

Capítulo 5

REFERENCIAS

- Ajuntament de Sitges. 2004. *Pla d'usos, activitats i serveis a les Platges de Sitges. Temporada d'estiu 2004.*
- Andreasen, J.K., O'Neill, R.V., Noss, R. y Slosser, N.C. 2001. Considerations for the development of a terrestrial index of ecological integrity. *Ecological Indicators*, 1, 21-35.
- Arisci, A., De Waele, J., Di Gregorio, F., Ferrucci, I. y Follesa, R. 2003. Geoenvironmental analysis in coastal zone management: A case study in Southwest-Sardinia (Italy). *Journal of Coastal Research*, 19, 4, 963-970.
- Barragán, J.M. 2003. Coastal zone management in Spain (1975-2000). *Journal of Coastal Research*, 19, 2, 314-325.
- Baumann, R.H., Day, J.W. y Miller, C.A. 1984. Mississippi deltaic wetland survival: sedimentation versus coastal submergence. *Science*, 224, 1093-1095.
- Berger, A.R. 1997a. Assessing rapid environmental changes using geoindicators. *Environmental Geology*, 32, 36-44.
- Boesch, D.F., Josselyn, M.N., Mehta, A.J., Morris, J.T., Nuttle, W.K., Simenstad, C.A. y Swift, D.J.P. 1994. Scientific assessment of coastal wetland loss, restoration and management in Louisiana. *Journal of Coastal Research*, Special Issue 20, 103 pp.
- Breton, F., Clapés, J., Marqués, A. y Priestley, G.K. 1996. The recreational use of beaches and consequences for the development of new trends in management: the case of the beaches of the Metropolitan Region of Barcelona (Catalonia, Spain). *Ocean & Coastal Management*, 32, 154-180.
- Bush, D.M., Neal, W.J., Young, R.S. y Pilkey, O.H. 1999. Utilization of geoindicators for rapid assessment of coastal-hazard risk and mitigation. *Ocean & Coastal Management*, 42, 647-670.

- Cacéres, A. 2002. *El desarrollo de índices e indicadores como ayuda a la gestión de costas.* Tesina de Especialidad, ETSECCPB (UPC), Barcelona.
- Cairns, J., McCormick, P.V. y Niederlehner, B.R. 1993. A proposed framework for developing indicators of ecosystem health. *Hydrobiologia*, 236, 1-44.
- Canicio, A. e Ibañez, C. 1996. Topography and bathymetry of the deltaic plain. *Impact of Climatic Change on Northwestern Mediterranean Deltas*, Vol. I, Final Workshop, Venecia, 1, 1-14.
- Capobianco, M., De Vriend, H.J., Nicholls, R.J. y Stive, M.J.F. 1999. Coastal area impact and vulnerability assessment: The point of view a morphodynamic modeller. *Journal of Coastal Research*, 15, 3, 701-716.
- Cardoch, L. y Day, J.W. 2002. Biophysical energy analyses of non-market values of the Ebro Delta. *Journal of Coastal Conservation*, 8, 87-96.
- CEDEX. 1979. *Estudio de la dinámica litoral en la costa peninsular Mediterránea y Onubense. Provincias de Barcelona y Gerona.* Laboratorio de Puertos Ramón Irribarren, Madrid.
- CEDEX. 2000. *Jornada sobre índices de calidad de las playas.* Dirección General de Costas, Ministerio de Medio Ambiente, 116 pp.
- Centre d'Estudis de Planificació, 1984. *Estat d'utilització de les platges del litoral català.* Generalitat de Catalunya, 93 pp.
- Cendrero, A., Francés, E., Del Corral, D., Fermán, J.L., Fischer, D., Del Río, L., Camino, M. y López, A. 2003. Indicators and indices of environmental quality for sustainability assessment in coastal areas; Application to case studies in Europa and the Americas. *Journal of Coastal Research*, 19, 919-933.
- Chang, N.B., Chen, H.W. y Ning, S.K. 2001. Identification of river water quality using fuzzy synthetic evaluation approach. *Journal of Environmental Management*, 63, 293-305.
- Clark, J.R. 1996. *Coastal zone management handbook.* CRC Press, Inc., Florida, 694 pp.
- Coleman, J.M. y Roberts, H.H. 1989. Deltaic coastal wetlands. *Geologie en Mijnbouw*, 68, 1-24.
- Costanza, R., Sklar, F. y White, M. 1990. Modeling coastal landscape dynamics. *Bioscience*, 40, 91-107.
- Cowell, P.J., Roy, P.S. y Jones, R.A. 1995. Simulation of LSCB using a morphological

