
Index

A

Administrative review

- rights & social justice, 560–570
 - comparison of third-party standing & rights (Vic), 561–565
 - conclusion, 569–570
 - equal open standing provisions (recommendation), 568–569
 - models of third-party rights, 565–566
 - social justice, 566–568

Africa

- wildlife – *see* **Wildlife**

Animals

- marine – *see* **Marine megafauna**
- wild – *see* **Wildlife**

Aotearoa – *see* **New Zealand**

Australian Pesticides and Veterinary Medicines Authority (APVMA)

- compliance, 378–391
 - Australia’s national regulator, 382–383
 - concluding comments, 391
 - conflicts of interest
 - international concern, 379–380
 - perceived, 386–387
 - external service providers, 387–388
 - regulatory problems, 378–379
 - structural arrangements & potential for conflicts of interest, 385–386
 - glyphosate controversy, 389–391
 - method of study, 379
 - processes at APVMA, 383–385
 - regulatory capture, 380
 - revolving door phenomenon, 380–382
 - scientific reviewers, 388
 - way forward, 388–389

B

Biodiversity

- managing impacts associated with State significant development (NSW), 670–687
 - concluding observations, 686–687
 - key features of “new regime”, 675–686
 - Biodiversity Conservation Act 2016 (NSW) Part 6, 679–686
 - general provisions, 679–684
 - specific provisions addressing biodiversity assessment method (BAM), 684–686
 - Biodiversity Conservation Act 2016 (NSW) Part 7, 675–679
 - key features of “old regime”, 672–675
- offsets – *see* **Cultural heritage**

Biology, synthetic – *see* **Synthetic biology**

Biosecurity

- environmental stewardship duties, 743–762
 - Australian context, 750–752
 - enforcement dilemmas, 762
 - extent of problem, 748–750
 - implementation impediments to obligations, 752–753
 - issues & challenges, 760–762
 - landholder duty of care, 754–755
 - legislative specifics, 758–760
 - regulatory reform, 755–758
 - unique nature of problem, 745–748

Book reviews

- Rogers, N & M Maloney, *Law as if Earth Really Mattered: the Wild Law project*, 218–226
- Hutter, B M, *Risk, Resilience and Environmental Law*, 227–229

C

Canada

- pesticides regulation – *see* **Pesticides**

Carbon markets

- Joint Crediting Mechanism – *see* **Joint Crediting Mechanism (JCM)**
- legal role, 142–158
 - additional government regulation, 157
 - conclusion, 157–158
 - establishing a functioning, reliable & efficient carbon market, 152–157
 - regulatory approaches to curbing carbon emissions, 144–146
 - success & failure of existing carbon markets, 146–152

Carbon risk disclosure – *see* **Risk disclosure**

Causal uncertainty

- epidemiological & legal perspectives, 426–429
 - mobile phone case study, 427–428
 - pesticides, 428–429
- pesticides, 408–425
 - causation in negligence actions, 416–421
 - discussion & conclusions, 424–425
 - Kimberley agricultural workers case, 411–416
 - scientific causation & social causation, 410–411
 - Veterans' Affairs & “reasonable hypothesis” test, 421–424

Certified Land Management

- results, 341–352

Citizen science

- environmental impact assessment – *see* **Environmental impact assessment**

Climate change

coastal protection & management – *see* **Coastal protection and management**

Coal mining

Adani Carmichael mine (Qld) – *see* **Public participation**

Coal seam gas (CSG)

waste water, 188–211
 conclusion, 209–210
 CSG projects & CSG water generally, 190–192
 glossary, 201–211
 literature on governance of CSG produced water, 199–204
 Australia, 199–202
 USA, 202–204
 managed aquifer recharge (MAR) & CSG produced water, 205–209
 problem of CSG produced water, 193–194
 treatment of CSG produced water, 194–198

Coastal protection and management

climate change
 transferable development rights (NSW), 87–101
 amelioration of climate change impacts, 95–98
 coastal miasma, 94–95
 Collaroy Beach (case study), 98–100
 conclusion, 100–101
 government response to sea level rise predictions, 89–82
 legal complexity & confusion, 92–94

Community engagement – *see* **Public participation****Compensation**

alternative sentencing orders (NSW), 612–613

Conflicts of interest

regulatory problems – *see* **Australian Pesticides and Veterinary Medicines Authority (APVMA)**

