

Creative Component Project Report Summary

Evolution of community development approach due to
community changes and major events:

A case study of Exmouth, Western Australia from 1986 to 2016



Residential street, Exmouth, WA. (K. Chamberlain, 2016)

Kirsten A. Chamberlain
University of Nebraska-Lincoln
December 6, 2016

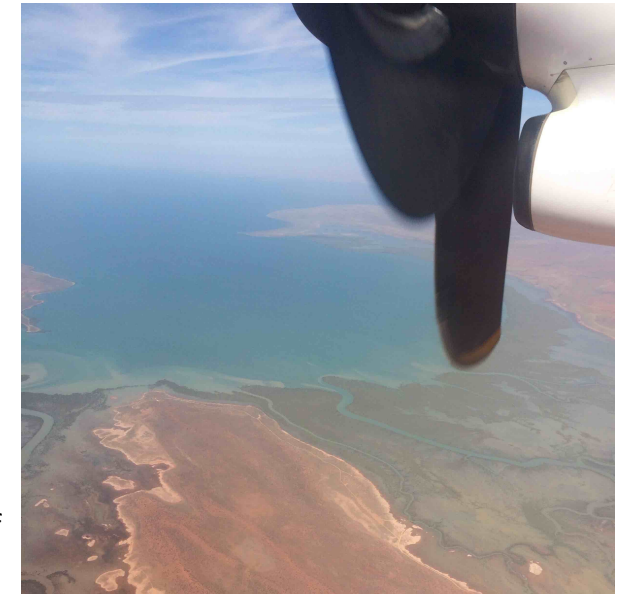


Whaleshark along Ningaloo Reef. (Three Islands, 2015)

Report Summary

- Community Overview
- Mixed-Method Case Study
- Study Findings
 - Socio-Economic Statistics
 - Community Development Programs Overview
 - Model of Exmouth Community Development
- Implications of Study
- Study Limitations & Future Research

Sandy Bay, Cape Range
National Park.



Flying over Exmouth
Gulf, south of
Exmouth, WA.



Murat Road near "footy" ovals.

Exmouth Community Overview

"If the base were to close, I imagine Exmouth would become a ghost town"

Prediction from a long-time Exmouth resident in 1986.
(Barker & Ondaatje, 2015, p.344)

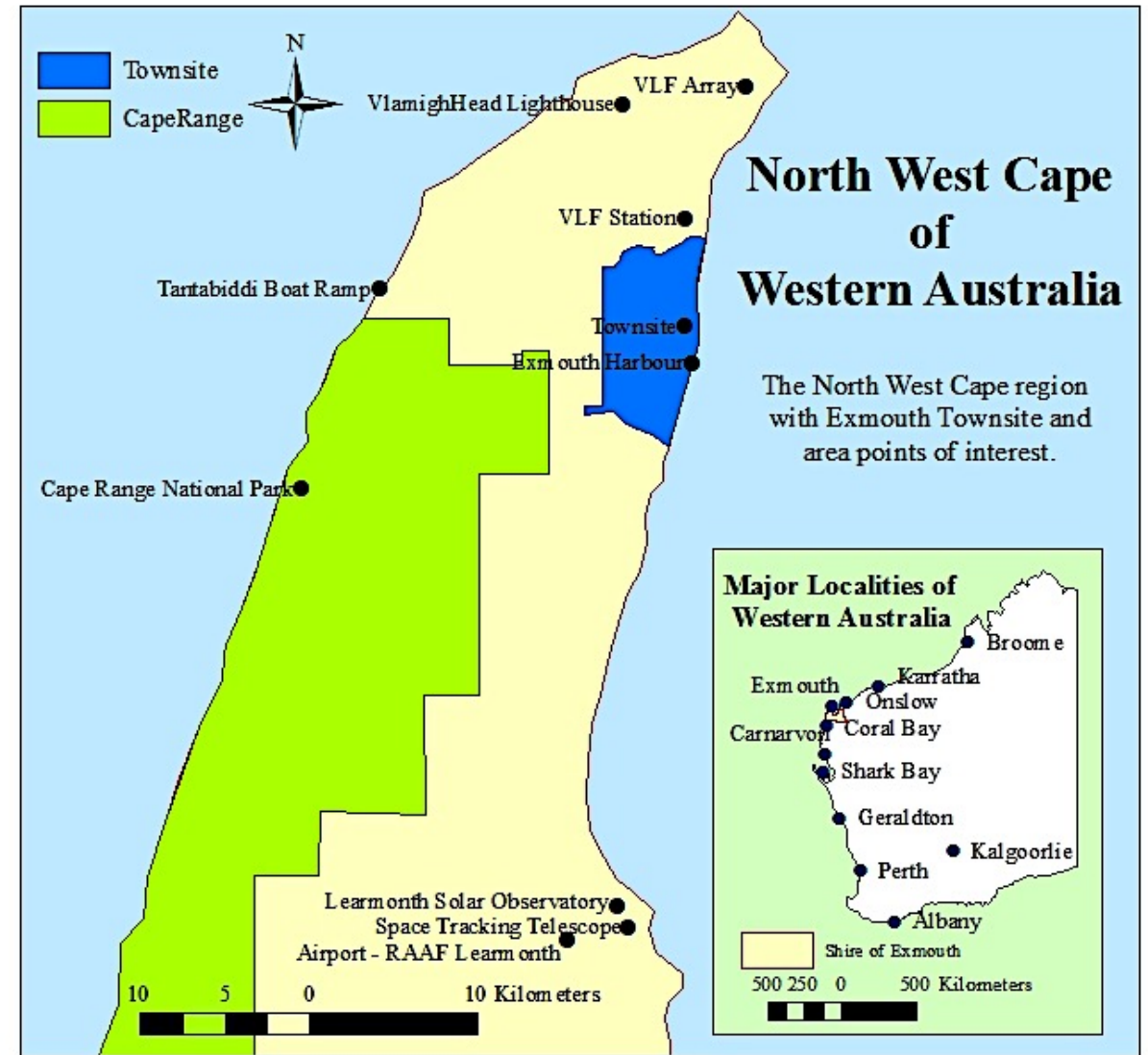
Brief History of North West Cape

- **Before permanent settlements**
 - 1700s Dutch explorers - 1800s European pastoralists, fishing & prawning
- **WWII “Bare Base”**
 - Operation Potshot, base for submarine refueling
 - RAAF Learmonth, dirt airfield for support patrols
 - Damaged by cyclone in 1944, personnel and assets moved closer to Perth
- **1967:** USN & Australian Defense Forces build naval communications station.
 - Very Low Frequency (VLF) Array, 270° coverage of Indian Ocean
- **1992:** USN remove personnel and dependents.
 - 30% population loss in less than a year.
 - 25% student population were Americans
- **2001:** Private defense contractors assume control of VLF station.
 - Base jobs reduced from over 800 to below 200.

- **Today**
 - International Tourism Destination, nationally recognized game-fishing FIFO workforce for resources sector.



Bush area near old Navy Base.



