climate change 22
affecting protected area tourism 166
challenge of 91
direct impacts from 93–5
environmental changes 93, 95–6
greenhouse gases 90–91, 95, 98
impact pathways 93
impacts, cumulative and compounding
100–101
land and sea surface temperatures 90
migration and displacement 97
mitigation and adaptation policy 97–8
Paris Climate Agreement 91–2, 97, 98, 102
regional knowledge gaps 99
socio-economic changes 93, 96–7
sustainable tourism in era of 92–8
taking action to combat 116–17
tourism sector and 101–3
tourist responses to 100
transnational impacts 99–100
climate-resilient economy 92
coastal tourism 117
Cochrane, J. 18
Cocklin, C. 132
cognitive benefits 150
Colorado River 188
community
and benefit creation 212–16
characteristics 214–15
context-sensitive models 218
contextualizing sustainable tourism in
207–9
control 213–14
as development strategy 241–3
governance 215–16
growth 208
participation 212–13
research needs 216–17
resilience 216–17
tourism awareness and knowledge 214
and tourism impacts 18, 209–12
Community-Based Natural Resource
Management (CBNRM) models 213, 214
community-level social factors 147–8
Complex Adaptive Tourism System (CATS)
model 17–18
complexity
functioning in 10
and sustainable tourism 17–18
systems thinking as response to 7–11
compliance, as opportunity 129
Comprehensive River Management Plan (CRMP)
190
conservation organizations 54, 159
Constance Ephelia resort 117
tourism
change drivers 46–50
influencing sustainability and resilience
40–42
power, culture and values in Vanuatu 48–50
research agenda 50–51
South Pacific context 50
Vanuatu 42–51
Convention on Biological Diversity (CBD) 160
demographic changes 41, 119
destination choices 96, 99, 148
destination community well-being (DCW)
approach 71–2, 79, 81, 82, 85
destination marketing/management organization
(DMO) 74–6, 79, 80–82, 85
destination residents 70, 75–81
destination tourists 75, 79
disturbance factors 166
double-loop learning 64
Doxey, G. V. 209, 210
Driver, B. L. 56, 169
Drumm, A. 4
dynamic, impossible to completely
understand, complex, and ever-changing
(DICE) 6
Eagles, P. F. J. 119, 162, 177
EarthCheck and Ecotourism Australia 115
earthquakes 26–32
Eco-Club programme 110
eco-friendly products 130
ecological effects 164–5
ecological elements 53, 218
economic benefits 75, 84, 153, 161, 173
Decentralisation and Local Government Regions
Act No.1 of 1994 49
demand side system 15–16
Dembek, K. 135
demographic changes 41, 119
Derrien, M. M. 244
destination choices 96, 99, 148
destination community well-being (DCW)
approach 71–2, 79, 81, 82, 85
destination marketing/management organization
(DMO) 74–6, 79, 80–82, 85
destination residents 70, 75–81
destination tourists 75, 79
disturbance factors 166
double-loop learning 64
Doxey, G. V. 209, 210
Driver, B. L. 56, 169
Drumm, A. 4
dynamic, impossible to completely
understand, complex, and ever-changing
(DICE) 6
Eagles, P. F. J. 119, 162, 177
EarthCheck and Ecotourism Australia 115
earthquakes 26–32
Eco-Club programme 110
eco-friendly products 130
ecological effects 164–5
ecological elements 53, 218
economic benefits 75, 84, 153, 161, 173
Stephen F. McCool and Keith Bosak - 9781788117104
Downloaded from Elgar Online at 11/05/2021 11:39:49AM
to free access
economic effects 209
economic growth 112–13, 208
economic impacts 75, 76, 100, 113, 153
ecosystem services (ES) 4, 53, 65, 171
ecosystems
  adaptive capacity 137
  health 148, 153–4
ecotourism 209, 230, 234
Ecotourism Opportunity Spectrum 56
education
  quality 110
  tourism awareness and knowledge 214
emergency healthcare 150–52
emergent properties 9, 14, 19, 74, 75, 240
emerging trends 229–30
employment 112–13, 152–3, 224
energy sources 112, 130
Enki Energy 228
environmental certification 115–16
environmental changes 93, 95–6
environmental impacts
  emerging trends 229–30
  floating cities 228–9
  management innovations 233–5
  negative 226–8
  progress 232
  research gaps 223, 233–5
  system-thinking approach 234–5
  wicked problem 225–8
environmental interpretation 150
environmental shifts 166
environmental sustainability 153–4
equity, of economic benefits 153
era of turbulence 5–7
Espiner, S. 24, 31, 240
experience economy 149
experience opportunities
  conceptual systems model of 72–7
  destination community well-being approach 71–2, 79, 81, 82, 85
