertaken. The survey was open to any individual or group with an interest in the Anthony-Pieman hydropower scheme. The survey was available both online and in print and promoted through the:

- Rosebery Rambler
- Rosebery Community House
- Marine and Safety Tasmania (MaST) and Inland Fisheries Service (IFS) websites
- Hydro Tasmania website and Facebook page

Surveys were distributed to residential addresses in Tullah, Rosebery and Zeehan via Australia Post.

Following completion of the community survey, Hydro Tasmania community engagement staff commenced face-to-face and telephone meetings with key stakeholders, including:

- government agencies
- West Coast Council members
- recreational organisations
- community groups
- individuals who had expressed an interest in being contacted directly through the community survey.

This stage was completed in December 2016 and a summary of outcomes can be found on our website

## 2.3 Stage 3 – Technical and social studies

Hydro Tasmania has conducted four technical and social studies to investigate the issues raised in Stage 1 and 2.

A summary of the issues, aims, outcomes and commitments for each study is provided in Section 3 of this report.

# 2.4 Stage 4 – Final outcomes and commitments

Informed by an understanding of stakeholder issues and the outcomes from the technical and social studies, commitments to improve the management of environmental, social, and cultural heritage values and issues have been identified in Section 3 of this report.



# 3.0 Outcomes and Commitments

Hydro Tasmania has been actively working to address issues raised and a number of outcomes have been achieved. We remain committed to strengthening our community involvement in the Anthony-Pieman region. The key issues, aims, outcomes and commitments are summarised below.

### 3.1 Recreational access

#### Issue:

It was identified in the community survey that access to land and waterways for recreation was a key area of interest for the community.

#### Aim:

It is important that visitors enjoy their recreation and remain safe at all times. To implement the new Public Safety Management Standard Hydro Tasmania has embarked on a process to assess our recreational sites and where appropriate, improve amenities to enhance the visitor experience.

#### **Outcomes:**

- Twenty nine sites including; boat ramps, camp grounds, look-outs and points of interest have been assessed for public safety in the Anthony-Pieman hydropower scheme
- Installation of a pontoon at Lake Rosebery in May 2016 was a collaboration between Hydro Tasmania and MaST
- Signs at boat ramps have been improved.
- Hazard signage evacuation gauge boards have been installed at Lake Mackintosh, Lake Pieman and Lake Plimsoll
- Picnic facilities upgraded at the look-out over Reece Dam and the Pieman River
- Updated safety information on the Hydro Tasmania website

#### Commitment:

We will work with the community to address recreational opportunities and potential risks at our

recreational sites in the Anthony-Pieman and all other catchments. Recreational information will be made available on our website.

We will continue to work closely with IFS, MaST and Parks and Wildlife Service (PWS), and collaborate with other stakeholders to ensure a safe and enjoyable experience for all.

# 3.2 Community engagement and involvement

#### Issue:

Feedback indicated that there is some confusion about the location and nature of Hydro Tasmania's operations and responsibilities in the Anthony-Pieman catchment.

#### Aim:

To increase community awareness of Hydro Tasmania's operations and to engage with our customers to prioritise community involvement and support.

#### **Outcomes:**

- Participation in the 2015 nextgen Business Team Challenge West Coast
- Participation in the Beacon Foundation Work Readiness Program from 2015
- The Hydro Tasmania display at the West Coast Heritage Centre (Zeehan) was updated in July 2016 to better tell the story of our operations
- In early august 2017 Hydro Tasmania launched its education program <u>Generation Hydro</u> at National Science Week in Hobart
- In late august 2017 Hydro Tasmania The Derwent School Outreach Program was delivered to students at Mountain Heights School (Queenstown), Rosebery District High School and Zeehan Primary School in collaboration with the Tasmanian Museum and Art Gallery (TMAG)
- Support of the Rosebery Community House Skills Development initiative

#### Commitment:

We will continue to work with stakeholders on a regular basis to identify opportunities within the



community to increase awareness of Hydro Tasmania's operations.

### 3.3 Water Management

#### 3.3.1 Water Quality

#### Issue:

Water quality, both for recreation and drinking, was identified as a primary area of interest in the community survey and at individual stakeholder interviews.

