
Index

- 1988 General Ecology Law (Mexico), 25, 28, 100n. 14
activated sludge treatment, 180, 181
 Table 2
advanced business retention and expansion programs, 93
agricultural output, 132–38 Appendix B
agriculture, 44, 91, 104, 124–29, 125 Table 5, 128 Table 6, 227, 228–29, 228 Table 3
Agua Prieta Landfill, 214
air quality, 14, 23
Ambos Nogales Air Basin, 35
aquaculture, 191
aquifers, 175–76
Arcata, California, 95
Attorney General for the Environment (Mexico), 44
Banco Convention of 1905, 19
Banco de Obras Publicas (BANOBRAS), 222
Bangkok, 80
biomimicry, 92
birth defects, 15, 144
Bismark, North Dakota, 188–89
bond-rating agencies, 214
border communities, 42, 59–63, 59 Table 1, 60 Table 2, 62 Table 3, 65–66
 administration, 12
 environment, 7, 211
 infrastructure, 148, 149 Table 2, 153, 153 Table 3, 171–72
 and NAFTA, 4
 population, 4, 209
 quality of life, 35–36, 165–66
 residents, 4
 settlements, 6
 water supply, 229–30
Border Environment Cooperation Commission (BECC), 10, 12, 17, 20 Table 1, 27, 29, 40, 52n. 19, 97, 197, 205, 216–17
 future investment, 46
 project certification, 30–32
 and sustainable development, 33
Border Environment Infrastructure Fund (BEIF), 40, 206, 219
Border Institute I, 1, 145–46, 156
Border Institute II, 1–2, 12
border region (see border communities)
Border Trade Alliance (BTA), 1
Border XXI Hazardous Waste Working Group, 43
Border XXI Program, 13, 16, 28–29, 32–35
Brawley, California, 151–52, 174, 214
brick industry, 21
Brownsville–Matamoros, 34, 93
Bryce Canyon, 90
building salvage, 93
Bush, George H. W., 16, 23, 25, 50n. 5
business mentoring, 91
business visitation programs, 92
Calexico, California, 150, 151
California State Controller's Office, 112
California Title 22, 165, 166

- Cámara Nacional de la Industria de Transformación (CANACINTRA), 30
- cancer, 144
- Cañón Los Laureles, 7, 103, 110, 119–124, 120 Fig. 1, 122 Table 4a, 123 Table 4b
- Carabias, Julie, 51n. 12
- cattle ranching, 78
- Center for Holistic Management, 84
- centralized wastewater treatment plants, 180
- Centro de Estudios del Sector Privado para el Desarrollo Sustentable (CESPEDES), 30
- Chattanooga, Tennessee, 82
- Chavez, Octavio, 147
- Ciudad Juárez, 21, 32, 93
- Clean Water Act, 181, 211
- Clinton, Bill, 27, 41
- closed-loop manufacturing, 5, 73, 81, 82
- Coca-Cola Company, 80
- Cocopah Indian tribe, 152
- colonias, 42, 52n. 21, 210–11
- Colorado River, 19, 150, 204
- Comisión Municipal de Agua Potable, Alcantarillado y Saneamiento (COMAPAS), 227
- Comisión Nacional del Agua (CNA), 203, 211, 222
- Cómite Ciudadano Pro Restauración del Cañón del Padre, 44
- Commission on Environmental Cooperation (CEC), 20 Table 1, 26–27, 44, 50n. 8
- community development corporations, 92
- Confederación de Cámaras Industriales de los Estados Unidos Mexicanos (CONCAMIN), 30
- Confederación Patronal de la República Mexicana (COPARMEX), 30
- Comisión Estatal de Agua Potable y Alcantarillado (CEAPA), 227
- Consejo Nacional de Industriales Ecologistas de Mexico (CONIECO), 30
- Consejo Nacional de Población (CONAPO), 38
- Consultative Mechanism for the Exchange of Information, 34, 51n. 18
- contingency planning emergency response, 34
- Convention of March 1, 1889, 19
- Convention of November 12, 1884, 19
- Coordination Principles between the Border XXI National Coordinators and the U.S. and Mexican Border States and U.S. Tribes for the Border XXI Program, 29
- Costing the Earth: The Challenge for Governments, the Opportunities for Business, 77
- cross-border cooperation, 34, 49
- Curitiba, Brazil, 95
- Davis Energy Group, 80
- defensive expenditures, 103, 110–19
 criteria for, 111–12, 119
 discrepancies, 113–16 Table 1
- Del Rio, Texas, 90
- depreciation asymmetry, 106
- dimensional bias, 108
- direct grants, 222
- direct loans, 222
- disease, 42
- downtown revitalization, 91
- dry farming, 78
- Eagle Pass–Piedras Negras, 34
- economic conditions, 35–35, 36 Table 3, 38–40, 40, 52n. 20
- economic development, 10–11, 75, 86, 104, 168

