Index

aboriginal water rights (Australia) 122–4
acequias 41–2
adaptive management 13, 47, 63, 88
Ahmedabad, India 57
Ak-Chin Indian Community 111–12
allotment policy 102, 106
American Convention on Human Rights 125
Anderson–Cottonwood Irrigation District 81
Angola 146
Animas–La Plata Project 112
Annan, Kofi (UN Secretary General) 142
Aral Sea 144
area of origin protections 75–6, 96
Argentina 51, 54, 61
Australia 4, 6, 30, 48–51, 61, 85–9, 94, 96–9, 122–4, 126, 157
Babbitt, Bruce 63, 118
BATNA 149
beneficial use 51–2, 77, 81, 172, 174
benefit-cost analysis 32–3
Big Horn River (and Native American water rights) 110, 119
Black Sea 14
Bolivia 11, 41
Bonneville Power Administration 134
Botswana 146
Boulder Canyon Project Act 165
Brazil 30, 38, 61
British Columbia Power and Hydro Authority 134
Buenos Aires Water Concession 54, 61
Bush, George W. (administration of) 170–71
CALFED 13, 37–8, 47, 63, 84, 173
Cambodia 145
Canada 4, 6, 30, 48, 133–5, 141, 151
Central Arizona Project 112
Central Valley Project Improvement Act 38, 83, 96
Chennai, Thailand 57–8
Chile 11, 26, 52–3, 61
China 4, 7, 16, 85–6, 91–4, 97–8, 143–5, 157
Clean Water Act 29, 79–80, 94, 163, 168, 169–72
climate change 14–15, 95, 159
Clinton, William (administration of) 118, 169
Cochabamba, Bolivia (and water privatization) 41, 97, 99
Colorado River Basin Salinity Control Act 136
Colorado River 30–31, 38, 45–6, 96, 107–8, 112, 114, 119, 135–41
Columbia River 46, 134, 141, 151, 173
Commerce Clause 76
Commission on Environmental Cooperation 138
Commission on Sustainable Development 161–2
compact commissions 139–40
comparative water law 3, 10–11, 85
compensatory storage 76, 96
comprehensive coordinated joint plans (CCJPs) 166
conjunctive use and management 37, 63
Convention on Wetlands (Ramsar Convention) 86
cultural value of water 29, 102
dam removal 82
Damodar Valley Authority 5
Danube River 14, 31
Declaration of Principles of Indigenous Rights 127
Denver Water Board 44
diffusion of water policy innovations 3, 12–13

East–West Center 6
ecological integrity paradigm 157
ecologicalism 159, 162–3
economic efficiency (in water use) 32–3
Edwards Aquifer 32, 37
Egypt 4–5
Endangered Species Act 29, 47, 80–81, 84, 112, 150, 163
England 5–6, 9, 11
English common law 5, 77
environmental determinism 9
Environmental Impact Statement 78
Environmental Protection Agency 36, 98, 166, 171–2
environmental regulation 78–83, 94, 166–8, 173
equitable apportionment 138
equity (in water allocation and reallocation) 33–34, 51, 60, 89–90, 95–6, 99
European Union 9

Federal Energy Regulatory Commission 81–2, 98
Federal Power Act 81–2, 165
federal reserved water rights 46, 78, 104–110, 114, 118, 120
Federal Water Pollution Control Act 168–9
federalism 73, 78–83, 98, 103, 109, 116–17
Fish and Wildlife Coordination Act 46, 81
Flood Control Act 45–6
Fort Belknap Indian Reservation 106
France 4, 6, 9, 11

Gal Oya Authority 5
Ganges River 31
General Agreement on Tariffs and Trade (GATT) 137
general stream adjudications 110–11, 115
Germany 4, 9, 51
Glen Canyon Dam 82
Global Alliance for Water Security 151
Global Environmental Facility 14

Global Water Partnership 7, 10
Grand Canyon Protection Act 82
Great Britain 4
Great Lakes 133–4
Green Revolution 12

Habitat Conservation Plans (HCPs) 163
Hagerstrand, Torsten 13
Harmon Doctrine 136, 150
Hawaii Commission on Water Resources Management 26
Hoover Dam 46

