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Exploring ways to deliver better fishway management

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Guidelines for fishway management in Victoria



Justin O'Connor, Matthew Jones, Ivor Stuart, Martin Mallen Cooper and Ruby Campbell-Beschorner



Environment,
Land, Water
and Planning

The Murray-Darling Basin



Coastal species



Inland (Murray Darling basin) species

















BACKGROUND

Where did it all start - a brief history

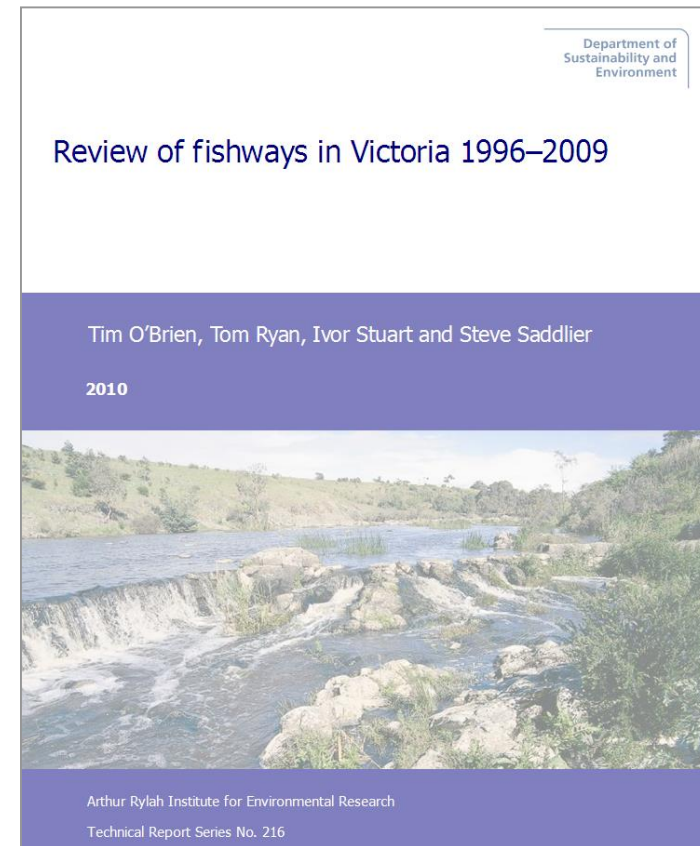
- ~50 fishways were built up to 1980
- In 1982 a fishway design program was initiated
- First fishways built for Australian fish and conditions
- Monitoring
- New fishway designs
- Adaptive learning process

BACKGROUND

Review of Victorian Fishways: 1996 – 2009

Objectives:

- Review fish passage for new and existing structures
- Review the management, maintenance and operation of existing fishways
- Develop recommendations to improve fish passage in Victoria



Findings

Review of Victorian fishways- functionality

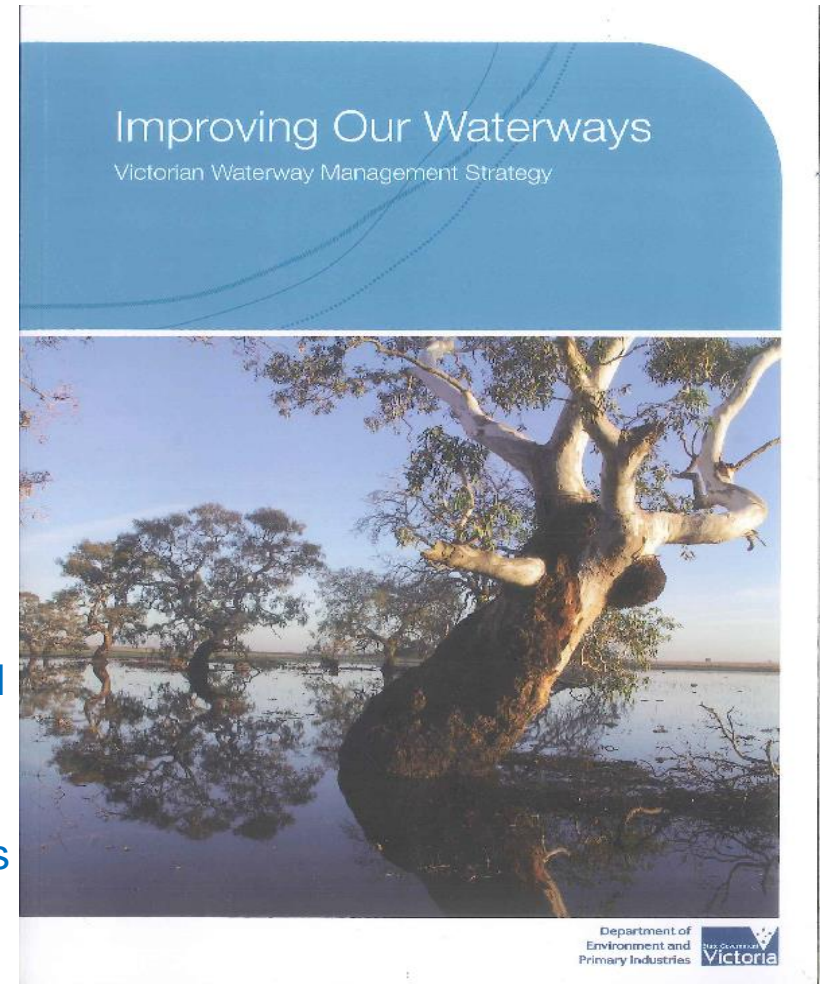
1 – not functional	3
2 – not assessed yet	77
3 – poor for species or flow	11
4 – limited for species or flow	28
5 – Good for key species	37
6 – Excellent for full fish community	11
TOTAL	167