Index

- difference between expansion and development, 86–87, 88–89
- economic indicators, 11, 68n. 3, 104
- Ecoparque Project, 84
- ecosystem services, 78
- education, 36 Table 3
- efficiency programs, 77, 99n. 2
- El Paso, Texas, 21
- El Paso–Ciudad Juárez–Doña Ana County air basin, 34
- employment, 40, 64
- empowerment zones, 41
- energy efficiency, 90
- enterprise communities, 41
- Enviro Loo, 186
- environmental accounting, 6
 - definition of, 104
 - implementation, 105
- Environmental Health Coalition (EHC), 44
- environmental infrastructure, 3, 7–8, 16, 17, 148, 149 Table 2, 168
 - construction, 241, 242–43
 - financing, 204–205, 221–25
 - legal issues, 245–46
 - operations, 243–44
 - political issues, 247–48
 - project design, 241–42
 - regulations, 245
 - and water supply, 208–209
- environmental law, 35
- environmental management, 12
- Environmental Performance Review of Mexico, The, 48
- environmental regulations, 76, 99n. 2
- Eugene, Oregon, 91
- externalities bias, 107
- fast-track negotiating authority, 23
- financial system, 213–15
- flexible business networks, 93
- Fondo de Inversión en Infraestructura (FINFRA), 222–23
- foreign direct investment (FOI), 58
- Fox administration, 48
- Fundación México–Estados Unidos para la Ciencia (FUMEC), 144, 156–57
- General Agreement on Tariffs and Trade (GATT), 20 Table 1
- general obligation bonds, 205, 223
- Gillette, 80
- Global Environmental Management Initiative (GEMI), 30
- Goat Canyon (see Cañón Los Laureles)
- Good Neighbor Environmental Board (GNEB), 33, 49
- Gore, Al, 41
- gray water, 177, 192 Table 4
- gross domestic product (GDP), 104, 106–110
- gross regional product (GRP), 116, 129
- growth management, 92, 94, 98
- Guanajuato–Silao toll road, 207
- Hasbro Manufacturing Services, 81
- Hazardous Waste Tracking System (HAZTRAKS), 25–26, 34, 42–43
- hazardous waste, 3, 18, 23, 25, 42–43, 73, 77, 148, 149 Table 2
- health threats, 3, 17, 32, 42, 144, 157
- Hepatitis A, 144
- Holland Classification System, 124
- Home Depot, 73
- Hudson, Stewart, 23–24
- Hueco Bolson aquifer, 45
- human capital, 3
- Hurtado, Miguel de la Madrid, 22
- illegal narcotics trade, 36
- immigration, 36
- Imperial Beach, 49n. 3
- Imperial County, 150, 152
- import substitution, 90
- imputation bias, 107–108

