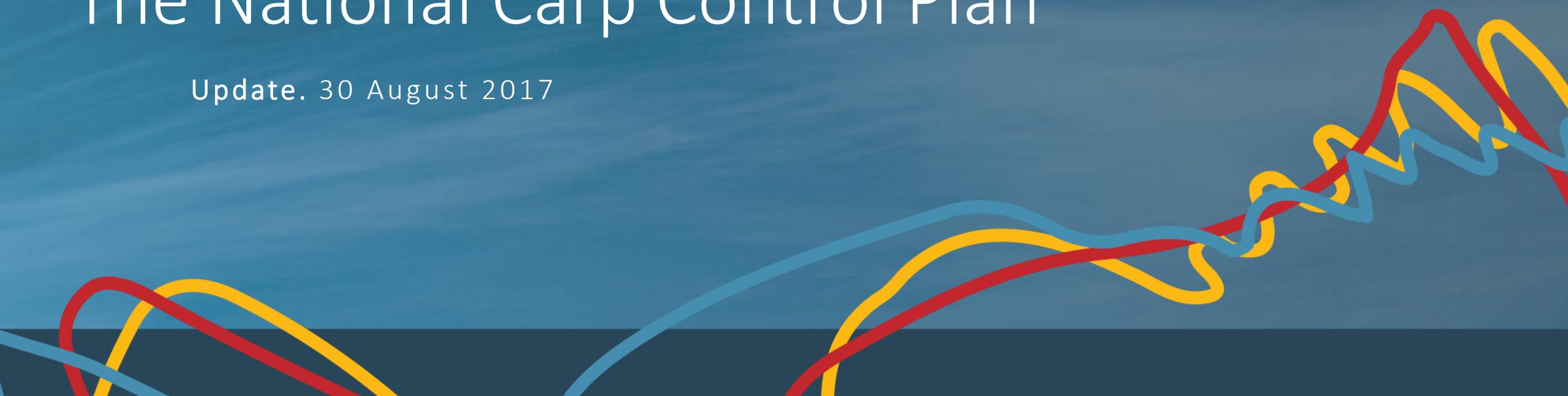


The National Carp Control Plan

Update. 30 August 2017



Mud map

- Review science underpinning NCCP.
- Explain what the NCCP is.
- Summarise research program.
- Update on progress.
- Answer your questions.
- Ask for your help.



What success looks like: Clearer Waters.

Pre-drawdown (carp present)



Post filling (adult Carp screened out)



What success looks like: healthier habitat



What success looks like: more highly valued fish



Houston we have a problem.

Recent flooding resulted in significant carp spawning and recruitment.

High focus on this issue in regional areas.



'We're still shaking our heads': SA Carp Frenzy reels in 16,000 fish in one day



PHOTO: A younger competitor gets creative with her fishing rod for the 2017 SA Carp Frenzy. (Supplied: Kym Manning)

