



# Central Plains Water

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Evidence of Philip Thomas  
Donnelly



# Scope of evidence

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- Updates evidence concerning economic effects from the amended scheme
- Sections of evidence most affected:
  - Section 7: Economic impact analysis (EIA)
  - Section 9: Costs and benefits
- Updates take account of:
  - proposed dam no longer being available
  - impact on post scheme farm management



# Principal changes to assumptions

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- Less affected area:
  - Now 76,000ha
  - 60,000ha benefit from CPW water
- Less intensive farming due to less reliable water
- Adopted Mr Macfarlane's changes
  - Summarised in my Table 1 and
  - Appendices 1 and 2
- Adopted Mr Lewthwaite's off-farm capital cost estimate



# Ongoing economic impacts - total direct plus indirect

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- Annual output increases by \$592M
- Annual GDP increases by \$261M
- Annual jobs by 1130
- Around 45% of the with dam scenario impacts



# Economic impacts - direct and indirect over 35-years

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- Output \$19.2B- \$4.9B NPV
- GDP - \$8.5B - \$2.1B NPV
- About 36,000 job years of work
- Around 45% of with dam scenario



# Construction impact

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- Direct output \$325M - \$272M NPV
- Direct GDP \$86M - \$72m NPV
- Direct jobs about 800
- Direct + indirect output \$693M - \$577M NPV
- Direct + indirect GDP \$244M - \$203M NPV
- Direct + indirect jobs about 2600
- That is, under half with dam scenario impacts



# Combined construction and operating impact

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- Direct + indirect output \$20B - \$5.4B NPV
- Direct + indirect GDP \$8.7B - \$2.3B NPV
- Direct and indirect job years about 39,000



# CBA results

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- Gross farm gate benefits \$1,223M NPV
- Costs \$935M NPV
- Net welfare gain \$288M
- Compared to dam
  - Farm gate benefits fall 50 percent
  - Costs fall 44 percent
  - Net welfare gain falls 23%
- Analysis not sensitive to discount rate
- CBA most sensitive to revenue assumption >-23% produces welfare loss
- Costs rise >75 percent before welfare loss.



# Conclusion

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- Substantially reduced scale of positive economic impacts
- Scheme still involve an efficient use of society's scarce resources
- Produce's significant new exports, bulk of \$328M annual production exported
- Exports are vital to NZ's standard of living and economic growth