- in-building recycling, 177
- industrial wastewater, 177–78
- industrialization, 42
- information services, 213–214
- Institutional Development Cooperation Program (IDP), 46, 214–15
- Integrated Environmental Plan for the U.S.–Mexico Border Area (IBEP), 25, 29
- Interagency Task Force on the Economic Development of the Southwest Border, 41
- Interface Solenium, 81
- Interface, Inc., 82–83, 86
- International Boundary and Water Commission (IBWC), 19, 27, 203–204, 205, 215–16
- International Boundary Commission (IBC), 19, 20 Table 1
- International Wastewater Treatment Plant, 32, 181–82
- Ithaca, New York, 92
- job growth, 40
- Kalundborg, Denmark, 82
- La Paz Agreement, 20 Table 1, 25, 34, 49n. 2
- lagoons, 154
- Laredo, Texas, 15
- Laredo–Nuevo Laredo, 34
- Lehman, John P., 144
- Living Machines, 85, 100n. 12
- local business ownership, 90
- local currency, 92
- Londonderry, Ireland, 82
- Malibu, California, 193
- manufacturing, 4
- maquiladora industry, 19–22, 20 Table 1, 25, 52n. 23, 99
 - and environmental conditions, 15, 29
 - incentive programs, 39
 - and population growth, 38, 104
 - recycling programs, 14
 - and United States, 39–40
 - and urban planning, 209–10
 - wages, 96
 - waste production, 43–44, 74, 75
 - water supply, 45
- McAllen–Reynosa, 3
- membrane filtration, 187, 189–90
- Metales y Derivados, 44
- Mexicali, B.C., 34, 150, 151
- Mexican Constitution, 207, 226
- Mexico
 - 1988 General Ecology Law, 25, 28
 - credit ratings, 234
 - data collection, 96
 - economic conditions, 10
 - environmental cooperation with United States, 2
 - environmental institutions, 26, 28–30, 44
 - government reforms, 48, 206–207, 237–38
 - infrastructure, 172, 211, 230–31
 - labor, 39
 - legal system, 39
 - municipal bond markets, 10
 - municipal procedures, 231–33
 - political system, 17, 18–19, 39, 203, 227–28
 - wastewater, 228–29
 - water rights, 226–28
 - water supply, 225, 225 Table 1
 - water utilities, 230–33
- Michigan, 93
- microcredit, 91
- mining, 78
- Monsanto, 77
- Monterrey, Mexico, 82
- Mothers of East Los Angeles, 89–90
- municipal bond markets, 207, 234–35
- Namibian Breweries, 81–82
- National Wildlife Federation, 23–24

Index

- natural capital, 78, 80, 95
 Natural Step, The, 169
 needs surveys, 155–56, 155 Table 4,
 Network of Border Economics/Red
 de la Economía Fronteriza
 (NOBE/REF), 3, 55, 68n. 1
 New Hampshire, 82, 93
 New Mexico, 38
 Nogales, Arizona, 2, 34
 Nogales, Sonora, 2, 34
 nonpotable water distribution, 176
 non-water related projects, 3, 17
 North American Agreement on
 Environmental Cooperation
 (NAAEC), 26, 44
 North American Development Bank
 (NADB), 10, 12, 17, 20 Table 1,
 27, 144, 205–206, 217–19
 as specialized banker, 214
 charter, 50–51n. 9
 future investment, 46
 project investment, 30–32
 reform of, 219–21
 North American Free Trade Agree-
 ment (NAFTA), 16, 20 Table 1
 effect on economy, 3–5
 and environment, 23–24, 26–27,
 30, 68, 96
 and maquiladora program, 43–44
 and population growth, 35
 Nuevo Laredo, 15
 Nuevo León, 236 Fig. 1
 Ojinaga pilot study, 85 Fig. 1
 Ojinaga, Chihuahua, 6
 onsite treatment, 193–96,
 Organisation for Economic Co-
 operation and Development
 (OECD), 20 Table 1
 output anomaly, 108–10
 Pacific Ocean, 32
 Paso del Norte Joint Air Advisory
 Committee (JAC), 34
 PETRO, 188
 philanthropy, 205
 pond treatment systems, 180–82,
 181 Table 2, 188
 population growth, 3, 17, 37 Table
 1, 37–38, 104
 and environmental consequences,
 16
 and infrastructure, 7
 Port Angeles, Washington, 85–86,
 95
 poverty, 35–36
 private sector participation, 235–36,
 240–48
 Productos de Consumo Electrónicos
 Philips, 81
 Project Development Assistance Pro-
 gram (PDAP), 27, 46
 Project Finance, 237, 238–40
 public participation, 28, 29, 35,
 52n. 19, 88–89, 205
 Ramo-33 Program, 222
 ranching, 84
 Reagan, Ronald, 22
 reclaimed water, 176
 recycling programs, 14
 regionalization, 181
 Reilly, William K., 50n. 5
 Resource funnel concept, 169–70,
 169 Fig. 1
 revenue bonds, 205, 223–24
 reverse osmosis, 154, 187
 Reyes, Sergio, 23, 49–50n. 4
 Rio Grande Valley Corporation, 41
 Río Grande, 15, 19, 45, 204
 Rocky Mountain Institute, 76
 Sacramento, California, 90
 Safe Drinking Water Act, 211
 Salinas de Gortari, Carlos, 16, 23, 27
 San Diego Association of Govern-
 ments (SANDAG), 124
 San Diego, 7, 29, 49n. 3, 116, 150
 (see also San Diego–Tijuana
 region)