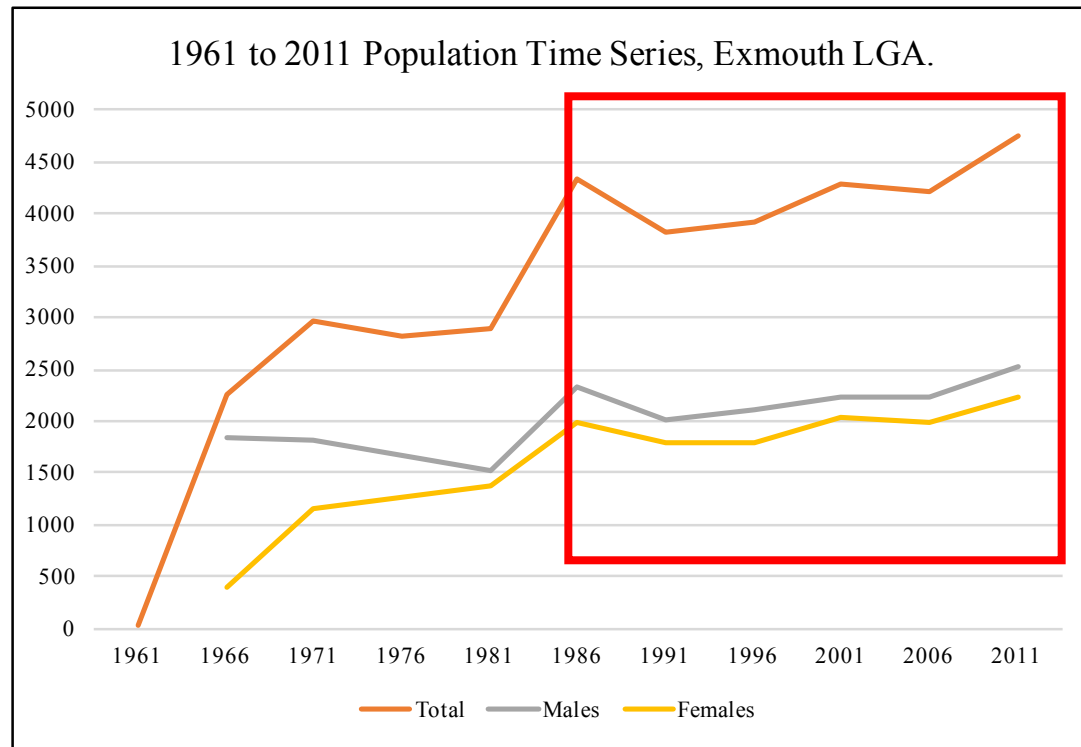
(“History of Exmouth”, N.d.; Industry Commission, 1993; Humphreys, 2006; Barker & Ondaantje, 2015)

Base Map Data Source: ESRI, 2016.

Photo: K. Chamberlain, 2015.

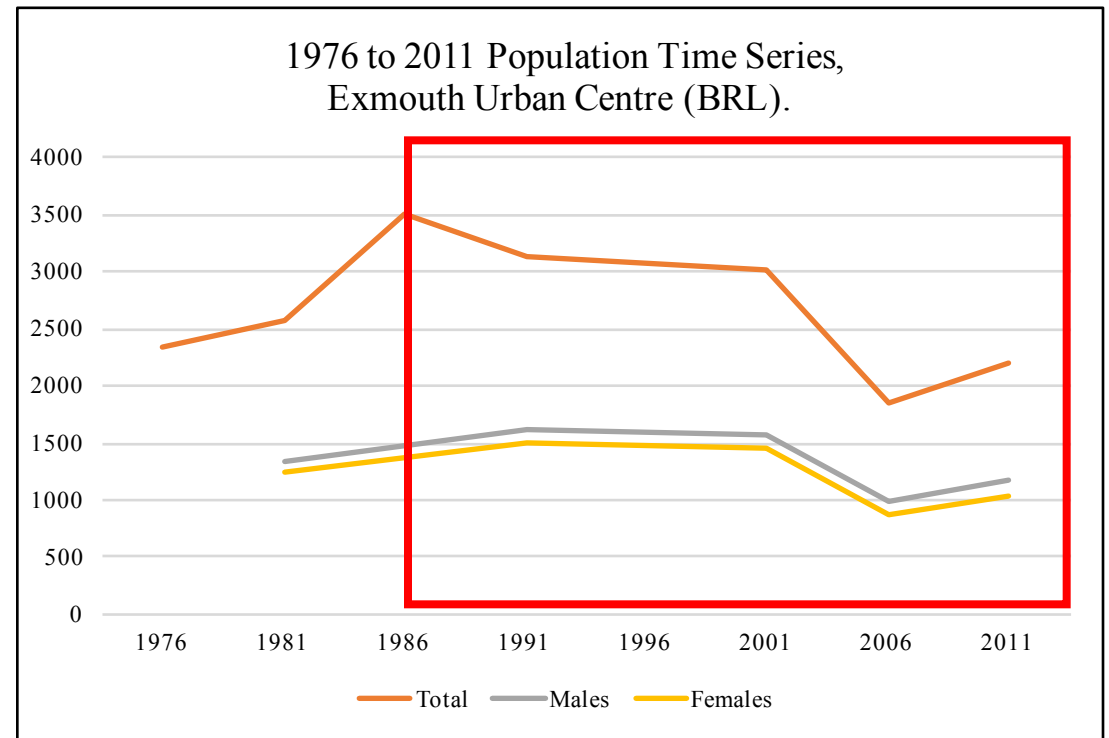
Population Trend Comparison

Shire of Exmouth (Local Government Area)



(ABS, 1962, p.9; ABS, 1968, p.20; ABS, 1974, p.3; ABS, 1979; ABS, 1982, p.10; ABS, 1988a, p.11; ABS, 1993a, p.27; ABS, 1997a, Table B03; ABS, 2002a, Table B03; ABS, 2007a, Table B04; & ABS, 2012a, Table B04).

Town Site (Bounded Rural Location)



(ABS, 1977; ABS, 1982, p.26; ABS, 1987b, p.27; ABS, 1992b, p.48; ABS, 2002b, Table B03; ABS, 2006b, Table B04; & ABS, 2012b, Table B04)

How did Exmouth persist and rebound after defense job cuts?

Research Questions:

1. What community development (CD) programs may have contributed to positive changes in the community?
2. What factors and events may influenced to the adoption of these programs?
3. What lessons can be learned from Exmouth's experience?

Methodology

Mixed-Method Case Study



Giant Prawn near Exmouth Visitor Centre, formerly local business signage.
(Photo: K. Chamberlain, 2016.)

Mixed-Method Case Study

- Socio-Economic Statistics
 - Australian Bureau of Statistics (ABS)
 - Census of Population and Housing, every 5-years, compulsory.
 - Socio-Economic Indexes for Areas (SEIFA), calculated socio-economic comparison (Pink, 2013)
- Community Development Program Summary and Assessment
 - Shire of Exmouth: Annual Reports, Strategic Plan (2011), Community Engagement.
 - CD Program Assessment Form- created to summarize program details.
 - Triple Bottom Line (Beeton, 2006) vs. Community Capitals Framework (Flora, Emery, Fey, & Bregendahl, 2006)
- Model of Exmouth Community Development
 - Inspired by Beeton's (2006) "Rural Tourism Map" (p.143).
 - Purpose: to show complex relationships of community assets and influences.



Wildflowers near base of VLF array, 2016.



Community festival at Federation Park, 2015.