Imperial Irrigation District 28, 40
India 4–5, 8, 16, 57, 143–4, 151, 157
Indian water rights
change of use 118–20
origins, see federal reserved water rights
quantification of 108–110, 114, 118, 120
settlements 111–13
indigenous water rights protections in international law 125–7
Indus Waters Treaty 150–51
Inland Waterways Commission 164
instream flows 29, 77, 89
Integrated Water Resources Management (IWRM) 155–6, 159–63, 172, 174
Integrated Watershed Management (IWM) 156, 159, 163–4, 170–74
International Boundary and Waters Commission 135–7
international comparative studies 3–6
International Convention on the Elimination of All Forms of Racial Discrimination 125
International Court of Justice 127, 149
International Covenant on Civil and Political Rights 125–6
International Covenant on Economic, Social and Cultural Rights 125
International Geosphere Biosphere Program 159
International Institute of Applied Systems Analysis 6
International Joint Commission 133, 141
International Labour Organization Convention No. 169, 125
International Rivers Network 15
International Water Law Association 10
International Water Management Institute 8
International Water Resources Association 7, 10
Internet water resources information 8
interstate water compacts 30, 45, 138–140
interstate water marketing 30–31, 38, 48–51
intertemporal externalities 31–2
Iran 6, 143
Iraq 6
Islamic water law 11
Israel 6, 147
Italy 4–7, 9
James, William 11
Japan 7, 86, 126
Jordan River 150
jurisdictional externalities 30, 38, 170
Katmandu, Nepal 55–7, 59
Kinney, Clesson S. 4
Klamath River 150
Klamath Tribe 118
Kousou Dam 34
Lake Constance 54–5
Lake Mead 31
Laos 145, 151
League of Nations 5
legal transplant theory 16–17
Lindblom, Charles 162
Los Angeles Water and Power 44
Lowi, Theodore 168
Marsh, George Perkins 4
McCarran Amendment 30, 109–11, 114–15
Mekong River Commission 145, 149
Mekong River 145, 151
Melamchi Project 56
Mescalero Apache Tribe 117
Metropolitan Water District of Southern California 28, 37, 40
Mexico 4, 6, 31, 51, 135–7
Ministerial Declaration of the International Conference on Freshwater 162
Mono Lake 76–7, 90, 124
Montesquieu, Baron de 8, 16
multiscalar studies 140–41
Murray–Darling Basin Commission 26, 48–51, 86, 88–9, 97, 99
Myanmar (Burma) 143–5
Namibia 146
National Environmental Policy Act 46, 78–9, 166
National Marine Fisheries Service 80, 98
National Planning Board 165
National Pollution Discharge Elimination System (NPDES) 169
National Research Council 6
National Resources Committee 165
National Resources Planning Board 165
National Water Act (of South Africa) 89–91, 125
National Water Commission 107
National Watershed Commission 172
National Waterways Commission 164
Native Title Act (of Australia) 122
Nepal Water Supply Corporation 56–7
Nepal 55–7, 59, 151
New South Wales Water Management Act 88
Newlands Commission 164
Nile River 6, 31
no injury rule 29, 36, 72, 119–20
non-equilibrium paradigm 158–60
North American Free Trade Agreement (NAFTA) 137–8
Northern Colorado Water Conservancy District 27–8, 40, 48
Northwest Power Planning Council 140
Ogallala Aquifer 31, 35–6
Okavango River 146
Ottoman Empire 4
Pakistan 143–4
Palestinian Authority 147
Palo Verde Irrigation District 28, 40
Papago Indian Reservation 112
Pecos River 40
Permanent Okavango River Basin Commission 146
Peru 5
population (and water supplies) 142
Powell, John Wesley 164
practically irrigable acreage (PIA) 108–109, 114
precautionary principle (in Australian
water law) 87, 94
President’s Water Resources Policy
Commission 5
prior appropriation 28, 43, 71–2, 86, 93,
95, 108, 174
private and cooperative water develop-
ment 43–4
private sector (defined) 26
privatization (of water) 11, 26, 33, 39,
40–42, 52–4, 60
Progressive Era 164–5
public goods 41
public interest protection and review
73–5, 120, 124–5, 172
public interests and values of water
(defined) 69, 72–3
public sector (defined) 25–6
public trust doctrine 76–7, 89, 124–5,
172
Pyramid Lake Paiute Tribe 107, 114–15
Racial Discrimination Act (of Australia)
122
Reagan, Ronald (administration of) 168
reallocation of water 27–8, 88, 96, 99,
173
Reclamation Act 150, 165
recreational water rights 29–30
Resources Conservation and Recovery
Act 94
Rhine River 31, 54–5
Rio Grande/Rio Bravo River 31, 135,
138, 173
riparian water law 70–71, 85–6, 90,
174
river basin development and administra-
tion 45, 60–61, 85, 91–2, 94,
134–7, 141, 151, 155–6, 159–74
Rogers, Everett 13
Roman water law 4–5, 9, 16
Roosevelt, Franklin (administration of)
165
Roosevelt, Theodore (administration of)
46, 164
rule of capture 27, 71
rule of law ideology 166
salinity (along the US–Mexico border)
136
Salween River 143–4
Sardar Sarovar Project 34
Scotland 6–7
security studies 131–2
Semple, E.C. 16
Snake River 28, 173
social learning 3, 13–15
social movement theory 3, 14–15
South Africa 6, 15, 85, 89–91, 94, 96,
98–9, 124–5, 157
South Platte River 32, 37, 139
Soviet Union 6, 144
Spain 1, 6, 9, 42, 51
Spanish missions 4
Stockholm Declaration 126
subsidies 27, 58, 62, 71, 88, 96
Superfund (CERCLA) 94
sustainable development 35, 87, 155,
157–60, 163–4, 172–3
takings 88, 96
Tarde, Gabriel de 12
Tennessee Valley Authority 5
Thailand 143–5, 151
third parties 73–4, 84, 97
total maximum daily load (TMDL) 37,
79, 169–72
transactions costs 51
Transboundary Freshwater Disputes
Database 8, 143–4
Treaty of Guadalupe Hidalgo 135
Treaty Relating to Boundary Waters
between the United States and
Canada 133
tribal water codes 116–18
Trinational Permanent Water Commis-
sion 146
Truckee River 107
Tucson Water 44
Unified River Basin Management
(URBM) 156, 164–70
United Kingdom 6, 133
United Nations Conference on Environ-
ment and Development 126, 156,
158, 160–61
Index

