Sustainable Development Goals (SDGs)
Priorities and Map the Interactions between SDGs in Goulburn Murray Region

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Progress Summary

1. Gathering information and resources about the Goulburn Murray and contextual analysis
2. Prepare list of priority SDGs in the Goulburn-Murray
3. Finding interactions among 7 selected SDGs
Goulburn-Murray Water regional map, including the Goulburn-Murray Irrigation District (GMID)

'inland water playground' and the 'food bowl of Victoria'

Source: Goulburn-Murray Water
Process of Goulburn-Murray Modelling

- Coding by Nvivo
- Narratives
- Synergy & Trade off
- System Dynamic Modeling
NVivo. 12 Pro gives you a place to:

- Store and organize
- Categorize and analyse
- Visualize and discover
Goulburn-Murray Contextual Analysis

- Reports: 96
- Journal Papers: 34
- Interviews: 30

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnerships for the Goals
Different Coding Methods in Nvivo 12 pro

- Manual Coding
- Automatic Coding
  - Automatic Coding By Theme
  - Coding by Frequency Words
Priority SDGs in Goulburn Murray
According to Number of References

- **Clean Water and Sanitation**: 99
- **Industry, Innovation and Infrastructure**: 79
- **Life on Land**: 75
- **Zero Hunger**: 53
- **Climate Action**: 44
- **Decent Work and Economic Growth**: 42
- **Responsible Consumption and Production**: 33
Priority SDGs in Goulburn Murray
According to Number of Statements

- 06. CLEAN WATER AND SANITATION
- 15. LIFE ON LAND
- 09. INDUSTRY INNOVATION AND INFRASTRUCTURE
- 13. CLIMATE ACTION
- 02. ZERO HUNGER
- 08. DECENT WORK AND ECONOMIC GROWTH
- 12. RESPONSIBLE CONSUMPTION PRODUCTION
- 17. PARTNERSHIPS FOR THE GOALS
- 11. SUSTAINABLE CITIES AND COMMUNITIES
- 03. GOOD HEALTH AND WELL BEING
- 16. PEACE JUSTICE AND STRONG INSTITUTIONS
- 04. QUALITY EDUCATION
- 10. REDUCED INEQUALITY IN LOCAL COMMUNITIES
- 07. AFFORDABLE AND CLEAN ENERGY
- 05. GENDER EQUALITY
- 14. LIFE UNDER WATER
- 01. NO POVERTY
Word Frequency among all of Resources
Synergy: Positively one goal or target influences another, progress in one goal or target favors progress in another.

Trade off: Negatively one goal or target influences another. progress in one goal or target hinders progress in another.
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Priority SDGs Synergy & Trade off in Goulburn-Murray
System Dynamics Modelling

System dynamics is a perspective and set of conceptual tools that enable us to understand the structure and dynamics of complex systems.
Future project plans of Goulburn-Murray

1- Narrative interactions (Synergy & Trade off) among 7 most frequently coded SDGs

2- Narrative interactions (Synergy & Trade off) among targets of 7 most frequently coded SDGs

3- Simulation of Goulburn-Murray by System Dynamics Modeling

4- Analyse future scenarios by System Dynamics Modeling

5- Improve socio-economic and environmental policies of sustainability for Goulburn-Murray
1- River Murray System operations: drivers for change and key risks. 17 October 2019

2- Environmental outcomes from the Basin Plan: what benefits are we seeing from managed environmental water?. 28 November 2019

3- Disaster resilience: Impacts of recent bush fires on water resources. 25 February 2020
Thank You
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Artwork by Jordana Angus