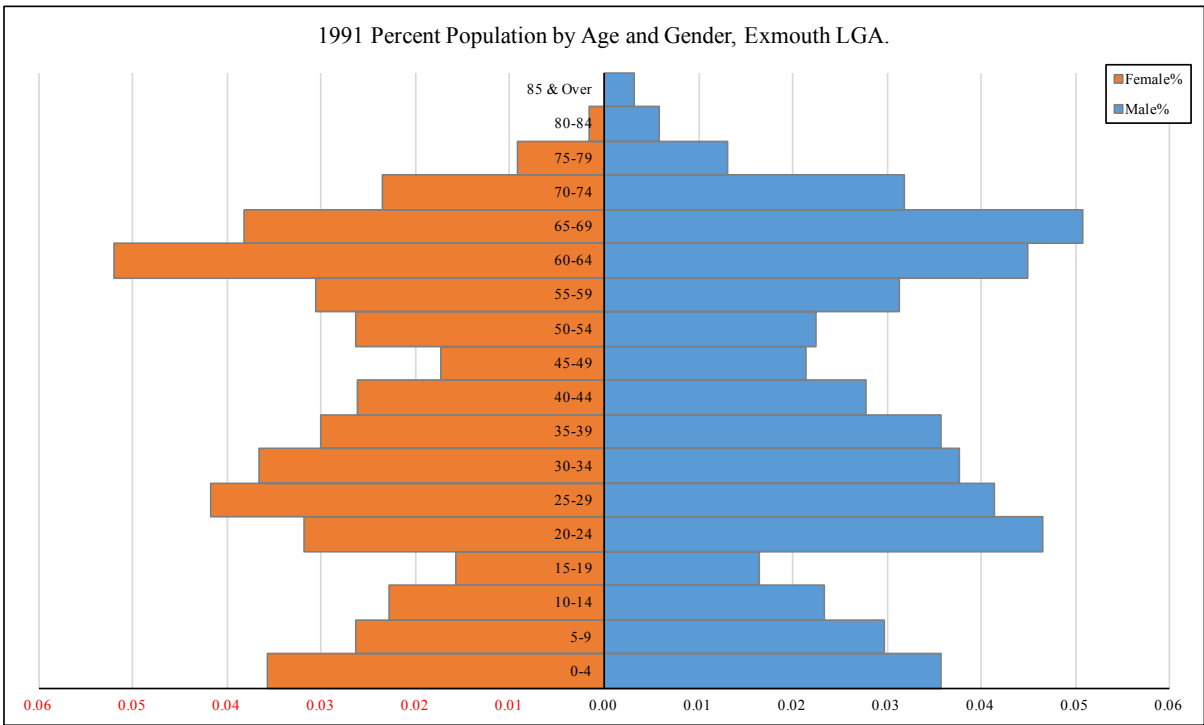
Friendly eco-tour staff (Three Islands, 2015).



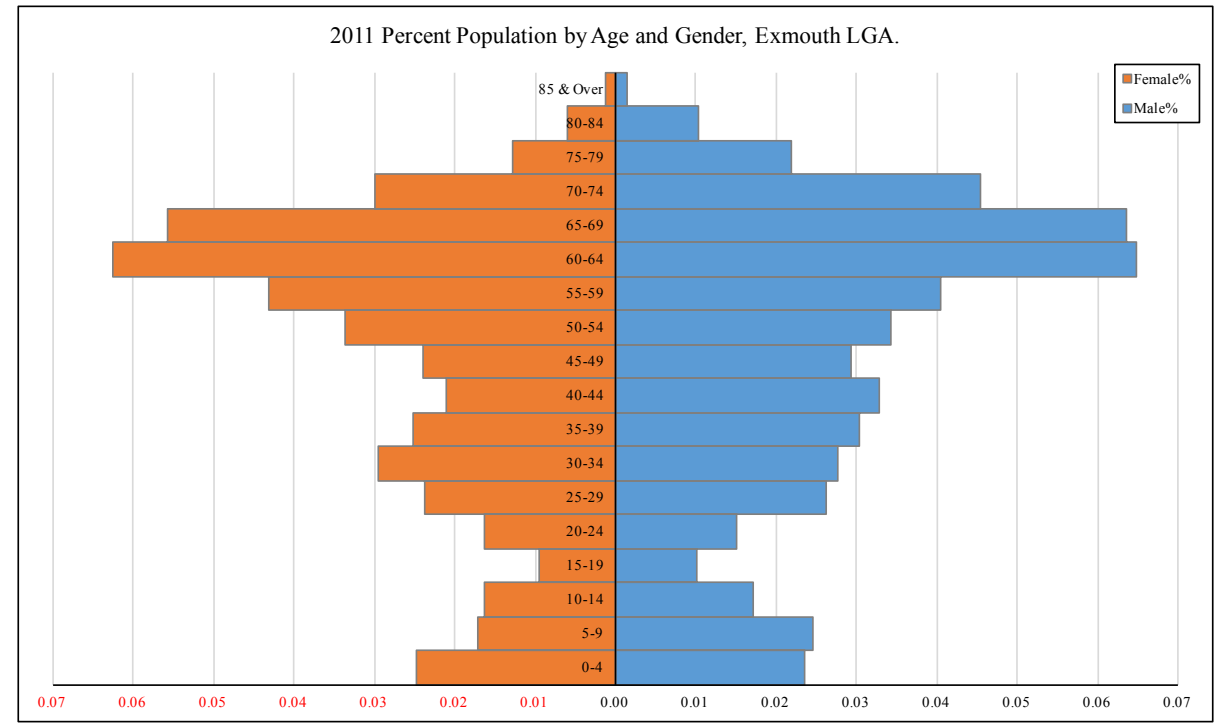
(Photos: K. Chamberlain.)

Case Study Findings

Highlights from Project Report.



(ABS, 1993a, p.27)



(ABS, 2002a, Table B03)



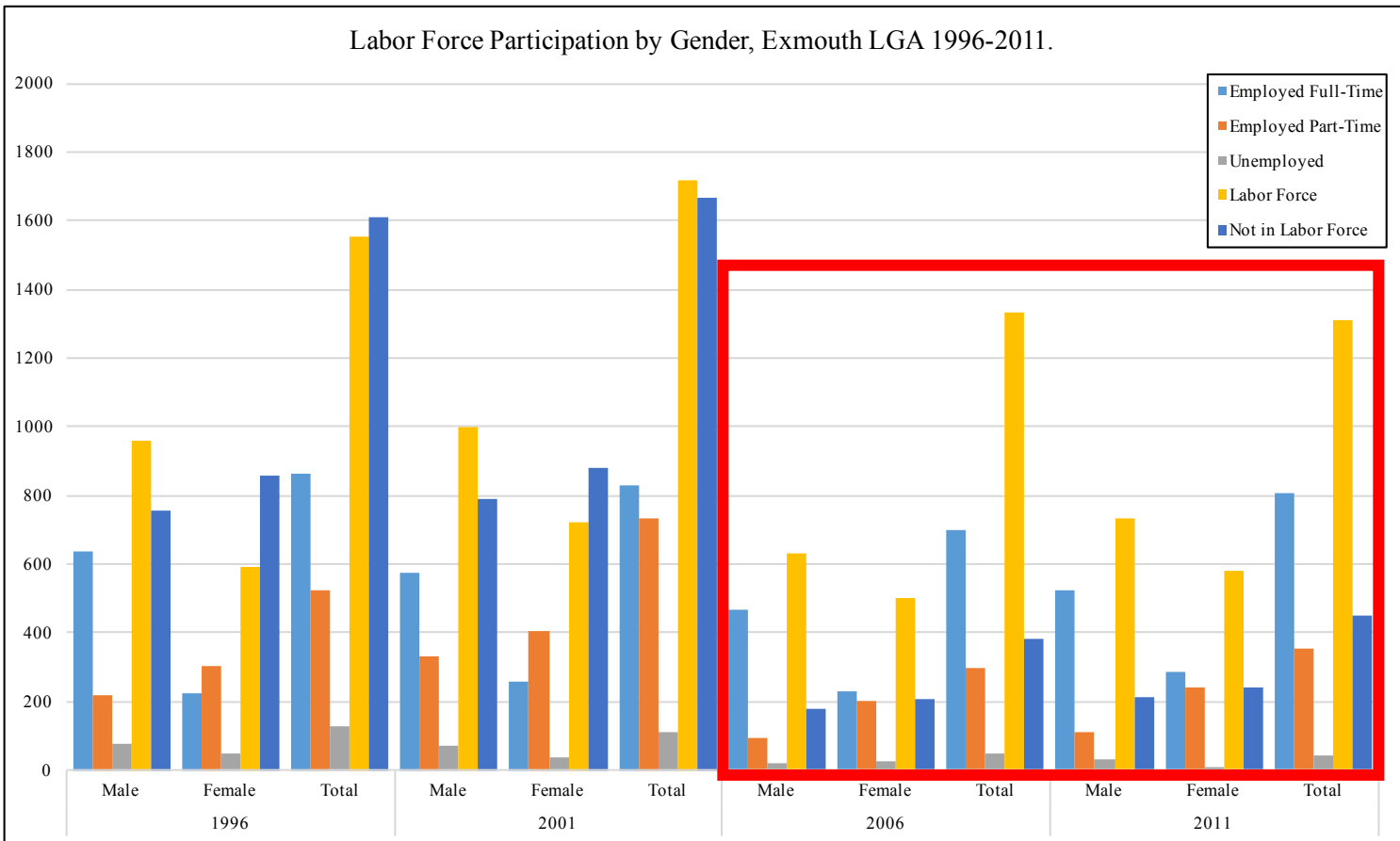
New home construction along Exmouth Marina canal.