Conservation

soil – *see* **Soil conservation**

Consistency

sentencing, 530–531

Cost recovery

alternative sentencing orders (NSW), 612–613

Costs

environmental lawfare, 186–187
sentencing, 531–535

Crime

sentencing – *see* **Sentencing**

CSG – *see* **Coal seam gas**

Cultural heritage

- biodiversity offsets, 247–266
 - conclusions, 265–266
 - theory & practice of biodiversity offsets, 251–257
 - traditional approaches to cultural heritage management, 249–251
 - transferability of biodiversity offset approaches to cultural heritage, 258–265

D

Duty of care

- landholder – *see* **Biosecurity**

E

Ecocentric law (wild law)

- book review, 218–226

Ecologically sustainable development (ESD)

- Australian law, 102–120
 - background, 103–107
 - current definitions & future, 118–119
 - current legislative regimes, 113–116
 - future directions, 119–120
 - global concern, 116–117
 - goals of process, 110–111
 - maintaining status quo, 111–112
 - pillars of sustainability, 107–108
 - policy & law, 112–113
 - politics & popularity, 108–110

EIA – *see* Environmental impact assessment

Emissions Reduction Fund (ERF) (Aust)

- Joint Crediting Mechanism and, 667–669

ENGOS – *see* Environmental non-government organisations

Environmental crime

- sentencing – *see* **Sentencing**

Environmental duty of care – *see* Biosecurity

Environmental impact assessment (EIA)

- Australia, 46–47
 - marine megafauna – *see* **Marine megafauna**
- citizen science involvement in monitoring, 571–587
 - conclusion, 586–587
 - criticisms of EIA, 573–579
 - legislative framework (Aust), 572–573
 - legislative reform recommendations, 579–586

Environmental law

- Australian experience, 637–658
 - Australian construction of environmental law, 637
 - institutions reviewing, upholding & enforcing laws, 654–656
 - people who have shaped laws, 656–658
 - sources of environmental laws, 637–649
 - distinctive aspects of content of Australian environmental laws, 638–649
 - legislature & judiciary, 637–638
 - structure of the laws, 649–654
 - burden of proof, 651–652
 - implementation & enforcement of laws, 653–654
 - relevant matters to be considered, 650–651
 - statutory object clauses, 649–650
 - substantive rights, duties & obligations, 652–653

Environmental lawfare

- access to justice, 181–182
- barriers to access to justice, 182–187
 - access to legal assistance, 187
 - benefits of open standing in challenging environmental decisions, 185
 - community participation & trust in public institutions, 185–186
 - costs, 186–187
 - standing, 182–183
- entitlement to agitation, 187
- “green lawfare” & “vigilante litigation”, 177–178
- judicial review – *see* **Judicial review**
- myth of environmental lawfare, 178–181

Environmental non-government organisations (ENGOS)

- use of judicial review – *see* **Judicial review**

Environmental risk disclosure – *see* Risk disclosure**Environmental stewardship**

- biosecurity – *see* **Biosecurity**

ERF – *see* Emissions Reduction Fund**ESD – *see* Ecologically sustainable development****European Community (EC)**

- adoption of regulatory emission standards, 283–284

F**Farmers**

- voluntary stewardship programs – *see* **Voluntary stewardship**

Floods

- assessment of risks in courts, 267–279
 - divergent policy, 269–272
 - jurisprudential view of risk (Telstra case), 273–274
 - Masonre case, 275–276
 - precaution through the back door, 278–279
 - Radray case, 275–276
 - Stockland case, 276–278
 - universal vs contingent appraisals of risk, 267–269

Fossil fuels

- subsidising (Aust), 159–176
 - Agreement on Subsidies and Countervailing Measures (ASCM) & its application to Australia's proposals, 165–171
 - conclusion, 175–176
 - fossil fuel subsidies in Australia, 163–165
 - limits of ASCM & potential for reform, 171–175
 - overview of fossil fuel subsidies, 160–163

Fuels

- efficiency standards
 - commitment to achievement (Aust), 280–298
 - Abbott Government (2013–2015), 289–291
 - conclusion, 297–298
 - EC adoption of regulatory emission standards, 283–284
 - Gillard Government (2010–2013), 287–289
 - Howard Government (1996–2007), 284–286
 - industry standards & Ministerial Forum, 292–297
 - regulatory emission standards & politics of climate change, 282
 - Rudd Government (2007–2012), 286
 - Turnbull Government (2015–), 291–292
- fossil – *see* **Fossil fuels**

G

Genetically altered organisms – *see* **Synthetic biology**

Glysohate

- controversy (APVMA), 389–391

Green lawfare – *see* **Environmental lawfare**

Groundwater

- governance challenges & opportunities (Aust), 588–605
 - case studies, 595–597
 - discussion of case studies & implications, 598–604
 - SA, 595–596
 - WA, 596–597
 - conclusion, 604–605
 - definition & principles of governance, 591–595
 - research methods, 591