destination marketing/management organization 74–6, 79, 80–82, 85
destination residents 70, 75–81
development and management 81–5
leverage points, identifying and analyzing 77–85
social representation of tourism 77–9
systems thinking 72
tourism developers on 70
traditional and sustainability marketing elements 82
Uluru climb 74–7, 84
Facebook 223
Fang, Y. 93
Farrell, B. H. 17
fast-change drivers 41
Fennell, D. A. 177
Fernando de Noronha Marine Park 226
financial viability 135
“Find Your Park” 7
Flathead River System
  accuracy and efficiency 202
  analyzing, synthesizing and interpreting data 196–7
  complexities of 188–91
  data and integration in diverse and complementary planning processes 202
  desired conditions 187, 190, 193
  innovative data and analysis techniques 202–3
  long-term monitoring of trends 202
  on-river monitoring 192–3, 197–201
  on-shore river monitoring 193–5, 197–201
  surveying users to inform indicators and standards 191–2
  tour operator/outfitter use monitoring 196
  transboundary nature 201
  user experience 201–2
  floating cities 228–9
foreign exchange
  earnings 108, 114
  generating 6
  rates 127
  source of 3–4
  forest management 117–18
Fourth Industrial Revolution (IR4.0) 217
Frumin, H. 146
Furceri, D. 218
Gebhardt, K. 214
gender equality 110–11
Geographic Information Systems (GIS) 231
Glacier National Park 192, 203
global catastrophic risks 22
global climate crisis 22
global positioning system (GPS) 193
Global Protected Areas Program 160
Global Risk Report 96
Global Sustainable Tourism Council (GSTC) 49, 120, 178
global tourism systems 70, 74, 85
global warming 94
“Good Agricultural Practices” guide 233
Gössling, S. 93
governance
collaborative 177
community 215–16
destination residents in 79–81
effective 176–7
Great Barrier Reef 115, 143
Great Barrier Reef Authority 119
green infrastructure 115
greenhouse gas (GHG) emission 90–91, 95, 98,
116, 154
gross domestic product (GDP) 43, 112–13
Gunderson, L. 17
Gunn, C. A. 15, 16
Haas, G. E. 56
Hall, C. M. 16, 22, 93, 206, 209
health, and well-being 109–10
health risks 150–52
healthcare, access to 150–52
Hedlund, J. 99
heritage, natural and cultural 1, 2, 7
Higham, J. E. S. 24, 240
Holling, C. 17
host–guest relations 210, 211, 217
human capital 141–2
human-environmental system 39
human–nature connections 146–7
human–wildlife interactions 165
hunger, zero 108–9
Iguaçu National Park 226
Inangahua earthquake 26
indicator places 62
indicators, identifying 60–61
indigenous leaders 174
industrialization 113–14
industry-driven sustainability 207
inequalities 114–15
information networks 151–2
infrastructure, environmental impacts of
113–14
Iniesta-Bonille, M. A. 84
innovation
and infrastructure 113–14
management 233–5
innovative funding models 177–8
Instagram 223
institutional capacity 178–9
intangible product 126–7
integrated tourism planning 148
Interagency Visitor Use Management Council
167
Interagency Visitor Use Management Framework
(IVUMF) 58
Intergovernmental Panel on Climate Change
(IPCC)
Fifth Assessment Report 95, 97, 99
global climate change 90, 91
International Labour Organization (ILO) 111
International Union for the Conservation of
Nature (IUCN) 1, 160
Best Practice Guidelines 117, 167
Strategic Framework for Capacity
Development 178
Tourism and Protected Areas Working Group
163
International Year of Sustainable Tourism for
Development 107
internet promotion 6
Irritex model 209
Jafari, J. 78
Jamrozy, U. 84
Japan 141, 144, 149
Jericoacoara National Park 226
Johnson, L. W. 84
Jones, P. 132, 134, 135
Journal of Sustainable Tourism
16
Kaikoura earthquake 27–31
Kimmswick 3, 242
King, B. E. 177
Kodish, S. R. 151
Koh Tachai beach 232–3
Kohl, J. 5, 6
La Tijuca National Park 4
land use, regulating 117–18
landscape gradient 146–7
least developed country (LDC) 43
Leiper, N. 15, 16, 127, 138
Leung, Y.-F. 119
Lew, A. A. 14, 24, 39, 40–41
life-cycle assessments 130, 137
limits of acceptable change (LAC) 167, 169, 191
Loehr, J. 244
Loungani, P. 218
low-carbon transition 98, 116
low-cost airlines 223
Lüdeke-Freund, F. 132, 135
Luthe, T. 18
Maclean, N. 203
McCool, S. F. 5, 6, 10, 19, 22, 24, 70, 224, 228
nature-based tourism
destinations 32–3
ecosystem health 153–4
growing synergy 160–61
in New Zealand 24–6
nature contact 146, 147, 153
nature pyramid 146