- behaviour model. *Marine Geology*, 126, 45-61.
- Cowell, P.J., Stive, M.J.F., Niedoroda, A.W., Swift, D.J.P., de Vriend, H.J., Buijsman, M.C., Nicholls, R.J., Roy, P.S., Kaminsky, G.M., Cleveringa, J., Reed, C.W. y de Boer, P.L. 2003. The coastal-tract (Part 2): Applications of aggregated modeling of lower-order coastal change. *Journal of Coastal Research*, 19, 828-848.
- Comín, F.A., Menéndez, M. y Forés, E. 1987. Salinidad y nutrientes en las lagunas del delta del Ebro. *Limnética*, 3, 1-8.
- Cox, E. 1994. *The fuzzy systems handbook*. Academic Press, London, 623 pp.
- Crowell, M., Leatherman, S.P. y Buckley, M.K. 1993. Shoreline change rate analysis: long term versus short term data. *Shore and Beach*, 61, 2, 13-20.
- Crowell, M., Douglas, B.C. y Leatherman, S.P. 1997. On forecasting future US shoreline positions: A test of algorithms. *Journal of Coastal Research*, 13, 1245-1255.
- Dale, V.H. y Beyeler, S.C. 2001. Challenges in the development and use of ecological indicators. *Ecological Indicators*, 1, 3-10.
- Dally, W.R., Dean, R.G. y Dalrymple, R.A. 1985. Wave height variation across beaches of arbitrary profile. *Journal of Geophysical Research*, 90, 11917-11927.
- Day, J.W.Jr., Pont, D., Hensel, P. e Ibañez, C. 1995. Impacts of sea level rise on deltas in the Gulf of Mexico and the Mediterranean: the importance of pulsing events to sustainability. *Estuaries*, 18, 636-647.
- Day, J.W.Jr., Martin, J.F., Cardoch, L. y Templet, P.H. 1997. System functioning as a basis for sustainable management of deltaic ecosystems. *Coastal Management*, 25, 115-153.
- De Ruyck, M.C., Soares, A.G. y McLachlan, A., 1997. Social carrying capacity as a management tool for sandy beaches. *Journal of Coastal Research*, 13, 822-830.
- De Vriend, H.J. 1991. Mathematical modelling and large-scale coastal behaviour, part I: Physical processes. *Journal of Hydraulic Research*, 29, 727-740.
- De Vriend, H.J., Capobianco, M., Chescher, T., de Swart, H.E., Latteux, B. y Stive, M.J.F. 1994. Long-term modelling of coastal morphology. *Coastal Engineering*, 21, 225-269.
- DHI. 1998. *Mike 21 Parabolic Mild Slope Module*.
- Dolan, R., Fenster, M.S. y Holme, S.J. 1991. Temporal analysis of shoreline recession and accretion. *Journal of Coastal Research*, 7, 723-744.

- Dolz, J. 1997. El Delta del Ebro. *Revista de Obras Públicas*, 3368, 130 pp.
- Dovers, S.R. y Handmer, J.W. 1992. Uncertainty, sustainability and change. *Global Environmental Change*, 2, 262-276.
- Dovers, S.R. y Handmer, J.W. 1995. Ignorance, the precautionary principle and sustainability. *Ambio*, 24, 92-97.
- EAA, 1998. *Europe's Environment. The Second Assessment*.
- Enea, M. y Salemi, G. 2001. Fuzzy approach to the environmental impact evaluation. *Ecological Modeling*, 136, 131-147.
- Espanya, A. 1997. Las actividades humanas en el delta y su incidencia en la conservación del patrimonio natural. *Revista de Obras Públicas*, 3368, 89-99.
- Erosion Project. 2004. Living with coastal erosion in Europe: Sediment and Space for Sustainability. Service contract B4-3301/2001/329175/MAR/B3. *Coastal erosion – Evaluation of the need for action*. Directorate General Environment. European Commission.
- Fenster, M.S., Dolan, R. y Elder, J.F. 1993. A new method for predicting shoreline positions from historical data. *Journal of Coastal Research*, 9, 147-151.
- Foundation for Environmental Education. 2004. *Guidance notes to the European Blue Flag beach criteria*.
- Fraguell, R.M. 2004. Turisme de litoral a Catalunya. La pressió de la segona residència. *Congrés de Turisme de Catalunya. Jornada I: Turisme, paisatge i ordenació del territori a Catalunya*, Tarragona.
- Franceschini, L., Chatelus, Y. y Hamm, L. 1999. Predictability of the erosion rate of nourished beaches during storms using SBEACH. *Performance of Soft Beach Systems and Nourishment Measures for European Coasts*. Abstracts-in-depth, Final Workshop, paper D8.
- Gallopín, G.C. 1997. Indicators and their use: information for decision-making. En: Moldan, B. y Billharz, D. (eds.), *Sustainability indicators. Report of the project on indicators of sustainable development*. SCOPE, Wiley.
- García, M.A., Sánchez-Arcilla A., Sierra J.P., Sospedra J. y Gómez J. 1993. Wind waves of the Ebro delta, NW Mediterranean. *Journal of Marine Systems*, 4, 235-262.