(Photo: K. Chamberlain, 2015.)

1996 to 2011 Reported Medians and Averages of Exmouth LGA

Criteria	1996	2001	2006	2011
Median Age	44	46	37	38
Median Weekly Individual Income	\$200-299	\$300-399	\$529	\$737
Median Weekly Family Income		\$800-999	\$1,161	\$1,719
Median Weekly Household Income	\$300-499	\$700-799	\$1,059	\$1,373
Average Household Size	2.5	2.4	2.3	2.4
Median Weekly Rent		\$100-149	\$141	\$257
Median Housing Loan Payment		\$800-999	\$1,240	\$2,167

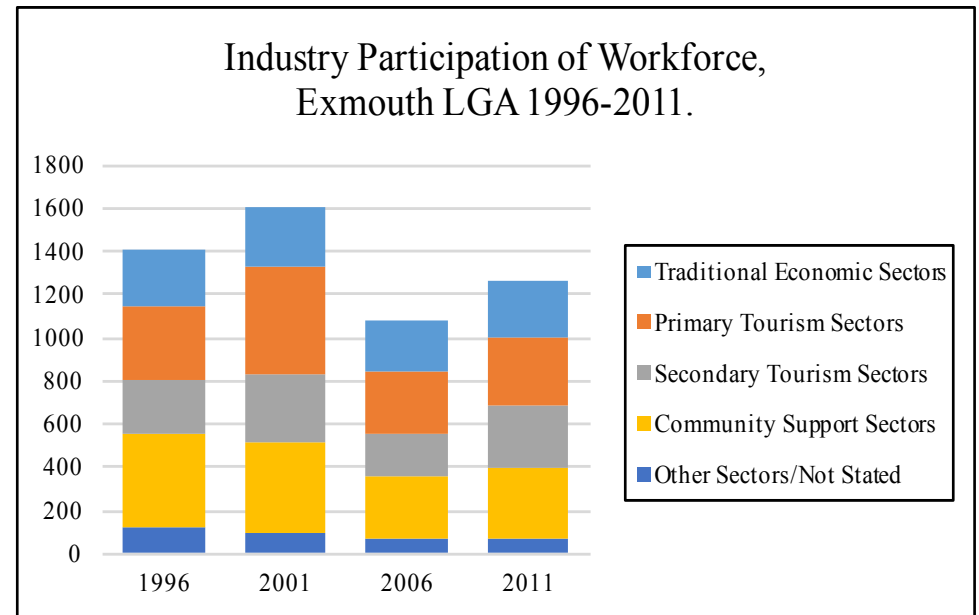
(ABS, 1997a, Table B32; ABS, 2002a, Table B33; ABS, 2007a, TableB02; & ABS, 2012a, Table B02).



(ABS, 1997a, Table B13; ABS, 2002a, Table B25; ABS, 2007a, Table B41; & ABS, 2012a, Table B42)

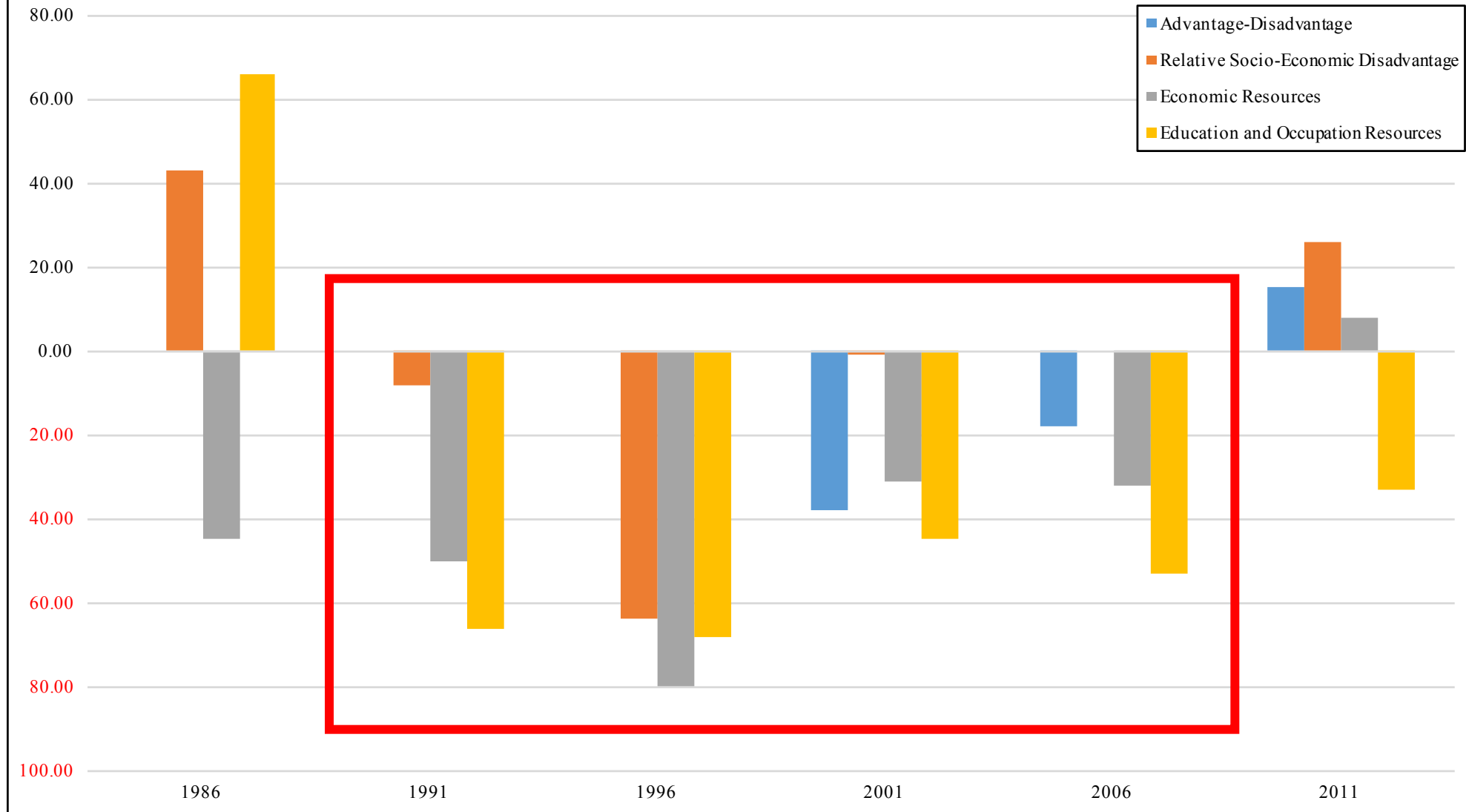


Whaleshark swim participants receiving safety briefing.
(Photo: Three Islands, 2015.)