Opportunities

Victorian Waterway Management Strategy (2013)

Overview- to provide a framework for government, in partnership with the community, to maintain or improve the condition of rivers, estuaries and wetlands so they can support environmental, social, cultural and economic values

- Fishways have a major role in achieving this



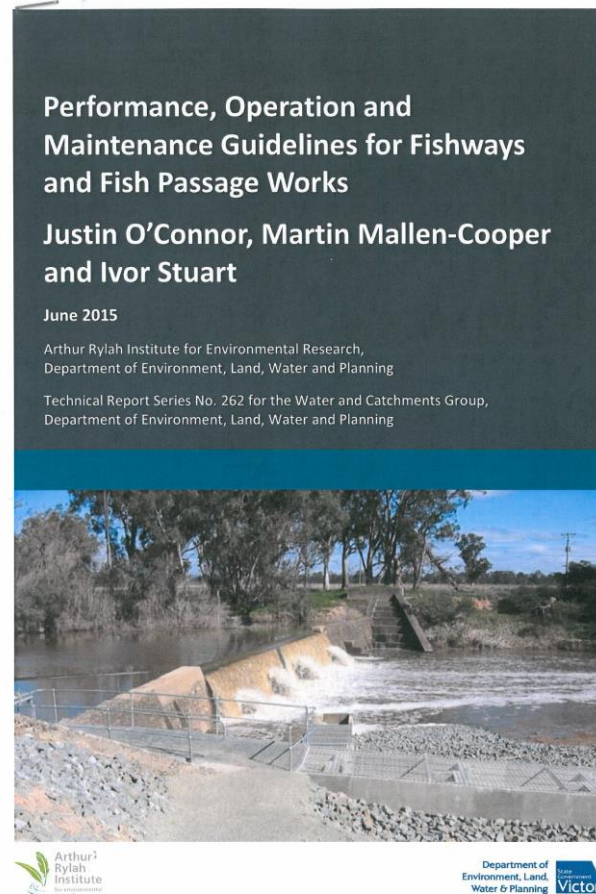
Victorian Waterway Management Strategy

Recommendations

To develop:

- **Guidelines for fishway performance, operation and maintenance**
- **Guidelines for fish passage at small structures**
- **Guidelines for the design, approval and construction of fishways.**
- **Guidelines for monitoring the performance of fishways and fish passage works.**

Action 11.9: Develop performance, operation and maintenance guidelines for fishways and fish passage works.



Present

Develop performance, operation and maintenance guidelines for fishways and fish passage works.

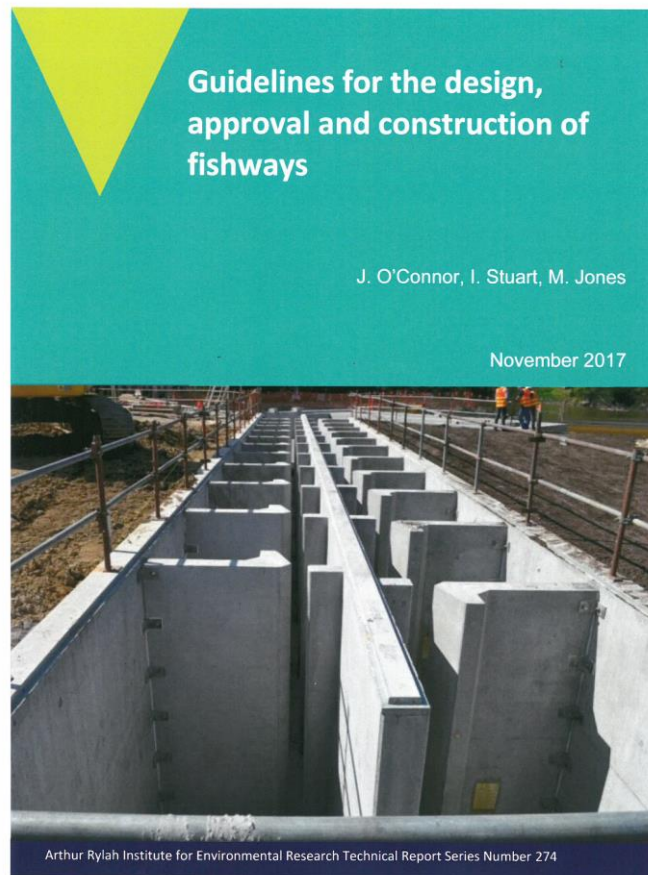
Key outcomes:

- Think about the species
- Think about the site
- Think about how the fishway needs to perform

Design the fishway with these criteria in mind

Present

Action 11.6: Develop best practice guidelines for the appropriate design, approval and construction of fishways and other fish passage works.