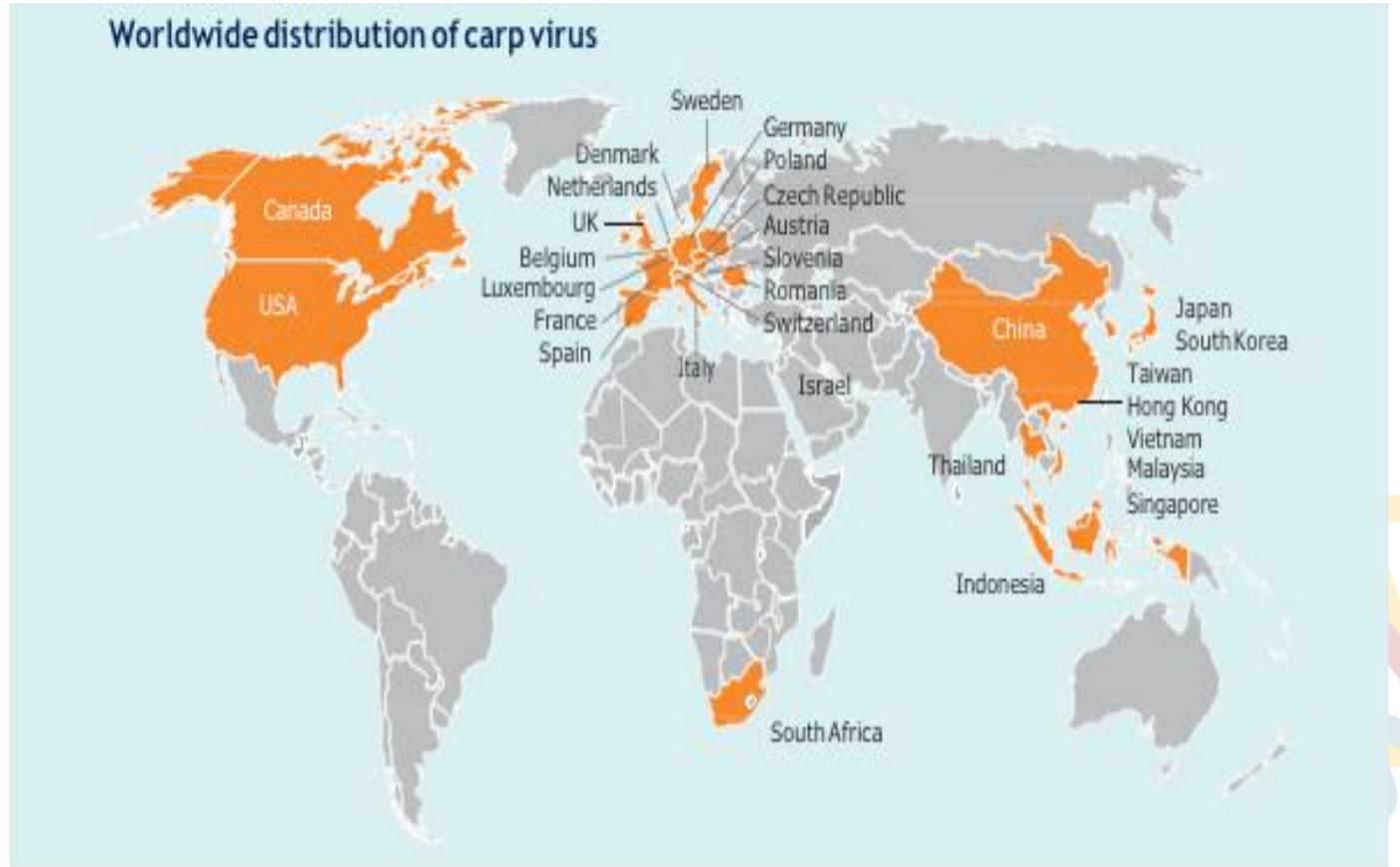




Up to 1,000,000 carp per hectare = up to 10,000kg/Ha

About the Carp virus

- Naturally occurring carp virus first described in 1998.
- Now found in >32 countries.
- 8 years of research to understand whether we can use it to control carp.



Meets critical criterion as biocontrol agent

1. Species-specific



Meets critical criterion as biocontrol agent

1. Species-specific
2. Can be highly effective

70% → 100%

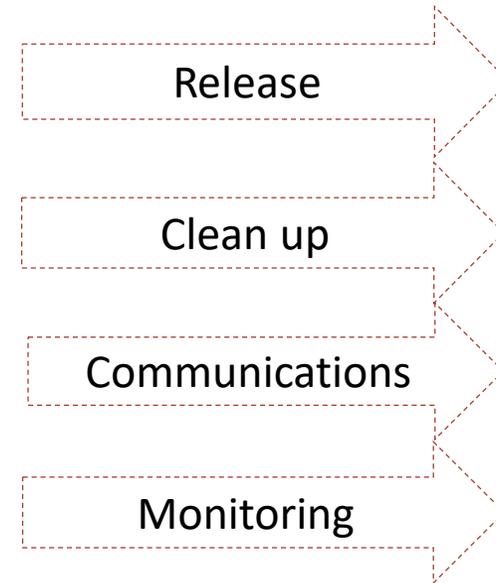


NCCP Progress: tracking well.