neoclassical economic theory 131
New Zealand
nature-based tourism sector in 24–6
resilience-thinking 22
South Island’s West Coast 31
Nidumolu, R. 129, 131
Ni-Vanuatu 43–8
Nkwichi Lodge 118
Nobel Peace Prize 97
Noble, G. 84
non-governmental organizations (NGOs) 142,
155
Novelli, M. 214

occupational exposures 153
One Planet Network 128
‘one size fits all’ approach 138
on-shore river monitoring 193–5, 197–201
Orchiston, C. 24, 27, 240
organizational fragmentation 127–9
Osterwalder, A. 132
Ostry, J. D. 218
Othman, S. 217
“Our Common Future” report 208
outcomes-focused management (OFM) 55–6, 65
outstandingly remarkable values (ORVs) 190
overtourism 6, 10, 11, 70, 210, 217, 223, 239, 244

Pafuri Camp 108
Paris Climate Agreement 91–2, 97, 98, 102
parks
building institutional capacity 178
growing synergy 160–61
indigenous leaders in tourism planning 174
recreation experience preferences 54
tourism value 57
visitor needs in 169
visitor use management in 63–6
Passold, A. J. 235
peace parks 118
Pearce, D. 15
Peattie, K. 82
per-passenger taxes 151
photos 223
physical activity
promotion 148
in protected areas 109
Pigneur, Y. 132
planning, tourism 175–9
Plitvice Lakes National Park 4
Plotwatcher Pro game cameras 193–4
Plummer, R. 177
Pomerding, A. M. 84
poverty alleviation 21, 108, 173, 216, 218, 244
power and power relations 40, 48–50
Prahalad, C. K. 129, 131
Predictable, Linear, Understandable, and Stable (PLUS) world 6
primary trades 126
privatization 215
pro-poor tourism (PPT) 108, 113
protected areas (PAs)
community and culture 172–5
development 159–60
disturbance factors 166
effective governance 176–7
environmental shifts 166
growing synergy 160–62
human–wildlife interactions 165
information needs 163–79
innovative funding models 177–8
institutional capacity 178–9
for intrepid traveler 160
lack of visitation 167–8
management challenges 163–79
managing tourism in 162
planning 175–9
quality of life for inhabitants 161
research directions 163–79
research needs for 179, 180
study approach 162–3
sustainability science 162
sustainable tourism monitoring 175–6
visitation levels 160–62, 225
visitation trends 166–8
visitor experience 63–6
visitor management in 117
visitors, monitoring 168
zero hunger 108–9
public lands 160–62
Queensland Department of National Parks 109
radio frequency identification (RFID) 193
Ramli, A. 217
Rangaswami, M. R. 129, 131
Rango de Oportunidades para Visitantes en Áreas Protegidas (ROVAP) 56
recreation experience preferences (REPs) 54–5
recreation opportunity spectrum (ROS) 56, 167, 169, 191
Regenvanu, R. 43
regional knowledge gaps 99
regression-based models 63
Reisinger, A. 100
renewable energy 112, 116, 130
research agenda
communities 241–3
impacts, understanding 244
nature-based attractions 243
systems thinking 240–41
visitor experiences, understanding 241
resident well-being 74, 150
resilience 11, 18–19
community 22, 216–17
context influencing 40–42
emergence of 23
to natural disasters 26–32
research agenda 240, 242, 244, 245
and sustainability 32–4
Westland Glaciers 32
Rhodes, R. A. W. 215
rising sea levels 97
Rittel, H. W. 7
A River Runs Through It (Maclean) 203
river system
analyzing, synthesizing and interpreting data 196–7
complexity of 187
ecological components 187
Flathead River System 188–91
monitoring, importance of 187–8
on-river monitoring 192–3, 197–201
on-shore river monitoring 193–5, 197–201
surveying users to inform indicators and standards 191–2
tour operator/outfitter use monitoring 196
Rocky Mountain National Park 62
Roe, D. 108
Ruiz-Ballesteros, E. 18
Rylanse, A. 242, 244
Saarinen, J. 244
Sanchez-Fernandez, R. 84
sanitation 111–12
Savio, R. 228
Scale, Change and Resilience (SCR) 18, 24, 40
Schellhorn, M. 22
INDEX 253

Scheyvens, R. 108, 213
Schleupner, C. 96
science, and tourism 242–3
Scott, D. 93, 98, 244
SDGs see Sustainable Development Goals (SDGs)
sea level rise (SLR) 95–6, 100
secondary trades 126
self-catering accommodation 85
self-sustaining organizations 137
Senge, P. M. 9
SES see socio-ecological system (SES)
Seville, E. 27
shinrin yoku 144
ski industry 95, 245
slow-change drivers 41
small, medium and micro enterprises (SMMEs) 111
smokeless industry 21
snowball sampling approach 163
social capital 4, 10, 215
social determinants of health 143–4
social elements, visitor experience 53
social media 233–4