- Generalitat de Catalunya. 1995. *Pla de gestió de l'Illa de Buda (Parc natural del delta de l'Ebre)*. Direcció General de Patrimoni Natural, 34 pp.
- Generalitat de Catalunya. 2004. *Catalunya Turística en cifres-2003-. Estudis de Turisme de Catalunya*.
- Generalitat de Catalunya. 2004. Programa de actuaciones urgentes en las zonas costeras del delta del Ebro afectadas por los temporales. *Departament de Medi Ambient i Habitatge*.
- Green, C. y Penning-Rowsell, E. 1999. Inherent conflicts at the coast. *Journal of Coastal Conservation*, 5, 221-246.
- Guillén, J. 1992. *Dinámica y balance sedimentario en los ambientes fluvial y litoral del Delta del Ebro*. Tesis doctoral, Universitat Politècnica de Catalunya, Barcelona, 584 pp.
- Guillén, J. y Jiménez, J.A. 1995. Proceses behind the longshore variation of the sediment grain size in the Ebro Delta coast. *Journal of Coastal Research*, 11, 205-218.
- Guillén, J. y Palanques, A. 1997. A historical perspective of the morphological evolution in the lower Ebro river. *Environmental Geology*, 30, 174-180.
- Handmer, J.W. y Dovers, S.R. 1996. A typology of resilience: rethinking institutions for sustainable development. *Industrial & Environmental Crisis Quarterly*, 9, 482-511.
- Hensel, P., Day, J.W., Pont, D. y Day, J.N. 1998. Short-term sedimentation dynamics in the Rhône river delta, France: the importance of riverine pulsing. *Estuaries*, 21, 52-65.
- Ibañez, C., Canicio, A., Day, J.W. y Curcó, A. 1997. Morphologic development, relative sea level rise and sustainable management of water and sediment in the Ebro Delta, Spain. *Journal of Coastal Conservation*, 3, 191-202.
- Ioannidou, I.A., Paraskevopoulos, S. y Tzionas, P. 2003. Fuzzy modeling of interactions among environmental stressors in the ecosystem of Lake Koronia, Greece. *Environmental Management*, 32, 624-638.
- IPCC. 2001. *Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change*. [Houghton, J.T., Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell, y C.A. Johnson (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 881 pp.
- Jackson, L.E., Kurtz, J.C. y Fisher, W.S. 2000. *Evaluation guidelines for ecological indicators*. US EPA, EPA/620/R-99/005.

- Janer, N. 2004. Evolució costanera en les immediacions de la Tordera. Implicacions per les funcions de la platja. Tesina d'Especialitat, ETSECCPB (UPC), Barcelona.
- Jeftic, L., Milliman, J.D. y Sestini, G. 1992. *Climatic change and the Mediterranean*. UNEP, London; Edward Arnold, 673 pp.
- Jiménez, J.A. 1996. *Evolución costera en el Delta del Ebro. Un proceso a diferentes escalas de tiempo y espacio*. Tesis doctoral, Universitat Politècnica de Catalunya, Barcelona, 274 pp.
- Jiménez, J.A. 2001. La influencia de los procesos litorales en la gestión de las infraestructuras de los municipios costeros. *Equipamiento y Servicios Municipales*, 93, 61-67.
- Jiménez, J.A. y Sánchez-Arcilla, A. 1997. A conceptual model for barrier coasts behaviour at decadal scale. Application to the Trabucador Bar. *Coastal Dynamics'97*, ASCE, 913-922.
- Jiménez, J.A. y Sánchez-Arcilla, A. 1993. Medium-term coastal response at the Ebro delta, Spain. *Marine Geology*, 114, 105-118.
- Jiménez, J.A. y Sánchez-Arcilla, A. 1999. Modelling of barrier-spit system evolution at decadal scale. *Proceedings of Coastal Sediments'99*, ASCE, 1724-1738.
- Jiménez, J.A. y Sánchez-Arcilla, A. 2004. A long-term (decadal scale) evolution model for microtidal barrier systems. *Coastal Engineering*, 51, 74-764.
- Jiménez, J.A. y Valdemoro, H.I. 2003. La influencia de la dinámica costera en la explotación turística de las playas (I). Erosión a largo plazo. *Equipamiento y Servicios Municipales*, 109, 28-37.
- Jiménez, J.A. y van Koningsveld, M. 2002. Coastal state indicators. A bridge between science and coastal management. *Coastal State Indicators Report, CoastView Report*.
- Jiménez, J.A., García, M.A. y Sánchez-Arcilla, A. 1990. Estimación del transporte de sedimento en el Ebro. Contribución a la evolución costera. *Technical Report LT-2/7*, DGPC, Generalitat de Catalunya, Barcelona, 25 pp.
- Jiménez, J.A., Sánchez-Arcilla, A., Valdemoro, H.I., Gracia, V. y Nieto, F. 1997. Processes reshaping the Ebro delta. *Marine Geology*, 144, 59-79.
- Jiménez, J.A., Valdemoro, H.I., Gracia, V. y Sánchez-Arcilla, A. 1999. *Estudio sobre la erosión de la Platja de s'Abanell (Blanes, Girona). Análisis y Propuesta de Soluciones*. TR-AMC-98-C3107. Laboratori d'Enginyeria Marítima, UPC, Barcelona.