I

Invasive species

biosecurity – *see* **Biosecurity**

J

Japan

Joint Crediting Mechanism – *see* **Joint Crediting Mechanism (JCM)**

Joint Crediting Mechanism (JCM)

Australia's possible introduction, 659–669
Australia's Emissions Reduction Fund (ERF), 667–669
background to JCM, 660–663
criticisms of JCM, 661–662
Japan's climate change policy, 662–663
Kyoto & JCM, 660–661
Paris Agreement mechanism, 662
features of JCM, 663–664
issues with JCM, 666–667
JCM in practice, 665–666
replication of JCM in Australia, 669

Judicial review

use by environmental non-government organisations (ENGOS), 714–742
conclusions, 730–733
ENGOS & judicial review litigation, 715–717
list of judicial review proceedings, 733–742
methodology of study, 717–719
primary outcomes of proceedings, 719–725
secondary outcomes of proceedings, 725–730

K

Kyoto Protocol

Joint Crediting Mechanism and, 660–661

L

Landcare – *see* **Biosecurity**; **Soil conservation**

Lawfare – *see* **Environmental lawfare**; **Judicial review**

Legal assistance

environmental lawfare, 187

Litigation – *see* **Environmental lawfare**; **Judicial review**

M

Managed aquifer recharge (MAR) *see* **Coal seam gas (CSG)**

Marine megafauna

- Australia
 - environmental impact assessment, 46–59
 - case studies, 53–58
 - Abbot Point (Qld), 55–56
 - Gladstone Port gas developments (Qld), 53–55
 - Port Melville, Tiwi Islands (NT), 56–58
 - discussion, 58–59
 - likelihood of triggering assessment, 47–49
 - process, 52
 - “significant impact”, 50–51
 - strategic assessments, 51–52

Mining

- Adani Carmichael mine (Qld) – *see* **Public participation**

N

Natural disasters

- risk (book review), 227–229

New organisms – *see* **Synthetic biology**

New South Wales

- biodiversity impacts – *see* **Biodiversity**
- Land and Environment Court (LEC)
 - role, 235–246
 - benefits of review, 240–242
 - conclusion, 246
 - evolution of role, 242–244
 - looking forward, 245–246
 - scope of review, 236–237
 - unwanted consequences of administrative review, 237–240
- pollution law – *see* **Sentencing**
- social housing – *see* **Social housing**
- soil conservation – *see* **Soil conservation**
- transferable development rights – *see* **Coastal protection & management**
- wind farms – *see* **Wind farms**

New Zealand (Aotearoa)

- pesticides regulation – *see* **Pesticides**

Northern Territory

- marine megafauna (case study, Port Melville, Tiwi Islands), 56–58

Novel organisms – *see* **Synthetic biology**

P

Paris Agreement

mechanisms & Joint Crediting Mechanism, 662

Pesticides

regulation

Canada, 491–513

conclusion, 512–513

federal, provincial & municipal regulations, 500–511

general context, 491–500

causal uncertainty – *see* **Causal uncertainty**

discord between international & Australian approaches, 392–407 – *see also* **Australian Pesticides and**

Veterinary Medicines Authority

Australian regulation, 400–406

conclusion, 406–407

best practices in other countries, 398–400

international framework, 394–398

New Zealand, 456–490

areas for reform, 482–488

conclusion, 488–490

law, 464–482

testing, toxicology & risk assessment, 460–464

Philippines, 443–455

challenges in implementation, 453–454

conclusions & recommendations, 454–455

management, 444–453

Singapore, 430–442

agriculture & cultivation of plants, 437–442

conclusion, 442

control & management as “hazardous substances”, 431–433

public health: vector control, 433–437

special issue editorial, 359–363

WA

national cooperative scheme, 364–377

application to *Agvet* Acts, 374–376

conclusion, 376–377

constitutional boundaries, 366–374

Philippines

pesticides regulation – *see* **Pesticides**

Precautionary principle

judicial developments, 123–141

application by courts, 136–141

conclusion, 141

criticism of interpretation by courts, 133–134

response to, 134–136

ecologically sustainable development, 123–126

interpreting the principle, 126–133

Prevention

alternative sentencing orders (NSW), 612–613

Proportionality

sentencing, 530–531

Public interest litigation – *see* **Environmental lawfare**

Public participation

Adani Carmichael mine (Qld), 320–330
approval process & court proceedings, 328–329
background to Carmichael Coal Mine, 327–328
case study in public participation, 321–324
co-opting the process: rise of NGOs, 324–327
conclusions, 329–330
environmental lawfare, 185–186