(ABS, 1997a, Table B19; ABS, 2002a, Table B26; ABS, 2007a, Table B43; & ABS, 2012a, Table B44)

1986-2011 SEIFA Indices, Exmouth LGA.



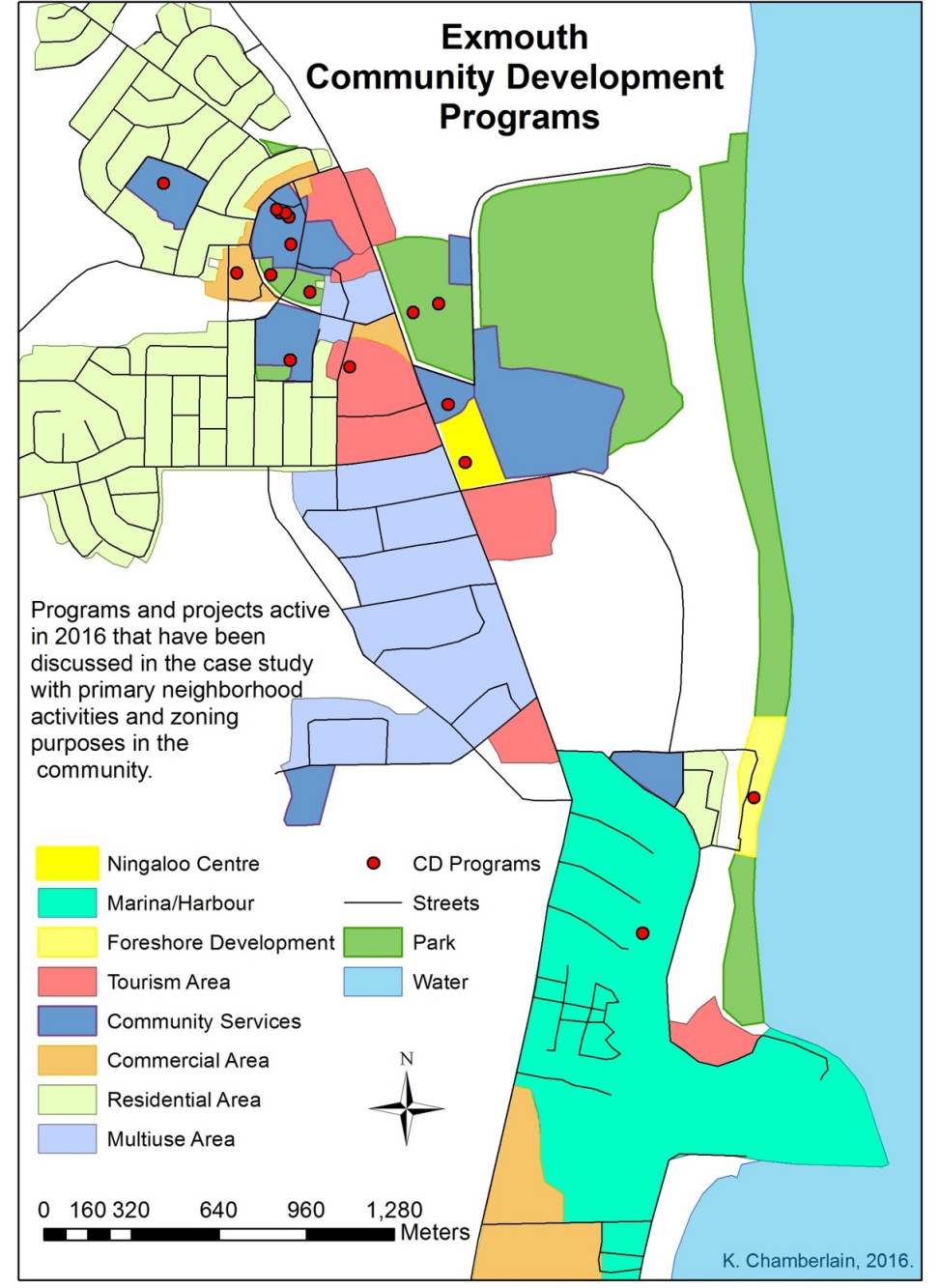
(ABS, 1987b, Table "Indexes"; ABS, 1993b, Table "CD, SLA, PostCode Data SEIFA91"; ABS, 2002c, Table "AUS_lga_01"; ABS, 2006c, Table "SEIFA LGAs2006 & State Suburb Codes 2006"; & ABS, 2011c, Table "LGS, Indexes, SEIFA 2011 & State Suburb Codes 2011")

Program Title

Capitals

	Human	Social	Cultural	Natural	Built	Financial	Political
Affordable Housing Project	Blue	Blue			Yellow	Grey	Black
Aviation Services	Blue	Blue			Yellow	Grey	Black
Club Development	Blue	Blue	Orange				
Community Resource Center	Blue	Blue			Yellow		
Exmouth Marina & Harbour Development	Blue	Blue		Green	Yellow	Grey	Black
Exmouth Visitor Centre	Blue	Blue	Orange	Green		Grey	
Heritage Celebrations	Blue	Blue					
Better Beginnings Initiative	Blue	Blue					
Men's Shed	Blue	Blue	Orange		Yellow		
Ningaloo Centre	Blue	Blue	Orange	Green	Yellow	Grey	Black
Health and Wellness Expo	Blue	Blue					
KidSport	Blue	Blue					Black
National Volunteers Week	Blue	Blue					
Paltridge Memorial Pool/Splash Park	Blue	Blue	Orange	Green	Yellow	Grey	
Passionately Pink and Movember Campaigns	Blue	Blue					
Police and Community Youth Centre (PCYC)	Blue	Blue	Orange				
SkateX	Blue	Blue	Orange		Yellow		
Tantabiddi Boat Ramp			Orange	Green	Yellow	Grey	
Tidy Towns Competition		Blue			Yellow		Black
Town Centre & Foreshore Revitalization Plans	Blue	Blue	Orange	Green	Yellow	Grey	Black
Youth Action Exmouth (YAE)	Blue	Blue					

Exmouth Community Development Programs



(Base Map Data Source: ESRI, 2016)