NCCP:
\$15m,
2 years

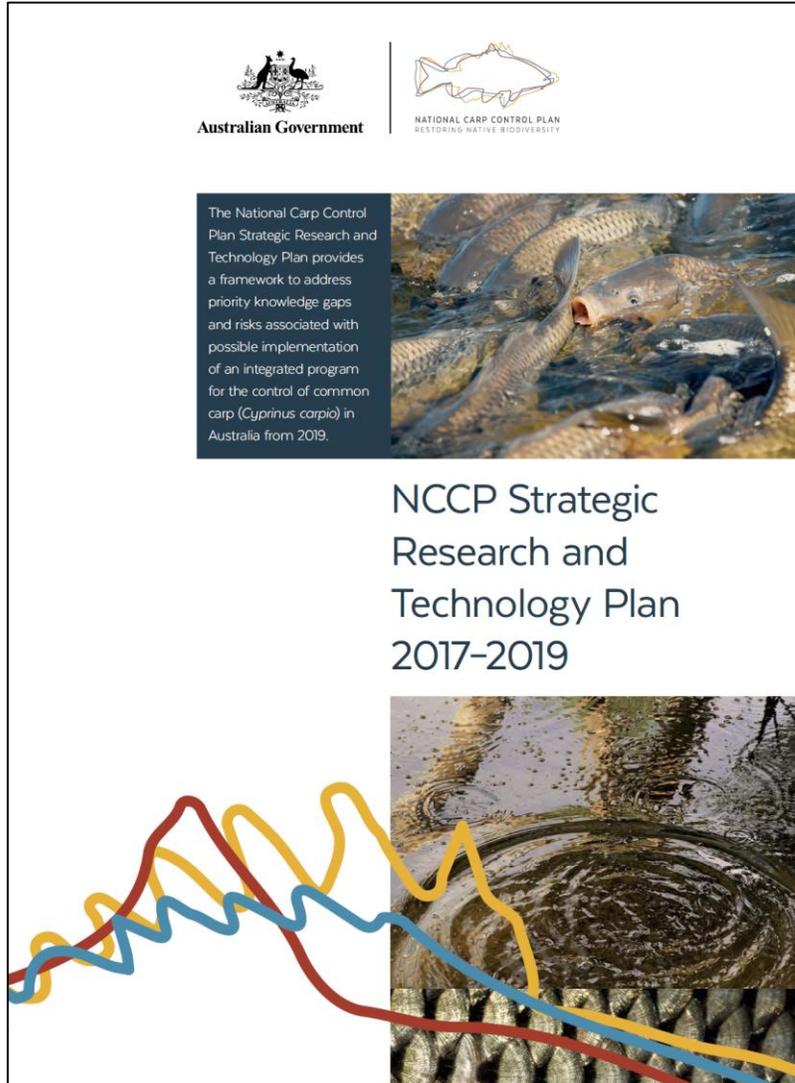


Decision



2019 - 2046

Research & Technology



- Developed Strategic Research and Technology Plan.
- Research program underway addressing priority areas.
- Monitoring underway to establish present ecological state (baseline)