United Nations Convention for the Protection of the World Culture and Natural Heritage 86
United Nations Convention on Biological Diversity 86, 125–26
United Nations Draft Declaration on the Rights of Indigenous Peoples 125
United Nations General Assembly 162
United Nations 7
United States Army Corps of Engineers 5, 44–6, 80, 85, 98, 134, 165
United States Bureau of Reclamation 5, 7, 28, 31, 36, 44–5, 82, 85, 106–107, 112, 139, 165
United States Fish and Wildlife Service 80, 98
United States Geological Survey 5
United States National Intelligence Council 142
United States Soil Conservation Service 5
United States-Mexico Water Treaty 135–6
usufructuary rights 71

Vienna Declaration 126
Vietnam 145

Ware, Eugene 4
water banks 26, 40, 48, 62
water entitlements 172–74
water markets and marketing, transfers 26, 33, 38–42, 48–51, 56–9, 62, 72–6, 89, 96–7, 99, 113, 115–16
water pricing 28–9, 89–92, 97, 99
water quality 36–7, 55–8, 63, 79, 92, 133; also see Clean Water Act
Water Resources Council 166, 168–9
Water Resources Planning Act 166, 169
water rights administration 71
water rights certainty 95, 172–74
water scarcity 27, 70, 142–3, 157
water stress 143
water trusts 77
watershed groups 26, 47, 61, 83–4
Watson, Alan 16–17
Weber, Kenneth 42
West Bank 147
Western Water Policy Review Advisory Commission 6, 160
wetlands protection 80
Wild and Scenic Rivers Act 82
Wind River Tribes 110, 119
Winters doctrine, see Indian water rights, federal reserved water rights
Wittfogel, Karl 9
World Bank 7, 41, 53
World Climate Research Program 159
World Commission on Dams 6, 15
World Commission on Environment and Development (Brundtland Commission) 35
World Council of Indigenous Peoples 127
World Heritage Convention 126
World Summit on Sustainable Development (WSSD) 156, 158, 160–61
World Water Commission 7
World Water Council 10
xeriscaping 28