- Jiménez, J.A., Canicio, A., Sánchez-Arcilla, A. e Ibáñez, C. 2000. Caracterización de la problemática y alternativas de gestión y actuación para las costas del Delta del Ebro. Inf. Técnico, UPC-UB, Barcelona.
- Jiménez, J.A., Valdemoro, H.I. y Sánchez-Arcilla, A. 2002. *Estudio sobre la estabilidad de la margen izquierda del Tordera (T.M. Blanes, Girona) y la creación de accesos a la zona*. Inf. Técnico, Laboratori d'Enginyeria Marítima, UPC, Barcelona.
- Jiménez, J.A., Valdemoro, H.I. y Sánchez-Arcilla, A. 2003 Bayed beaches behaviour under storms. Effects of storm direction, intensity, duration and water level on beach erosion *Coastal Sediments'03*. CD-ROM Pub. by World Scientific Publishing Corp. & East Meets West Productions, Corpus Christi, Texas, USA.
- Judge, E.K., Overton, M.F. y Fisher, F.S. 2003. Vulnerability indicators for coastal dunes. *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, 270-278.
- Kaly, U., Briguglio, L., McLeod, H., Schmall, S., Pratt, C. y Pal, R. 1998. *Environmental vulnerability index (EVI) to summarise national environmental vulnerability profiles*. Executive Summary, SOPAC, Fiji Islands.
- Katz, R.W. y Brown, B.G. 1992. Climate change for extreme events: An Application of the Theory of Extreme Values, *Preprints, 11th Conference on Probability and Statistics in Atmospheric Sciences*, American Meteorological Society, Boston, 10-15.
- Kay, R. y Alder, J. 1999. *Coastal planning and management*. Spon Press, 375 pp.
- Kelly, J.R. y Harwell, M.A. 1990. Indicators of ecosystem recovery. *Environmental Management*, 14, 527-545.
- Kesel, R.H. 1988. The decline in suspended load of the lower Mississippi river and its influence on adjacent wetlands. *Environmental Geology and Water Science*, 11, 271-281.
- Kline, J.D. y Swallow, S.K. 1998. The demand for local access to coastal recreation in southern New England. *Coastal Management*, 26, 177-190.
- Komar, P.D. 1998. *Beach processes and sedimentation*. Prentice Hall, 544 pp.
- Kriebel, D.L. y Dean, R.G. 1985. Numerical simulation of time-dependet beach and dune erosion. *Coastal Engineering*, 9, 221-245.
- Kriebel, D.L., Dalrymple, R., Pratt, A. y Sakovich, V. 1997. A shoreline risk index for northeasters. *Proceedings ASCE International Conference on Natural Disaster Reduction*, ASCE, 251-252.