NCCP Research Program

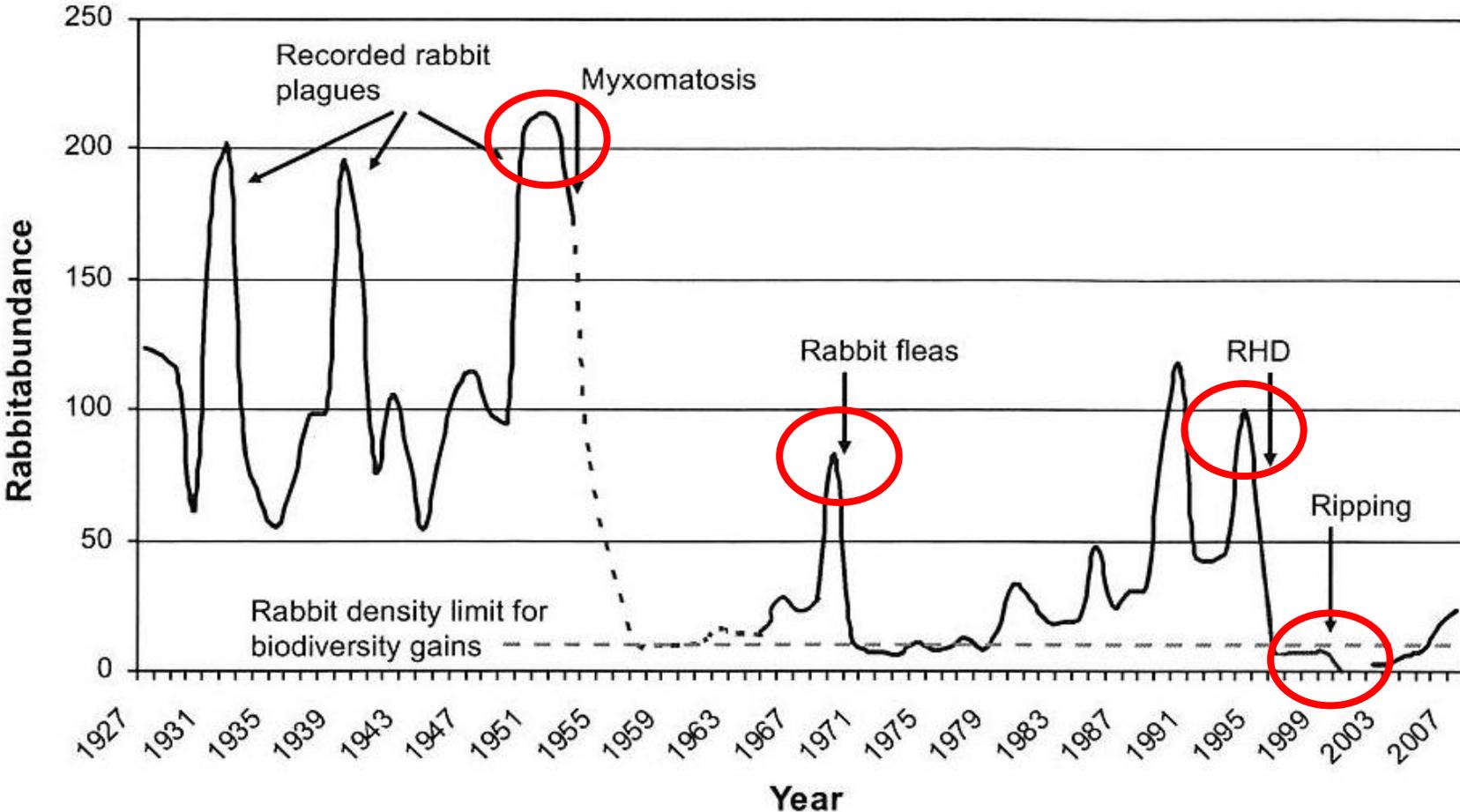


How to clean up infected Carp.

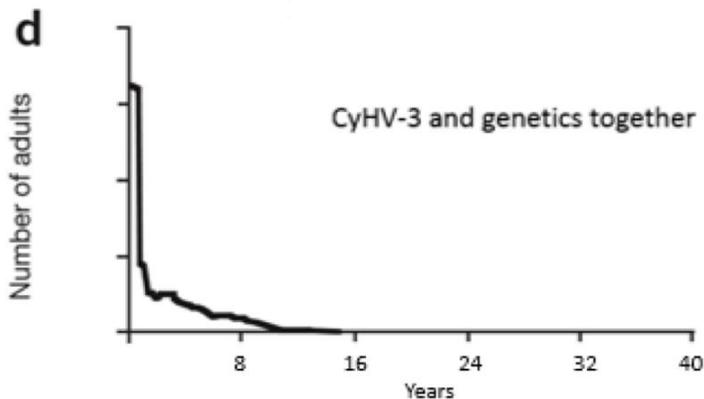
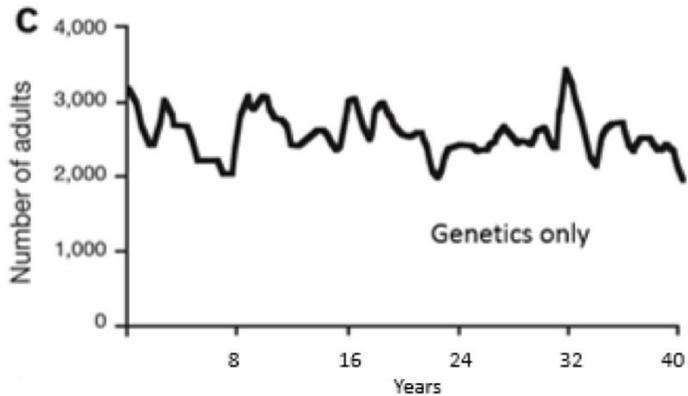
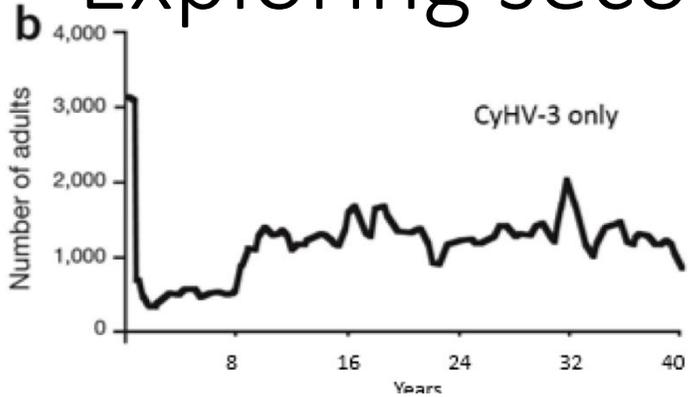
- Biomass estimate
- Research into impacts of dead carp on water quality.
- Research best techniques
- Computer modeling.
- International case studies.
- All about resourcing.