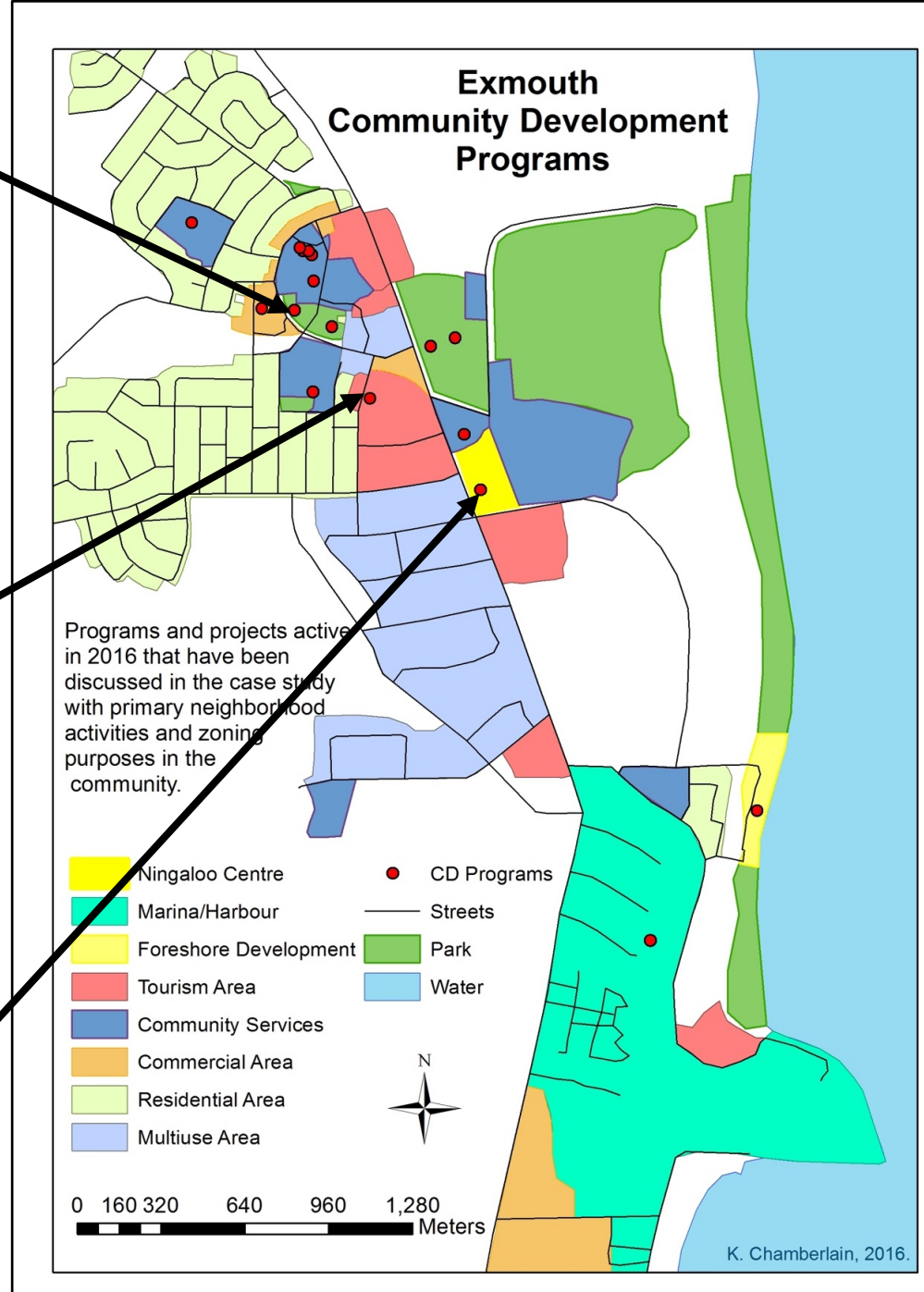
Above: Town Centre Revitalization Plan (L-R: Town Centre shopping district, Federation Park & Splash Park)

Below: Construction of Lefroy Street Affordable Housing Development

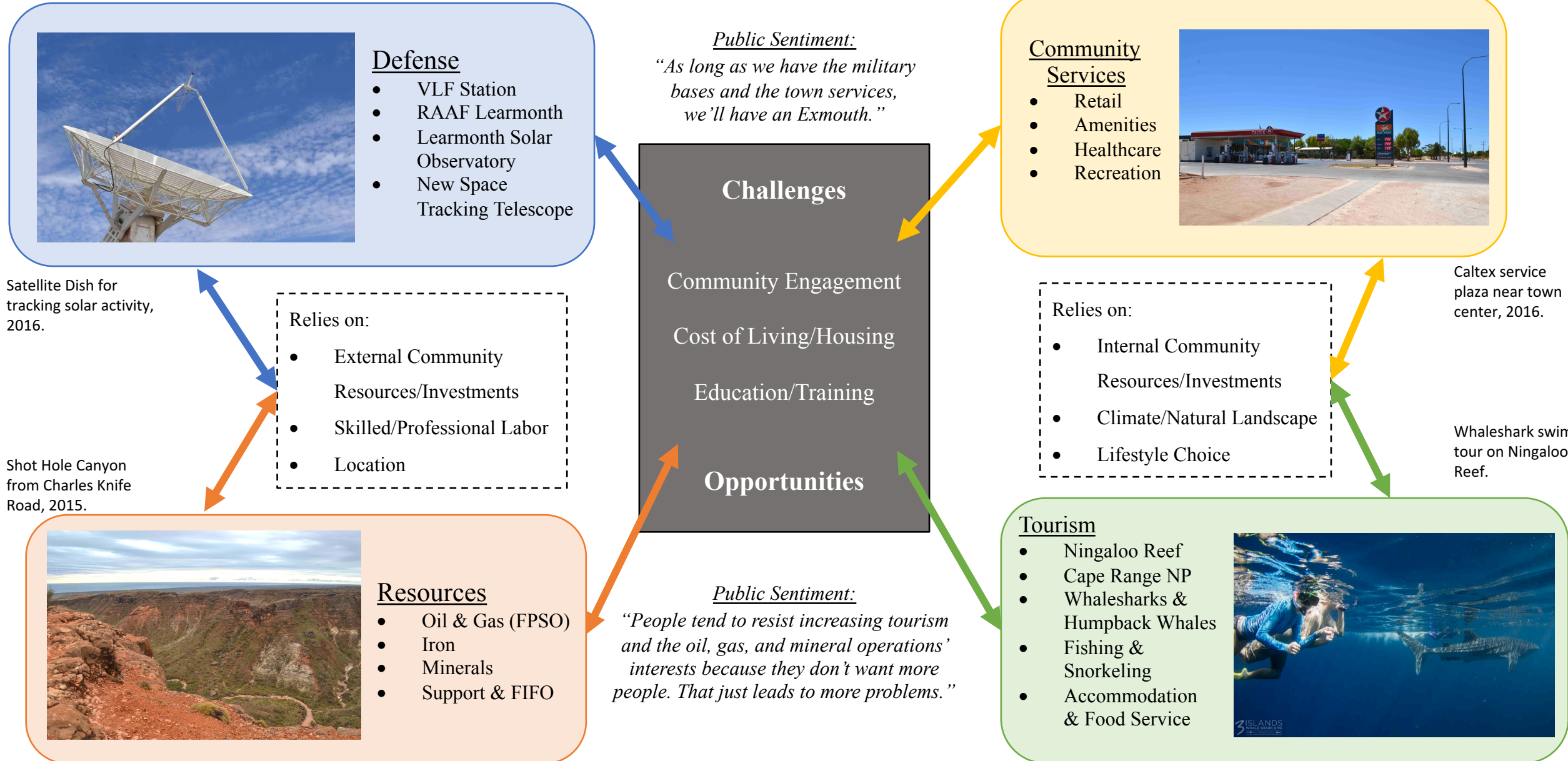


Above: Construction of Ningaloo Centre

Photos: K. Chamberlain, 2016
Base Map Data Source: ESRI, 2016



Exmouth Community Development Model



Implications

- Preservation of community history and local identity...
 - ... Not always in agreeance with outside forces.
- Tourism does not define Exmouth...
 - ... Continued growth requires balance with other areas.
- Areas needing attention:
 - affordable housing
 - education & job training
 - encouraging local business collaboration

Study Limitations & Future Research

Limitations of Current Study

- Based on secondary sources due to limited resources and narrow timeframe.
- Unavailability of Key Materials
 - Held in reserve/classified status.
- WA Crime and Corruption Commission investigation ongoing.
 - Alleged misconduct and improper use of government funds. (Hamlyn, 2016)
- Ningaloo Centre construction and other administration duties.