- Kurtz, J.C., Jackson, L.E. y Fisher, W.S. 2001. Strategies for evaluating indicators based on guidelines from the Environmental Protection Agency's Office of Research and Development. *Ecological Indicators*, 1, 49-60.
- Larson, M. y Kraus, N.C. 1989. *SBEACH. Report 1, Empirical foundation and model development*. Tech. Report CERC-89-9, US Army Corps of Engineers, Vicksburg.
- Larson, M., Kraus, N.C. y Byrnes, M.R. 1990. *SBEACH: Numerical model for simulating storm-induced beach change. Report 2*. Tech. Report CERC-89-9, US Army Corps of Engineers, Vicksburg.
- Leatherman, S.P. 1979. Migration of Assateague Island, Maryland, by inlet and overwash processes. *Geology*, 7, 104-107.
- Leatherman, S.P. 1987. Time frames for barrier island migration. *Shore & Beach*, 55, 82-86.
- List, J.H., Sallenger, A.H., Hansen, M.E. y Jaffe, B.E. 1997. Accelerated relative sea-level rise and rapid coastal erosion: testing a causal relationship for the Louisiana barrier islands. *Marine Geology*, 140, 347-365.
- Maldonado, A. 1972. El delta del Ebro. Estudio sedimentológico y estratigráfico. *Boletín de Estratigrafía*, 1, 1-486.
- Maldonado, A. 1986. Dinámica sedimentaria y evolución litoral reciente del Delta del Ebro. En: Mariño, M.G. (ed.), *Sistema Integrado del Ebro*, Hermes, Madrid, 33-60.
- Malvarez-García, G., Pollard, J. y Domínguez-Rodríguez, R. 2000. Origins, management and measurement of stress on the coast of Southern Spain. *Coastal Management*, 28, 215-234.
- Manning, R.E. y Lawson, S.R. 2002. Carrying capacity as "informed judgment": the values of science and the science of values. *Environmental Management*, 30, 157-168.
- Martí, C. y Pintó, J. 2004. Metodología de análisis del paisaje de la Costa Brava: evolución, diagnóstico y prognosis. En: Conesa, C. y Martínez, J.B. (eds.), *Territorio y Medio Ambiente: Métodos Cuantitativos y Técnicas de Información Geográfica*, Universidad de Murcia, 317-328.
- McBride, R.A., Byrnes, M.R. y Hiland, M.W., 1995. Geomorphic response-type model for barrier coastlines: a regional perspective. *Marine Geology*, 126, 143-159.
- McGlade, J.M., Pauly, D. y Silvestre, G. 1996. *SymCoast, CEC Final Report*. CT1, CT93-0349, Brussels.

- McNeill, F.M. y Thro, E. 1994. *Fuzzy logic. A practical approach*. Academic Press, London, 292 pp.
- Mendoza, E.T. y Jiménez, J.A. 2004. Factors controlling vulnerability to storm impacts along the Catalonian coast. *Proc. 29th ICCE*, ASCE (en prensa).
- Menéndez, M., Hernández, O. y Comín, F.A. 2002. Spatial Distribution and Ecophysiological Characteristics of Macrophytes in a Mediterranean Coastal Lagoon. *Estuarine, Coastal and Shelf Science*, 55, 403-413.
- Ministerio de Medio Ambiente. 2001. *Sistema español de indicadores ambientales: subárea de costas y medio marino*. Madrid, 75 pp.
- Montoya, F. y Galofré, J. 1997. La particularidad sobre la actuación física en la costa: caso del Delta del Ebro. *Revista de Obras Públicas*, 3368, 33-45.
- MOP. 1970. *Playas. Modelos tipo y sugerencias para su ordenación*. Dirección General de Puertos y Señales Marítimas, Madrid.
- Mora, J. 2004. *Disseny d'un sistema d'informació ambiental pel seu ús en els processos de gestió integrada de zones costaneres. Aplicació a la Costa Brava*. Tesis doctoral, Universitat de Girona, 479 pp.
- Morgan, J.P. y Stone, G.W. 1985. A technique for quantifying the coastal geomorphology of Florida's barrier islands and sandy beaches. *Shore and Beach*, 53, 19-26.
- Morton, R.A. 2002. Coastal geoindicators of environmental change in the humid tropics. *Environmental Geology*, 42, 711-724.
- Muñoz, I. 1990. *Limnologia de la part baixa del riu Ebre i els canals de regs*. Tesis doctoral, Universitat de Barcelona.
- Museu Del Montsia. 1997. *Estudi sòcio-ecòmic del Delta del Ebre*. MEDDELT Report, Amposta.
- Novoa, M. 1990. La gestión de las costas de Barcelona. *Obra Pública*, 18, 4-21.
- Niedoroda, A.W., Reed, C.W., Swift, D.J.P., Arato, H. y Hoyanagi, K. 1995. Modeling shore-normal large scale coastal behavior. *Marine Geology*, 126, 181-199.
- Nogué, J., 2004. La transformació del territori i del paisatge de la Costa Brava (1956-2003). Situació actual i propostes d'actuació. *Debat Costa Brava*, 48 pp.
- Novoa, M. 1990. La gestión de las costas de Barcelona. *Obra Pública*, 18, 4-21.
- Palanques, A., Plana, F. y Maldonado, A. 1990. Recent influence of man on the Ebro margin