Silver bullet?



Exploring secondary control measures.



1. Deployment of Carp virus

'Boosted' virus strain

2. Deployment of sex biasing construct

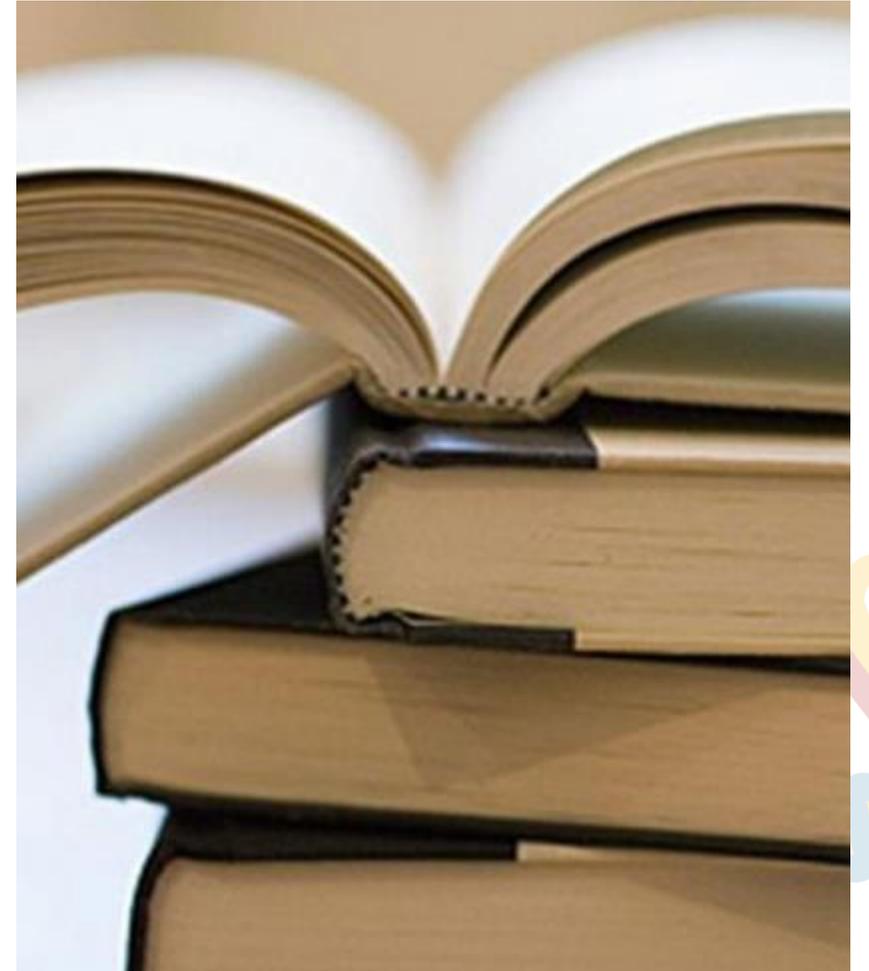
3. Deployment of Gene Drive

Consider vaccinating for fitness advantage

Also Consider vaccinating

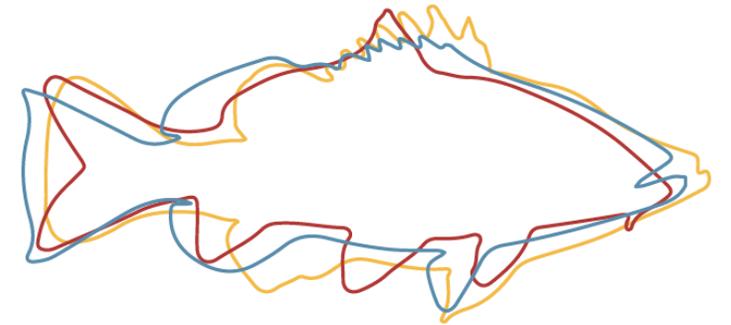
Policy, legislation and regulation

- Application submitted **to import virus** under *Biosecurity Act 2015*
- Progress declaration of the virus **as a biocontrol agent** under *Biological Control Act 1984*.
- Application submitted June 2017 to APVMA seeking registration of virus as **safe and effective**.
- Application pathway confirmed under *EPBC Act 1999* (Strategic Assessment).

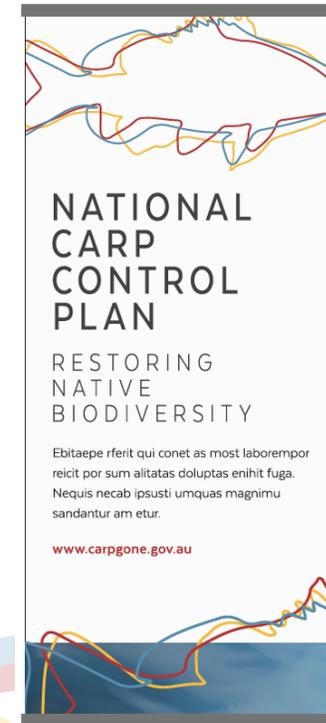


Communication & engagement

- Focus groups > Strategic Communication & Engagement Plan.
- Comms & engagement activities underway.
- First wave of national attitudinal survey now complete, second wave delivered in Aug/Sept (more later).
- Statewide inter-agency workshops now complete in nearly all jurisdictions (exception WA).
- Broad stakeholder consultation commences Oct/Nov.



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Stakeholder Attitude Surveys – Wave 1