Recommendations for Research

- Comparison study of 1990s reports' predictions.
 - How accurate were they?
- Conduct primary source study.
 - Interview residents, stakeholders.
- Longitudinal study of labor force to better define workforce development needs.
- Pilbara-region community sustainability study by Murdoch University graduate student. (McKenna, 2016.)

Any Questions?



Vlamingh Head Lighthouse at sunrise (K.Chamberlain, 2015).

Acknowledgements

This project would not have been possible without the help from following people: Roge Kempe, Shire of Exmouth-Executive Manager of Community Engagement; Sharon Regterschot, Julie Throne, and the staff at Exmouth Public Library; Wendy and Ian McKeown, Exmouth residents; my family for their never ending encouragement; and my husband and young son for their love and patience.

References

- Barker, A. J. & M.L. Ondaatje. (2015). *A Little American In Western Australia*. Crawley, Western Australia: UWA Publishing.
- Beeton, S. (2006). "Chapter 2: Tourism theories and their relevance to communities." *Community Development through Tourism* [Kindle DX Version]. Collingwood, VIC: Landlinks Press. Retrieved from Amazon.com
- Bureau of Meteorology. (N.d.). "Cyclones in Exmouth." Australian Government. Retrieved October 31, 2016 from <http://www.bom.gov.au/cyclone/history/wa/exmouth.shtml>
- Bureau of Meteorology. (2016). "Monthly climate statistics: Learmonth Airport summary statistics." *Climate Statistics for Australian Locations*. Australian Government. Retrieved November 11, 2016 from www.bom.gov.au/climate/averages/tables/cw_005007.shtml
- Destination Visitor Survey. (2012). *Western Australia: Evaluating the WA Cruise Visitor Experience*. Tourism Research Australia, Canberra. Retrieved November 12, 2016 from https://www.tra.gov.au/documents/SRR_WA_Cruise_visitor_experience_FINAL.pdf
- Flora, C. Butler, M. Emery, S. Fey, & C. Bregendahl. (N.d.). *Community Capitals: A Tool for Evaluating Strategic Interventions and Projects*. [Pamphlet]. Retrieved August 25, 2015 from <http://wp.aae.wisc.edu/ced/wpcontent/uploads/sites/3/2014/01/204.2-Handout-Community-Capitals.pdf>
- Hamlyn, C.. (2016, November 9). "Exmouth Shire CEO giving evidence in CCC hearing over million-dollar aquarium contract." ABC News. Retrieved November 21, 2016 from <http://www.abc.net.au/news/2016-11-10/ccc-hearing-into-alleged-exmouth-shire-corruption/8013952>
- Hassell. (2012). "Exmouth Town Centre and Foreshore Revitalisation Plan: Final Report." Report prepared for Shire of Exmouth, April 2012. Perth, WA: Hassell Planning, Urban Design, and Landscape Architecture.
- Humphreys, B. (2006). *Calls to the Deep*. Defense Material Organisation. Defense Publishing Service.
- Industry Commission. (1993, December 17). *Impediments to Regional Industry Adjustment*. 1(35). Canberra: Australian Government Publishing Service. Retrieved October 24, 2016 from <http://www.pc.gov.au/inquiries/completed/regional-industry-adjustment/35iria.pdf>
- Jones, T., D. Wood, M. Hughes, M. Deery, L. Fredline, R. Jones, ..., & J. Catlin. (2011). "Ningaloo Collaboration Cluster: Socio-Economics of Tourism." Ningaloo Cluster Final Report No.3. CISRO and Curtin University. Retrieved October 25, 2016 from <http://ningaloo-atlas.org.au/sites/default/files/Socioeconomics%20of%20tourism%20final%20report.pdf>
- Kavita, E. & J. Saarinen. (2016). "Tourism and Rural Community Development in Namibia: Policy Issues Review." *Fennia*, 194(1), p.79-88. Doi: 10.11143/46331
- Kempe, R. (2014). "Media Release: Exmouth Town Centre and Foreshore Revitalisation Project." Shire of Exmouth. Retrieved October 30, 2016 from http://www.exmouth.wa.gov.au/profiles/exmouth/assets/clientdata/documentcentre/community_engagement/Exmouth_cbd_and_foreshore_revitalisation_final.pdf
- McBride, J. L. (2012). "The Estimated Cost of Tropical Cyclone Impacts in Western Australia." The Indian Ocean Climate Initiative, Stage 3. Centre for Australian Weather and Climate Research, Bureau of Meteorology. Retrieved October 31, 2016 from <http://www.bom.gov.au/cyclone/history/major/vance/vance.pdf>

References

- McKenna, B. (2016, November 9). "Sustainability Study." *Pilbara News*. Opinion, P.9.
- McLeod, P. & C. McGinely. (1990). Economic Impact Study: Commercial Fishing in Western Australia. Economic Research Associates. Retrieved November 4, 2016 from http://www.fish.wa.gov.au/Documents/management_papers/fmp061.pdf
- Pink, B. (2013). Technical Paper: Socio-Economic Indexes for Areas (SEIFA). [PDF Document]. Commonwealth of Australia. Canberra: Australian Bureau of Statistics.
- Rawsthorne, M. (2005). "Community Development Activities in the Context of Contracting." *Australian Journal of Social Issues*, 20(2), p.227-240. Australian Council of Social Service.
- Ross, S. & G. Wall. (1999). "Ecotourism: Towards Congruence Between Theory and Practice." *Tourism Management*, 20(1), p.123-132.
- Scheyvens, R. (1999). "Case Study: Ecotourism and the Empowerment of Local Communities." *Tourism Management*, 20(1), p.245-249.
- Shire of Exmouth. (N.d.). "History of Exmouth." Retrieved September 5, 2015 from <http://www.exmouth.wa.gov.au/exmouth-history.aspx>
- Shire of Exmouth. (N.d.). "Ningaloo Centre, Exmouth." [Pamphlet].
- Shire of Exmouth. (N.d.). "Shire Statistics." Retrieved November 1, 2016 from <http://www.exmouth.wa.gov.au/shire-statistics.aspx>
- Shire of Exmouth. (N.d.). "What's in a Name." Retrieved November 3 from <http://www.exmouth.wa.gov.au/whats-in-a-name.aspx>
- Shire of Exmouth. (2010). 2009/10 Annual Report.
- Shire of Exmouth. (2012). 2011/12 Annual Report.
- Shire of Exmouth. (2013). 2012/13 Annual Report.
- Shire of Exmouth. (2014). 2013/14 Annual Report.
- Shire of Exmouth. (2015). 2014/15 Annual Report.
- Taskforce on Regional Development. (1993). *Developing Australia: A regional perspective (Kelty Report)*. Canberra: Australian Government Publishing Service.
- UHY Haines Norton. (2011). *Shire of Exmouth 10+ Year Strategic Community Plan*. Exmouth, WA: The Shire of Exmouth. Retrieved September 10, 2015 from <http://www.exmouth.wa.gov.au/Assets/Documents/Document-Centre/Governance/ShireofExmouthSCPfinal%28847%29.pdf>

References

Wood, D. S. (2003, June). Tourism on the Carnarvon-Ningaloo Coast Between Quobba Station and Exmouth: Implications for Sustainability of the Coast. Western Australia Planning Commission. Retrieved October 15, 2016 from http://www.wapc.wa.gov.au/dop_pub_pdf/Tourism_Disc_paper.pdf

Wright, S. (2016, October 26). "Picture of economy looks bleak." Pilbara News. p.14.