- sedimentation system, northwestern Mediterranean Sea. *Marine Geology*, 95, 247-263.
- Palutikof, J.P. 1993. Mediterranean land use and desertification - The Medalus Project. En: TROEN, I. (ed.), *Proceedings Symposium Climatic Change and its Impacts*, Copenhagen: European Comission, 165-172.
- PAP. 1997. Guidelines for carrying capacity assessment for tourism in Mediterranean coastal areas. Priority Actions Programme Regional Activity Centre, UNEP, Split, 51 pp.
- Peña, C. y Covarsi, M.F. 1994. Project, works and monitoring at Barcelona olympic beaches. *Proc. 24th ICCE*, ASCE, 3564-3578.
- Peña, C., Carrión, V. y Castañeda, A. 1992. Projects, works and monitoring at Barcelona coast. *Proc. 23rd ICCE*, ASCE, 3385-3398.
- Pereira, L.C.C., Jiménez, J.A., Medeiros, C. y Da Costa, R.M. 2003. The influence of the environmental status of Casa Caiada and Rio Doce beaches (NE-Brazil) on beaches users. *Ocean & Coastal Management*, 46, 1011-1030.
- Pérez, A. 2002. *Interacción de la dinámica litoral con las infraestructuras de playas urbanas*. Tesina de Especialidad, ETSECCPB (UPC), Barcelona.
- Pykh, Y.A., Hyatt, D.E. y Lenz, R.J.M. (eds.). 1999. *Environmental indices: system analysis approach*. EOLSS Publishers, Oxford.
- Polette, M. y Raucci, G.D. 2003. Methodological proposal for carrying capacity analysis in sandy beaches: a case study at the Central beach of Balneario Camboriú (Santa Catarina, Brazil). *Journal of Coastal Research*, SI 35, 94-106.
- Pompe, J.J. y Rinehart, J.R. 1994. Estimating the effect of wider beaches on coastal housing prices. *Ocean & Coastal Management*, 22, 141-152.
- Priestley, G. y Mundet, LI. 1998. The post-stagnation phase of the resort cycle. *Annals of Tourism Research*, 25, 85-111.
- Riera, G. 1991. *Evolució recent de la desembocadura de l'Ebre a partir de l'anàlisi batimorfològica*. Tesina Licenciatura, Facultad de Geología, Universidad de Barcelona, 89 pp.
- Rodríguez, I. 1999. Evolución geomorfológica del Delta del Ebro y prognosis de su evolución. Tesis doctoral, Universidad de Alcalá de Henares, 200 pp.
- Roelvink, J.A. y Brøker, I. 1993. Cross-shore profile models. *Coastal Engineering*, 21,

- 163-191.
- Ruggiero, P., Komar, P.D., McDougal, W.G., Marra, J.J. y Beach, R.A. 2001. Wave Runup, Extreme Water Levels and the Erosion of Properties Backing Beaches. *Journal of Coastal Research*, 17, 407-419.
- Ruth, M. y Pieper, F. 1994. Modeling spatial dynamics of sea-level rise in a coastal area. *System Dynamics Review*, 10, 4, 375-389.
- Sallenger, A. H. Jr. 2000. Storm impact scale for barrier islands. *Journal of Coastal Research*, 16, 890-895.
- Sánchez-Arcilla, A. y Jiménez, J.A. 1994. Breaching in a wave-dominated barrier spit: the Trabucador Bar (north-eastern Spanish coast). *Earth Surface Processes and Landforms*, 19, 483-498.
- Sánchez-Arcilla, A. y Jiménez, J.A. 1997. Physical impacts of climatic change on deltaic coastal systems (I): an approach. *Climatic Change*, 35, 71-93.
- Sánchez-Arcilla, A., Stive, M.J.F., Jiménez, J.A. y García, M.A. 1993. Impact of sea-level rise in a Mediterranean delta: the Ebro delta case. *Seachange'93, Sea level changes and their consequences for hydrology and water management*. IHP/OHP, Noordwijkerhout, IV53-IV62.
- Sánchez-Arcilla, A., Jiménez, J.A. y Valdemoro, H.I. 1998. The Ebro delta: morphodynamics and vulnerability. *Journal of Coastal Research*, 14, 3, 754-772.
- Sardá, R. 2001. Shoreline Development on the Spanish Coast. Problem Identification and Solutions. En: von Bodungen, B. y Turner, R.K. (eds.). *Science and Integrated Coastal Management*. Dahlem University Press, Berlin, 149-163.
- Sardá, R. y Fluvià, M. 1999. Tourist development in the Costa Brava (Girona, Spain): a quantification of pressures on the Coastal Environment. En: Salomons W, Turner K, Lacerda LD, Ramachandran S, (eds.). *Perspectives on Integrated Coastal Zone Management*, Springer, Berlin, 257-276.
- Saveriades, A. 2000. Establishing the social tourism carrying capacity for the tourist resorts of the east coast of the Republic of Cyprus. *Tourism Management*, 21, 147-156.
- Schwarzer, K., Crossland, C.J., De Luca, A., De Vries, I., Dronkers, J., Penning-Rowsell, E., Reise, K., Sardá, R., Taussik, J. y Wasson, M. 2001. Group Report: Shoreline Development. En: von Bodungen, B. y Turner, R.K. (eds.). *Science and Integrated Coastal Management*. Dahlem University Press, Berlin, 165-189.