#### Aim:

To investigate the potential of Hydro Tasmania's operations to impact on water quality in the Anthony-Pieman catchment.

#### Findings:

- A technical review was undertaken to understand the water quality in the Anthony-Pieman catchment and the impact of Hydro Tasmania operations on it
- The review identified elevated metal concentrations, mainly zinc, in a number of lakes. However, high levels of naturally occurring organic material substantially reduces the toxicity of zinc on acquatic organisms
- Hydro Tasmania's operations can influence water quality and zinc concentration levels in Lake
  Pieman. High releases have a diluting impact, while low releases result in higher concentrations of zinc

#### Commitment:

Hydro Tasmania remains open to further engagement with the local council, industry, mining companies and TasWater to better understand changes in operation and catchment land-use.

Hydro Tasmania is committed to establish, strengthen and maintain these relationships in order to work collaboratively to minimise any potential water quality issues.

#### 3.3.2 Environmental Water Flows

#### Issue:

The Hydropower Sustainability Assessment identified the Pieman River downstream Reece Dam and the Henty River downstream Newton Creek as being of high priority reaches for further consideration of environmental flow requirements

#### Aim:

To investigate the need for environmental flow requirements in the Henty and Pieman rivers.

#### Findings:

- Studies were undertaken into water flow in the Henty and Pieman Rivers to better understand the existing water management and flow characteristics
- These studies have shown that the provision of an environmental flow below the Pieman and Henty dams would have only limited environmental benefits.

#### Commitment:

No commitments have been made regarding environmental flows in the Henty and Pieman rivers.

### 3.4 10-year Weed Management Plan

#### Issue:

The community survey results indicated that weed and pest management was a top three area of community concern.

#### Aim:

To prepare and implement a 10 year weed action plan for Hydro Tasmania managed land on the West Coast that can be adapted in collaboration with and according to priorities determined through the West Coast Weed Management Group.

#### **Outcomes:**

- The 10-year Weed Management Plan was completed in February 2016
- Treatment of fox gloves at Lake Margaret Penstock commenced in financial year 2016-17 and will continue
- A pampas survey and mapping has been completed at Lake Pieman, Lake Rosebery, Lake Mackintosh and Lake Murchison
- The GIS data collated for the Weed Management Plan were submitted to the Cradle Coast Authority



for inclusion with the West Coast Weed Mapping database.

#### Commitment:

We will continue to implement the 10-year Weed Management Plan and collaborate with the West Coast Weed Management Group and other stakeholders to understand and support regional priorities and programs.

### 3.5 Aboriginal Heritage

#### Issue:

Background research identified that Aboriginal heritage in the Anthony-Pieman catchment is not well understood and there is a lack of understanding of Aboriginal values in the region more broadly.

#### Aim:

To document the current understanding of Aboriginal heritage values in the Anthony-Pieman catchment to ensure these values are considered in all future activities.

#### **Outcomes:**

Hydro Tasmania completed a thorough desk-top study of the known Aboriginal heritage characteristics and values within the Anthony-Pieman catchment. This study confirmed the knowledge gap, it also advanced our understanding of where future surveys and studies are best focussed.

The information and learnings from the desk-top study were shared with the Tasmanian Aboriginal Centre.

#### Commitment:

Hydro Tasmania is committed to maintaining and enhancing relationships with the Aboriginal community and involving them in decisions about the management of Aboriginal heritage.

## Conclusion

The Pieman Sustainability Review has increased stakeholder collaboration and cooperation in addressing key issues in the Anthony-Pieman catchments. The process has resulted in improvements in land within the catchments. A program of commitments by Hydro Tasmania will ensure ongoing collaboration with stakeholders, the implementation of planned actions, and the improvement of weed management practices in the Anthony-Pieman catchments.

Hydro Tasmania will continue to strive to ensure sustainable management of water resources for the benefit of Tasmania.

## 4.0 Acknowledgements

Hydro Tasmania would like to thank all stakeholders who have contributed to the Pieman Sustainability Review.

Thanks to many of the Hydro Tasmania and Entura personnel and consultants who have contributed to the work undertaken.

## 5.0 For More Information

All documentation and resources produced from the Pieman Sustainability Review are available online at www.hydro.com.au

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