- San Diego–Tijuana region, 29, 45
 (see also San Diego; Tijuana)
- San Luis–San Luis Río Colorado, 34, 150
- Sarbanes, Paul, 23
- satellite plants, 179
- Savory, Allen, 84
- Scandic Hotels, 173–74
- Schindler Elevator Corporation, 82
- Secretaría de Desarrollo Social (SEDESOL), 20 Table 1, 26
- Secretaría de Desarrollo Urbano y Ecología (SEDUE), 23, 25
- Secretariat for Environment, Natural Resources, and Fisheries (SEMARNAP), 27–28, 52n. 19, 97, 226
- services sector, 4,
- Seven Principles of Environmental Stewardship for the Twenty-First Century, 29–30, 31 Table 2, 33, 52n. 19, 77
- sewer mining, 178
- sewer services, 131 Appendix A
- Sister City Joint Contingency Plan, 34
- Small Communities Initiative, 211
- solar disinfection and dessication, 154
- solar power, 14
- Solar-powered aerators, 188–89
- solid waste, 148, 149 Table 2
- solutions economy, 82, 94–95
- Sony de Tijuana Este, 80
- South Africa, 186
- Southern California Gas, 93
- Southwest Border Partnership, 41
- Southwest Center for Environmental Research and Policy (SCERP), 32
- Stemple, Robert, 50n. 5
- storm water capture, 94, 174
- Strauss, Robert, 50n. 5
- Suárez, Enrique, 147
- Subcommittee on Trade, Ways and Means Committee, 50n. 5
- sustainable development, 166–70
- systems thinking, 85–86
- Tamaulipas, 45
- tariff rates, 58, 67
- tax financing, 204–205, 221
- technology, 5, 13
- Texas Comptroller of Public Accounts, 35–36
- Texas, 29, 38, 40, 58
- The Economist, 76–77
- throughput, 87–88
- Tijuana, 7, 29, 32 (see also San Diego–Tijuana region)
 air quality, 34–35
- Tijuana Emission Inventory, 34–35
- Tijuana River, 22, 49n. 3
- Tijuana River National Estuarine Research Reserve, 7, 103
- Todd, John, 85
- trade, 4, 16, 36–37
- tree farms, 6, 191
- trenchless sewer, 178–79, 179 Fig. 2, 190–91
- Tropic, Utah, 90
- Tucson, Arizona, 119
- U.S. Congress, 27, 41
- U.S. Environmental Protection Agency (EPA), 1, 25, 32, 40, 46, 52n. 19, 97
- U.S. firms, 39
- U.S. General Accounting Office (GAO), 46, 206
- U.S.–Mexican relations, 18–19, 20 Table 1, 19, 28–29, 51n. 12, 204
- U.S.–Mexico Chamber of Commerce, 29, 52n. 19
- United Nations' System of National Accounts (SNA), 105, 109–10
- United States
 attention to border needs, 2, 42
 environmental cooperation with Mexico, 2

Index

infrastructure, 172
political system, 203
recognition of border problems,
17
upflow anaerobic sludge blanket,
189
urbanization, 16, 42, 78–79
user fees, 13, 221
vendor matching, 91
waste matching, 93
Waste WiSe Program, 93, 98
wastewater infrastructure projects,
45, 148, 149 Table 2, 171
wastewater irrigation, 154
wastewater treatment, 177, 191, 192
Table 4, 194 Tables 5 and 6, 195
Table 7, 196–98
water conservation, 173, 174 Table 1
water demand, 170
Water Environment Research Foun-
dation (WERF), 170, 171, 172
water infrastructure projects, 32, 45,
148, 149 Table 2
water quality, 19, 23
water resources, 12, 17, 19, 39, 44,
89
water reuse, 186–88
water services, 131 Appendix A
Water Treaty of 1944, 204
water use, 119, 184–85, 185 Table 3
waterless technology, 184–86
wetlands, 154, 182
White House Empowerment Con-
ference, 41
wind power, 14
Yuma, Arizona, 150, 152
Zedillo, Ernesto, 27–28, 48,
49–50n. 4, 51n. 12