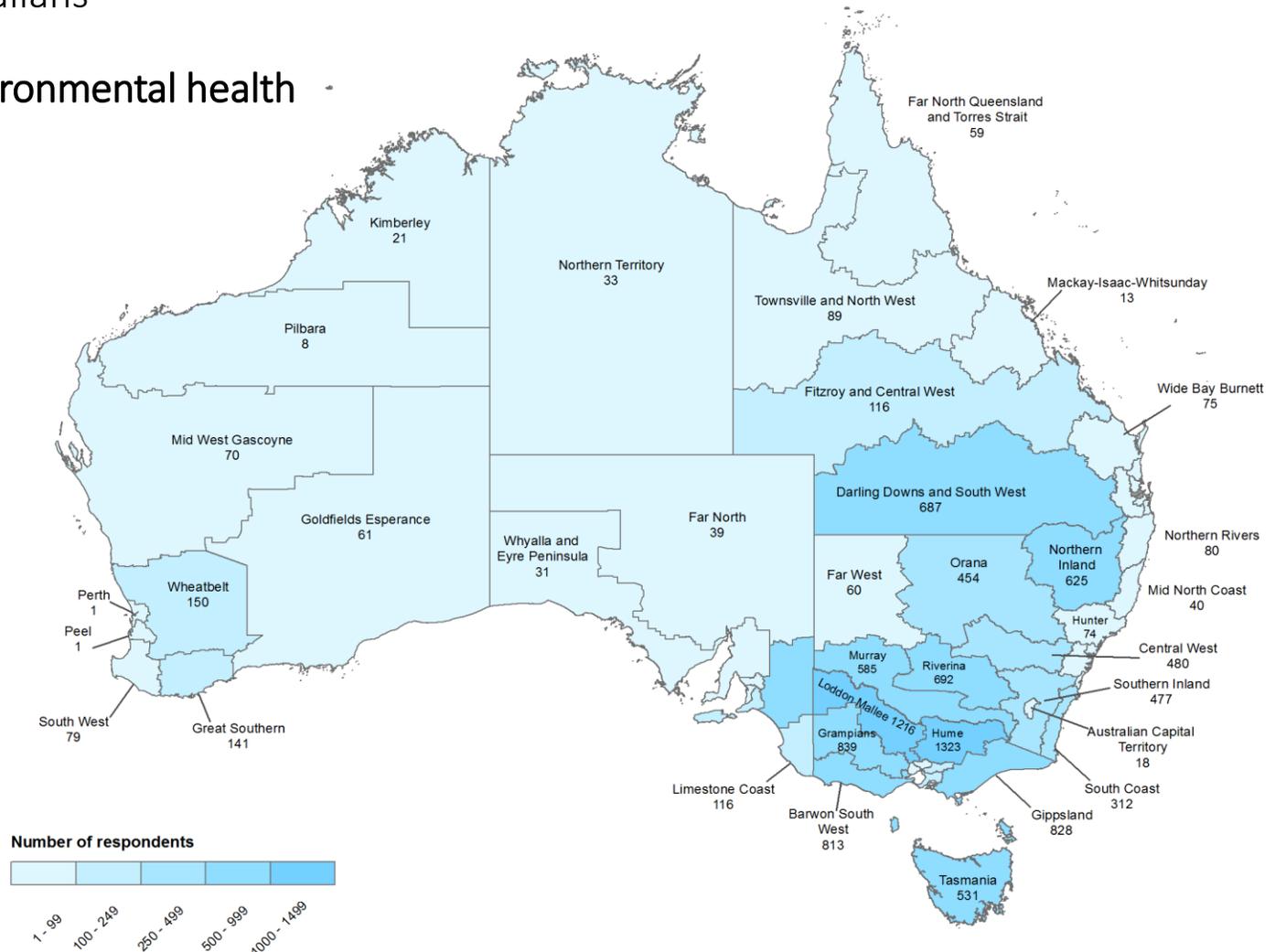
www.regionalwellbeing.org.au

Annual survey of 13,000 rural and regional Australians

+ around 400 capital city residents

2016 survey included questions about carp & environmental health

Participants recruited by flyers/surveys to stratified random sample of households; can complete survey online or on paper



Social science summary – wave 1

- Problem much better understood in rural communities.
- High level of support for carp biocontrol (~60%), ~20% against, 20% undecided).
- Older generations generally more supportive
- Males generally more supportive
- Rec fishers are strong supporters
- Lower support among people from non-english speaking backgrounds.
- Lower support in communities affected by other issues.



Native Fish Recovery Program



Important to leverage synergistic activities:

1. Screens on pumps



Native Fish Recovery Program



Important to leverage synergistic activities:

1. Screens on pumps
2. Putting fish habitat back
3. Fixing water quality
4. Re-stocking populations
5. Restoring fish migration

Summary:



- Fortunately we have a control method for Carp in Australia that appears effective, and species, specific.
- But we must understand how best to use it.
- And we must be able to manage risks.
- That is what the NCCP was established to do.

What you can do:



- Ask questions.
- Connect.
- If you would like to see the end of carp, help us share information.
- Share your views.
- Help communicate the need to also recover native fish.

Want to find out more?



- Social (Vimeo: National Carp Control Plan)
- Web: www.carp.gov.au
- Email: carp@frdc.com.au
- Phone: 1800CARPPLAN

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Home About us Carp - The Problem What we are doing
FAQ's Contact Us

NATIONAL CARP CONTROL PLAN

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We aim to enhance the safety, health, prosperity, and well-being of the Australian community, while working actively towards improving the resilience, productivity, and long-term sustainability of Australia's aquatic ecosystems.

[Learn more about what we do](#)

Why the NCCP ?

Why so much focus on carp? And why a strategy based on biocontrol? Find out the facts about carp impacts, and how best to control them here.