Publication orders

environmental crime, 535–540

Q

Queensland

Adani Carmichael mine – *see* **Public participation**
marine megafauna (case studies) – *see* **Marine megafauna**

R

Remediation

environmental crime, 535–540

Renewable energy – *see* **Wind farms**

Resilience

book review, 227–229

Restoration

alternative sentencing orders (NSW), 612–613

Rights – *see* **Administrative review**

Risk assessment

floods – *see* **Floods**

Risk-based regulation

book review, 227–229

Risk disclosure

Australia, 519–528
carbon risk disclosure requirements, 520–523
conclusion, 528
improving existing practices, 525–528
legal requirements, 523–525

Road transport emissions – *see* **Fuels**

Rule of law

environmental lawfare – *see* **Environmental lawfare**

S

Science

citizen

environmental impact assessment – *see* **Environmental impact assessment**

Sentencing

alternative sentencing orders (ASOs)

pollution law (NSW), 606–634

purpose of ASOs, 608–612

restoration, prevention, cost recovery & compensation, 612–613

environmental crime, 529–541

conclusion, 541

costs orders as impediment, 531–535

remediation & publication orders, 535–540

solutions, 540–541

transparent, consistent & proportionate sentencing, 530–531

Singapore

pesticides regulation – *see* **Pesticides**

Social housing

heritage listing (NSW), 213–217

Sirius Building (case note), 213–217

impact of decision, 216–217

issues at trial, 214

LEC holdings, 214–216

update, 217

Social justice – *see* **Administrative review**

Soil conservation

NSW legislation (1938), 5–25

land degradation in central regions, 8–17

origins of Act, 17–22

regulatory approach, 22–25

South Australia

groundwater governance (case study), 595–596

Standing – *see* **Administrative review; Environmental lawfare**

Stewardship

biosecurity – *see* **Biosecurity**

voluntary – *see* **Voluntary stewardship**

Synthetic biology

- protecting Australian biology from, 688–713
 - conclusions & recommendations, 710–713
 - Gene Technology Act 2000 (Cth) & Environment Protection and Biodiversity Conservation Act 1999 (Cth), 699–710
- theoretical framework, 697–699

T

Timescales

- environmental law (Aust), 299–319
 - adaptive time: responding to environmental change, 305–308
 - ecological & social dimensions of time, 300–305
 - past time & repairing former nature, 309–311
 - tempo & slowness, 312–315
 - time, 299–300
 - timing: agenda for environmental law, 316–319

Transferable development rights – see Coastal protection and management

Transparency

- sentencing, 530–531

U

Uncertainty

- causal – *see* **Causal uncertainty**

United States

- literature on governance of CSG produced water, 202–204

V

Victoria

- standing – *see* **Administrative review**

Vigilante litigation – see Environmental lawfare; Judicial review

Voluntary stewardship

- biosecurity – *see* **Biosecurity**
- programs for farmers, 331–354
 - Certified Land Management results, 341–352
 - difficulties facing empirical evaluation, 332–333
 - discussion, 353–354
 - integrated approach, 333–334
 - methodology of study, 334–341

W

Waste water

coal seam gas – *see* **Coal seam gas**

Water management

groundwater – *see* **Groundwater**

wetlands – *see* **Wetlands**

Western Australia

groundwater governance (case study), 596–597

pesticides regulation – *see* **Pesticides**

wetlands conservation – *see* **Wetlands**

Wetlands

conservation (WA)

legislative framework, 60–86

Class A reserves & Conservation and Land Management Act 1985 (WA), 82–83

comparisons of wetland classifications, 84–86

conclusions, 83–84

defining wetlands, 62–65

Environmental Protection Act 1986 (WA) & related statutes, 75–82

federally regulated wetlands, 65–66

wetlands & water law, 66–74

Wild law – *see* **Ecocentric law**

Wildlife

trafficking (African Great Lakes Region), 542–559

conclusion, 559

corruption & transnational organised crime, 554–558

illegal wildlife trade, 543–544

prosecution in International Criminal Court, 558–559

role of UN Security Council, 550–554

treaties, 544–549

Wind farms

regulating development (NSW), 26–45

conclusion, 44–45

efficiency of planning law regimes, 34–37

future of Australian wind energy, 28–30

good governance principles, 37–44

law & large-scale renewable energy, 28–30

potential adverse impacts of large-scale wind farms, 32–34