- SCOR. 1991. The response of beaches to sea-level changes: a review of predictive models. *Journal of Coastal Research*, 7, 3, 895-921.
- Servicio de Costas de Tarragona. 2004. *Actuaciones en el Delta del Ebro*. Report (no publicado).
- Serra, J. 1997. El sistema sedimentario del delta del Ebro. *Revista de Obras Pùblicas*, 3368, 15-22.
- Silberman, J. y Klock, M. 1988. The recreation benefits of beach nourishment. *Ocean & Coastal Management*, 11, 73-90.
- Silvert, W. 2000. Fuzzy indices of environmental conditions. *Ecological Modelling*, 130, 111-119.
- Singh, A., Shi, H., Fosnight, E.A. y Ernste, M.A. 2001. How crowded is the Global Coastal Zone?. *Proceeding of the 2nd Biennial Coastal GeoTools Conference*, 1-8.
- Small, C. y Nicholls, R.J. 2003. A Global Analysis of Human Settlement in Coastal Zones. *Journal of Coastal Research*, 19, 584-599.
- Smith, R.A. 1991. Beach resorts: a model of development evolution. *Landscape and Urban Planning*, 21, 189-210.
- Smith, G. y Soltau, C. 2004. Behaviour of a meganourishment on a high energy coastline. *29th ICCE*, ASCE (en prensa).
- Somoza, L., Barnolas, A., Arasa, A., Maestro, A., Rees, J.G. y Hernández-Molina, F.J. 1998. Architectural stacking patterns of the Ebro delta controlled by Holocene high-frequency eustatic fluctuations, delta-lobe switching and subsidence processes. *Sedimentary Geology*, 117, 11-32.
- Sorensen, J. y West, N. 1992. *A guide to impact assessment in coastal environments*. Coastal Resources Center, University of Rhode Island, 100 pp.
- Sowman, M.R. 1987. A procedure for assessing recreational carrying capacity of coastal resort areas. *Landscape and Urban Planning*, 14, 331-344.
- Stanley, D. y Warne, A. 1993. Nile delta: recent geological evolution and human impacts. *Science*, 260, 628-634.
- Stive, M.J.F. y De Vriend, H.J. 1995. Modelling shoreface profile evolution. *Marine Geology*, 126, 235-248.
- Stone, G.W., Grymes, J.M., Dingler, J.R. y Pepper, D.A. 1997. Overview and significance