Yin, R. K. (2014). Case Study Research: Design and Methods, 5th Edition. Thousand Oaks, CA: Sage Publications.

Zaunmayr, T. (2016, October 20). "FIFO 'breeze-ins taking jobs of Pilbara locals'." Pilbara News. Retrieved November 4, 2016 from <https://au.news.yahoo.com/thewest/regional/north-west/a/32957025/fifo-breeze-ins-taking-jobs-from-pilbara-locals/#page1>

Zaunmayr, T. & D. Emerson. (2016, October 26). "Miners are failing towns, says Grylls." Pilbara News. p.12.

Census Data.

Australian Bureau of Statistics. (1962). "Volume V. Western Australia, Part V. Population and Dwellings in Localities." Census of the Commonwealth of Australia 30th June, 1961. Cat. No. 2107.0 [PDF Document] Canberra, Australia: Commonwealth Bureau of Census and Statistics. Retrieved September 22, 2015 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2107.01961?OpenDocument>

Australian Bureau of Statistics. (1968). "Census Bulletin No. 5.8: Population and Dwellings: Local Government Areas and Urban Centers, Western Australia." Census of the Commonwealth of Australia 30 June 1966. Cat. No. 2106.0 [PDF Document]. Canberra, Australia: Commonwealth Bureau of Census and Statistics. Retrieved September 22, 2015 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2106.01966?OpenDocument>

Australian Bureau of Statistics. (1974). "Census Bulletin No. 6: Population and Dwellings in Local Government Areas and Urban Centers, Part 5. Western Australia." Census of the Commonwealth of Australia 30 June 1971. Cat. No. 2105.0 [PDF Document]. Canberra, Australia: Commonwealth Bureau of Census and Statistics. Retrieved September 22, 2015 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2105.01971?OpenDocument>

Australian Bureau of Statistics. (1979). "Persons and Dwellings in Local Government Areas and Urban Centres: Western Australia." Census of Population and Housing, 30 June 1976. Cat. No. 2104.0 [PDF Document] Canberra, Australia: Australian Bureau of Statistics. Retrieved September 22, 2015 from [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/91A668BE3053A1C7CA25758B00122AE5/\\$File/24130_1976_Pop_Dwell_Sum_WA.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/91A668BE3053A1C7CA25758B00122AE5/$File/24130_1976_Pop_Dwell_Sum_WA.pdf)

Australian Bureau of Statistics. (1982). "Persons and Dwellings in Local Government Areas and Urban Centres: Western Australia." Census of Population and Housing, 30 June 1981. Cat. No. 2103.0 [PDF Document] Canberra, Australia: Australian Bureau of Statistics. Retrieved September 22, 2015 from [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/27382F1EAE146758CA25758300125515/\\$File/24050_1981_PD_LGA_WA.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/27382F1EAE146758CA25758300125515/$File/24050_1981_PD_LGA_WA.pdf)

Australian Bureau of Statistics. (1988a). "Census Counts for Small Areas: Western Australia." 1986 Census of Population and Housing. Cat. No. 2102.0 [PDF Document] Canberra: Australian Bureau of Statistics. Retrieved September 21, 2015 from [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/77DEDAC20591960ACA2574CF001AD747/\\$File/24650_1986_Persons_and_Dwellings_in_Local_Government_Areas_Western_Australia.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/77DEDAC20591960ACA2574CF001AD747/$File/24650_1986_Persons_and_Dwellings_in_Local_Government_Areas_Western_Australia.pdf)

References

- Australian Bureau of Statistics. (1988b). "Socio-Economic Indexes for Areas (SEIFA), Australia, 1986." 1986 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0011986?OpenDocument>
- Australian Bureau of Statistics. (1993a). "Census Counts for Small Areas: Western Australia." 1991 Census of Population and Housing. Cat. No. 2101.0 [PDF Document] Canberra: Australian Bureau of Statistics. Retrieved September 21, 2015 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2101.01991?OpenDocument>
- Australian Bureau of Statistics. (1993b). "Socio-Economic Indexes for Areas (SEIFA), Australia, 1991." 1991 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/ABF942D07F57B567CA25715B007A8F74?opendocument>
- Australian Bureau of Statistics. (1997a). "Exmouth, SLA." 1996 Census of Population and Housing Basic Community Profile. Cat. No. 2901.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved September 21, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/1996/communityprofile/535053360?opendocument&navpos=220
- Australian Bureau of Statistics. (1997b). "Socio-Economic Indexes for Areas (SEIFA), Australia, 1996." 1996 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0011996?OpenDocument>
- Australian Bureau of Statistics. (2002a). "Exmouth, LGA." 2001 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved September 19, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2001/communityprofile/LGA53360?opendocument&navpos=220
- Australian Bureau of Statistics. (2002b). "Exmouth, UCL." 2001 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved September 19, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2001/communityprofile/UCL509000?opendocument&navpos=220
- Australian Bureau of Statistics. (2002c). "Socio-Economic Indexes for Areas (SEIFA), Australia, 2001." 2001 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012001?OpenDocument>
- Australian Bureau of Statistics. (2007a). "Exmouth, LGA." 2006 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved September 29, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2006/communityprofile/LGA53360?opendocument&navpos=220

References

- Australian Bureau of Statistics. (2007b). "Exmouth, UCL." 2006 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved September 29, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2006/communityprofile/UCL509000?opendocument&navpos=220
- Australian Bureau of Statistics. (2007c). "Socio-Economic Indexes for Areas (SEIFA), Australia, 2006." 2006 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012006?OpenDocument>
- Australian Bureau of Statistics. (2012a). "Exmouth, LGA." 2011 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved August 28, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/LGA53360?opendocument&navpos=220
- Australian Bureau of Statistics. (2012b). "Exmouth, UCL." 2011 Census of Population and Housing Basic Community Profile. Cat. No. 2001.0 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved August 28, 2015 from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/UCL515012?opendocument&navpos=220
- Australian Bureau of Statistics. (2012c). "Socio-Economic Indexes for Areas (SEIFA), Australia, 2011." 2011 Census of Population and Housing. Cat. No. 2033.0.55.001 [Excel Spreadsheet] Canberra: Australian Bureau of Statistics. Retrieved October 28, 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012011?OpenDocument>

Map Data.

ESRI. (2016). World Base Map. ArcMap 10.4.1.

Photo Contributors.

K. Chamberlain.

Three Islands Whaleshark Swim Eco-Tours staff. Taken May 12, 2015 along the Ningaloo Reef, WA.