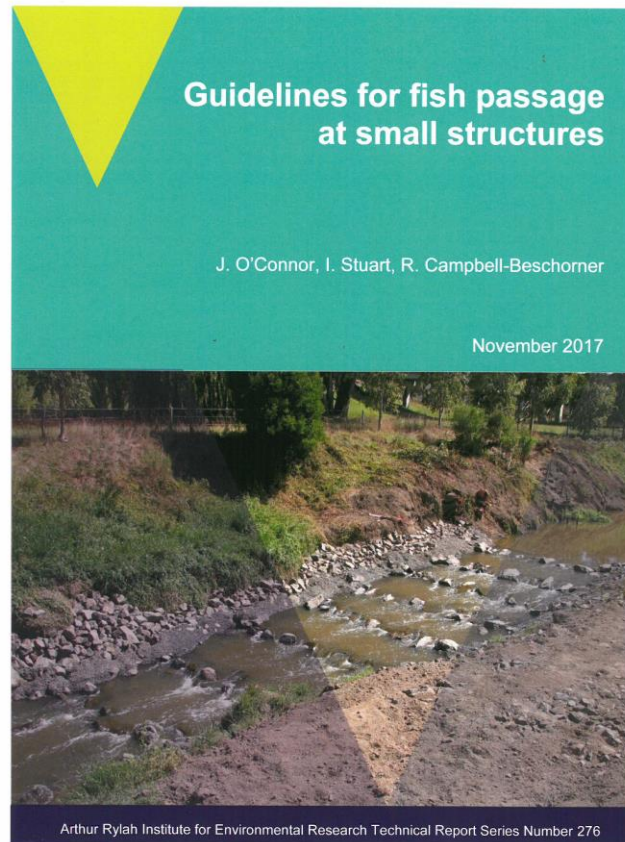
Present

Develop best practice guidelines for the design, approval and construction of fishways.

Key outcomes:

- Use of contemporary design criteria/standards
- Improved fishway design
- Fishway design is a dynamic

Action 11.7: Develop a suite of fish passage design guidelines for use at small scale structures.



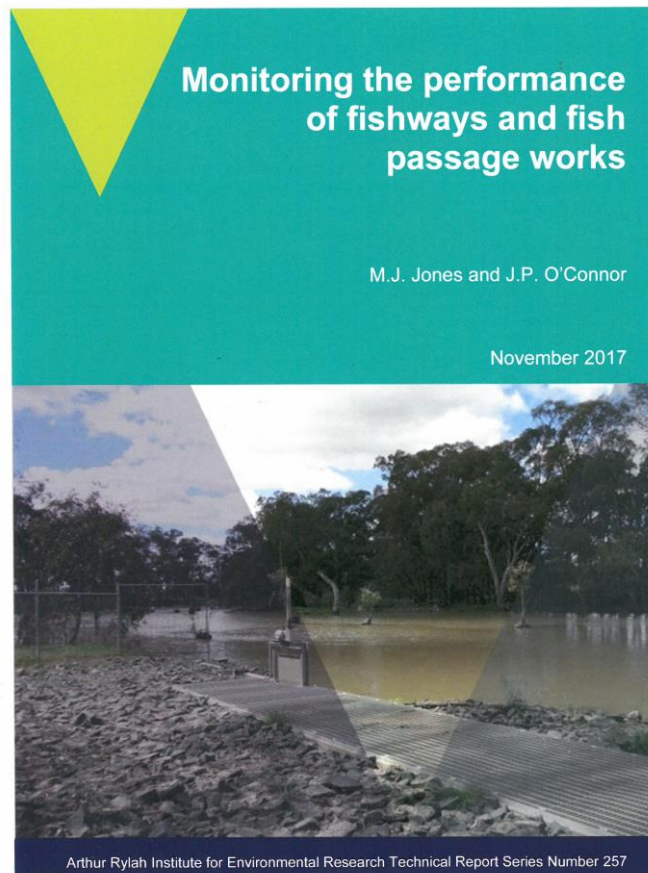
Present

Develop a suite of fish passage design guidelines for use at small scale structures.

Key outcomes:

- Understanding the cumulative impact
- No longer ignored
- Consider removal/new technologies

Action 11.8: Develop and implement a statewide program for monitoring the performance of fishways and fish passage works.



Arthur Rylah Institute for Environmental Research Technical Report Series Number 257

Present

Develop and implement a statewide program for monitoring the performance of fishways and fish passage works.

Key outcomes:

- Access to contemporary monitoring protocols
- Consistency in monitoring
- Leads to improvements in future design

Future opportunities-how do we improve things?

Communication

Contemporary knowledge

Share/publicize success

Thank You



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