- of hurricanes on the Louisiana coast, USA. *Journal of Coastal Research*, 13, 656-669.
- Taylor, D.I., Nixon, S.W., Granger, S.L., Buckley, B.A., McMahon, J.P. y Lin, H.J. 1995. Responses of coastal lagoon plant communities to different forms of nutrient enrichment a mesocosm experiment. *Aquatic Botany*, 52, 19-34.
- Turner, R.K., y Adger, W.N. 1996. *Coastal Zone Resources Assessment Guidelines*. LOICZ Reports and Studies, 4, Texel.
- Valdemoro, H.I. y Jiménez, J.A. The influence of shoreline dynamics on the use and exploitation of Mediterranean tourist beaches, (en revisión).
- Valdemoro, H.I. y Jiménez, J.A. Measuring the coastal protection function of beaches using indicators, (en preparación).
- Valdemoro, H.I., Jiménez, J.A. y Sánchez-Arcilla, A. 1999. Vulnerability: Evaluating the consequences of coastal changes. An application to deltaic coasts. *Coastal Sediments'99*, ASCE, 1450-1461.
- Valdemoro, H.I., Jiménez, J.A. y Sánchez-Arcilla, A. 2001. Vulnerability of wetlands to coastal changes. A methodological approach with application to the Ebro delta. En: Villacampa, Y., Brebbia, C.A. y Usó J.L. (eds.). *Ecosystems and Sustainable Development III*. WIT press, 595-604.
- Valdemoro, H.I., Jiménez, J.A., Sánchez-Arcilla, A., Gracia, V., Galofré, J., Montoya, F. y Peña, C. 2002. Beach management in a highly eroding coast with strong ecological constraints. *Proc. 28th ICCE*, ASCE, 3832-3844.
- Valdemoro, H.I., Jiménez, J.A., Cáceres, A. y Gracia, V. 2003. Utilización de indicadores en gestión de costas. Aplicación a la evaluación de riesgos de infraestructuras en playas urbanas. Resúmenes *VII Jornadas Españolas de Ingeniería de Costas y Puertos*, Almería, 504-506.
- Valiela, I., Foreman, K., La Montagne, M., Hersh, D., Costa, J., Peckol, P., DeMeo-Anderson, B., D'Avanzo, C., Bibione, M., Sham, C. H., Brawley, J. y Lajtha, K. 1992. Couplings of watersheds and coastal water: sources and consequences of nutrient enrichment in Waquoit Bay, Massachusetts. *Estuaries*, 15, 443-457.
- Van Heerden, I.L. y Derouen, K. 1997. Implementing a barrier island and barrier shoreline restoration program. The state of Louisiana's perspective. *Journal of Coastal Research*, 13, 679-685.
- Van Koningsveld, M. 2003. *Matching specialist knowledge with end user needs*. Tesis

- doctoral, University of Twente, 173 pp.
- Van Rijn, L.C. 1993. *Principles of sediment transport in rivers, estuaries and coastal seas*. Amsterdam: Aqua Publications.
- Van Rijn, L.C., Walstra, D.J.R., Grasmeijer, B., Sutherland, J., Pan, S. y Sierra, J.P. 2003. The predictability of cross-shore bed evolution of sandy beaches at the time scale of storms and seasons using process-based profile models. *Coastal Engineering*, 47, 295-327.
- Varela, J.M., Gallardo, A. y López De Velasco, A. 1986. Retención de sólidos por los embalses de Mequinenza y Ribarroja. Efectos sobre los aportes al Delta del Ebro. En: Mariño, M.G. (ed.), *Sistema Integrado del Ebro*, Hermes, Madrid, 203-219.
- Villares, M. 1999. *Percepció dels impactes estètics i mediambientals de la regeneració de platges*. Tesis doctoral, Universitat de Barcelona, 465 pp.
- Warrick, R.A., Le Provost, C., Meier, M.F., Oerlemans, J. y Woodworth, P.L. 1996. Changes in sea level. En: Houghton, J.T., Meira, L.G., Callander, B.A., Harris, N., Kattenberg, A. y Maskell, K. (eds.), *Climate change 1995. The science of climate change*, Cambridge University Press, Cambridge, 363-405.
- Withmarsh, D., Northern, J. y Jaffry, S. 1999. Recreational benefits of coastal protection: a case study. *Marine Policy*, 23, 453-463.
- Wigley, T.M.L. 1992. Future climate of the Mediterranean Basin with particular emphasis on changes in precipitation. En: Jeftic, L., Milliman, J.D. y Sestini, G. (eds.), *Climatic change and the Mediterranean*. UNEP, Edward Arnold, London, 15-44.
- Wise, R., Smith, S.J. y Larson M. 1996. *SBEACH. Report 4, Cross-shore transport under waves and model validation with SUPERTANK and field data*. Tech. Report CERC, US Army Corps of Engineers, Vicksburg.
- Wong, P.P. 1998. Coastal tourism development in Southeast Asia: relevance and lessons for coastal zone management. *Ocean & Coastal Management*, 38, 89-109.
- Yepes, V. 1998. Planificación y gestión turística de playas. *Actas del Curso sobre gestión Integral de la Costa*. CEDEX, Madrid, 43 pp.
- Yepes, V. 1999. Las playas de la gestión sostenible del litoral. *Cuadernos de Turismo*, 4, 89-110.
- Zadeh, L.A. 1965. Fuzzy sets. *Information and Control*, 8, 338-353.

- Zhang, K., Douglas, B.C. y Leatherman, S.P. 2001. Beach erosion potential for sever Nor'easters. *Journal of Coastal Research*, 17, 309-321.