social representation (SR) of tourism 77–9
social-ecological interactions 164–6
socio-ecological system (SES) 14–15, 18, 19, 22, 23, 39–40, 50–51
socio-economic changes 93, 96–7
Southern Alps 31
spa destinations 148–9
Spenceley, A. 242, 244
sport tourism 109
stag parties 74–6
Stanton, E. A. 96
staycation 141, 154
stewardship 1, 2, 171
Strategic Framework for Capacity Development 178
stress reduction 148–50
Strickland-Munroe, J. K. 17
strongly sustainable business model (SSBM) 132–5
Stubbs, W. 132
Sun, J. 137, 138
supply side system 15
sustainability paradigm, in tourism 21–3
sustainability science 162
sustainable business ecosystems 137
sustainable business model (SBM) 131–8
sustainable cities and communities 115
sustainable consumption and production (SCP) 115–16, 128
Sustainable Development Goals (SDGs) 21, 91, 242
affordable and clean energy 112
agenda for 107
challenges 119–20
clean water and sanitation 111–12
climate action 116–17
decent work and economic growth 112–13
gender equality 110–11
good health and well-being 109–10
industry, innovation and infrastructure 113–14
internalization of 107
life below water 117
life on land 117–18
no poverty 108
partnerships for the goals 118–19
peace, justice and strong institutions 118
positive impacts of tourism in 244
quality education 110
reduced inequalities 114–15
responsible consumption and production 115–16
sustainable cities and communities 115
zero hunger 108–9
sustainable state 22
sustainable tourism
barriers to 80
complexity theory and 17–18
context influencing 40–42
defining 2–3, 207
monitoring 175–6
to natural disasters 26–32
problematisation of 22
resilience and 23, 32–4
re-thinking conceptual relationships in 24–6
systems-thinking viewpoint 8–9
Sustainable Tourism and Digitization 120
Sustainable Tourism Programme 115
sustainable trajectory 22
Swarbrooke, J. 127
Swiss Alps 140
system complexity 22
system thinking 72
approach 62
research gaps 234–5
as response to complexity 7–11
returning to 240–41
for wicked problem 231–3
Tafea, tourism 49
tangible product 126–7
taxes, on tourism 151
use limits 10, 11, 196
USFS see United States Forest Service (USFS)
value chains sustainability 129–30
value network 6, 133
Vanuatu
change drivers 46–50
derivers of change impacting tourism 43–4
location 43
policy making and planning responses 45–6
power, culture and values in 48–50
regulation processes 46–50
South Pacific context 50
tourism destinations 50–51
tourism in 43–6
traditional economy 43
Vanuatu Sustainable Tourism Policy (VSTP) 46–8
Vanuatu Tourism Permit and Accreditation Program (VTPAP) 47–50
Vargo, J. 27
Venice 228–9, 241
video-based recreation monitoring 195
visitation trends 166–8
visitors
diverse experiences to 170–71
experiences and benefits 169–72
maximizing benefits to 171–2
monitoring 168
needs, understanding 169–70
volume of 167
visitor experience
adaptive management 64
ecological elements 53
importance of 53–4
management-by-objectives framework 58–61
managerial elements 53
outcomes-focused management 55–6, 65
parks and protected areas 63–6
preferences and outcomes 54–6
quality, managing for 57–8
recreation experience preferences 54–5
recreation opportunity spectrum 56
social elements 53
surveys 76
systems-thinking approach 62
understanding 241
visual-based method studies 63
visitor use management (VUM) 57–8
visual-based method studies 63
volcanic eruption 41
volunteers, tourists as 153, 154
Waiararapa earthquake 26
Wall, G. 15, 16
water access and security 111–12
Water Recreation Opportunity Spectrum 56
water scarcity 97
web-based video cameras 195
Webber, M. M. 7
Weiler, B. 244
well-being, resident 74, 150
West Coast tourism 31
Westland Glaciers 32
Whitelaw, P. A. 177
wicked problem 7, 8, 19
environmental impacts and 225–8
floating cities 228–9
system thinking for 231–3
Wild and Scenic River (WSR) 190, 203
Wilderness Safaris 110
wildfires 151, 166
Wildruns 110
Wolf, K. L. 244
women employers 110–11
World Bank 97, 110, 206, 216
World Conservation Strategy 208
World Database on Protected Areas (WDPA) 117
World Economic Forum 96, 116
World Tourism Organization 2, 21, 96, 97–8, 144, 207, 225
World Travel and Tourism Council (WTTC) 2, 92, 97, 116
Wu, B. 93
Wu, S. 137, 138
Wyss, R. 18
!Xaus Lodge 110
Yang, K. 137, 138
Yellowstone National Park 241
Yin, J. 93
YouTube 223
zero hunger 108–9