[Learn More](#)

Questions we will answer

A robust research program is central to the National Carp Control Plan to address key knowledge gaps and risks. Evidence will be used to inform decision-making on how to proceed at the end of 2018. Find out more about research proposed here.

[FAQ](#)

How can I help?

Want to be kept up to date with the latest science on carp control? Perhaps you are part of a group that might like to help? Register here to be help up to date with progress.

[Contact Form](#)

MOST VIEWED RECENT

APRIL 2017
About us
A National Carp Control Plan (NCCP) is being prepared to explore possible release of the carp virus.

APRIL 2017

Want to know more?
Watch our videos on YouTube.

Long-term impacts - Mississippi

- Dramatic decline of carp in Mississippi since late '90s.
- Has stayed that way.
- Carp virus was considered only plausible reason.
- Native species diversity and abundance boomed as carp dwindled.
- Including more valuable fish species.

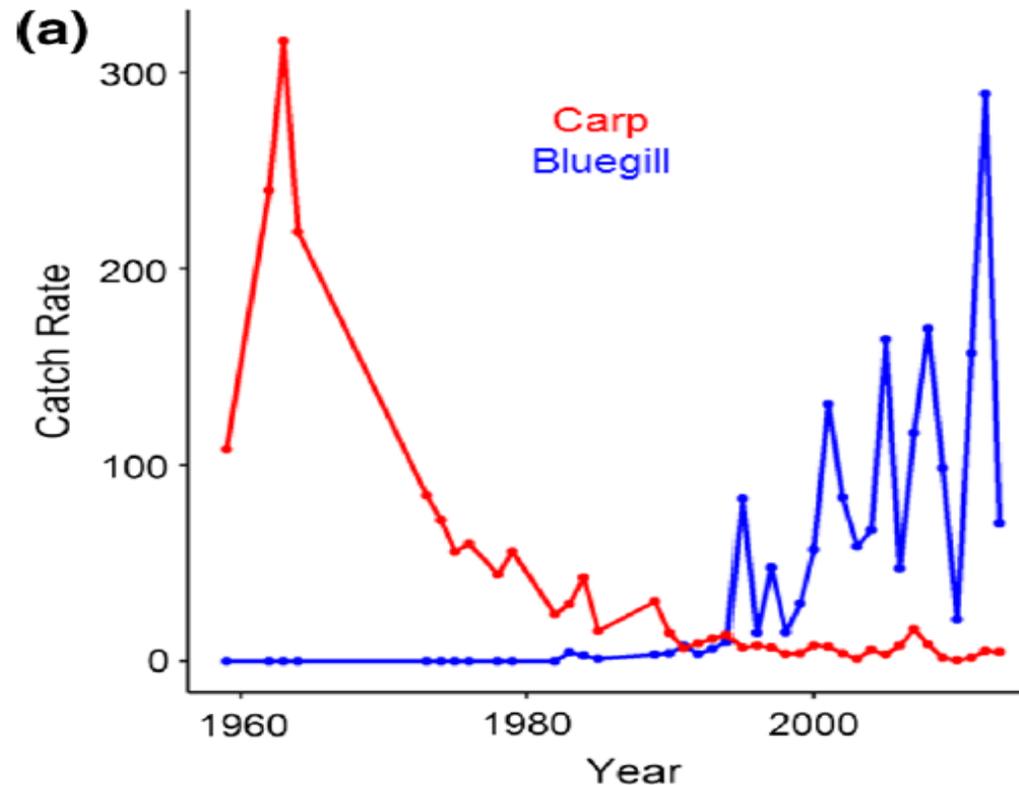
Widespread and enduring demographic collapse of invasive common carp (*Cyprinus carpio*) in the Upper Mississippi River System

Daniel K. Gibson-Reinemer · John. H. Chick · T. D. VanMiddlesworth · Madeleine VanMiddlesworth · Andrew F. Casper

Received: 24 September 2016 / Accepted: 7 March 2017
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Abstract Populations of invasive species that undergo rapid expansions after establishment in a new system can also be subject to collapse. Although the dynamics of the establishment and expansion

over several decades and examine several hypotheses to explain the decline, including: boom-bust population dynamics; suppression by native predators; resource exhaustion; improvements in environmental



Questions?



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