The Planning and Practice of Coastal Zone Management in Southern Spain

Gonzalo Malvárez García and John Pollard
School of Biological and Environmental Sciences, University of Ulster, Coleraine, N. Ireland

Rafael Domínguez Rodríguez
Departamento de Geografía, Universidad de Málaga, 29071 Málaga, Spain

This paper examines coastal management policies in southern Spain in the context of the state’s role in the promotion of sustainable development practices. It recognises the critical importance of the coast as a landscape resource for both visitors and residents and, in addition, the latter’s rights to enjoy access to it as public property. Attention is directed at both physical protection of the coast through erosion control programmes and urban planning policies, with special emphasis on the 1988 Shores Act that attempts to treat coastal planning in a more integrated manner than has historically been the case. The underlying rationale to introduce a more environmentally sensitive treatment of the coast is discussed together with the attempts to confront illegal occupancy through re-establishment of public ownership and control of land-use in the coastal zone. Positive achievements in beach management, and changing attitudes to the law, are seen as evidence that the message of sustainability is beginning to be heard. However, such success contrasts with failure to control the wider urban development process which continues (even in developments that postdate the Shores Act) to reflect short-term economic rather than environmental prerogatives. Thus severe limitations upon the maintenance of a quality coastal environment are likely to continue without enforcement of buffer zones at the regional level or a more radical designation of more of the coast as ‘protected’. Such may well be encouraged eventually by the very same economic interests that are concerned to retain Spain’s position in the global tourism market by providing an environment that is attractive to visitors.

Introduction

The role of the state in the promotion of sustainable development practices is both well established and diverse. Shaw and Williams (2002) have observed that the basis of that role lies in the absence of a market for public goods, including the landscape and ecosystems, thus requiring state intervention to provide overall environmental management. In the context of sustainable tourist development, it is the coast that provides the most extensive landscape resource within the Mediterranean basin, and it is the principal magnet not only for northern European visitors but also significant numbers of the region’s own residents. Spain, which occupies the second position in terms of foreign visitor arrivals (Travel and Tourism Intelligence, 2001), welcomes most of these tourists to its coastal margins (Bote Gomez & Sinclair, 1996), so that the well-being of its littoral is of vital concern to the Spanish economy and its workforce.
From the widest perspective that embraces all of Spain’s population, there is growing recognition of the rights of citizens as consumers. Within those rights are included entitlement to a quality environment in respect of air, water and scenery (Lash & Urry, 1994; Williams & Shaw, 1998), which has particular resonance for the state’s management of the coastal environment. An essential component of sustainable management here relates to the implied concern for social equity and the guarantee of access for both present and future generations to the basic natural resources of water, forests and land (Harrison, 1996). The rapid development of the Spanish coastline has obvious implications for this fundamental right in respect both to aesthetic concerns and to potential adverse impacts upon water quality and access provision.

Enjoyment of access and of an undegraded coastal landscape is an equally paramount demand of visitors to the region. Indeed, environmental factors have been recognised as an important element in the decision-making process (Robinson, 1996), while a reduction in tourism growth rates has often been associated with the serious environmental impacts of mass tourist development (Barke & France, 1996; Vera Rebollo, 2001). Despite the growing promotion of alternative tourism markets and indications of more self-provision and individualisation in holiday-making, it is generally accepted that mass tourism in coastal resorts will continue to play a vital part in the Spanish economy (Williams & Shaw, 1998). Consequently, protection of its economic interests in an increasingly globalised and competitive market demands the sustainable management of such a crucial resource.

The early post-war years of Spanish economic development showed little effective implementation of such sustainable management principles (Morris, 1996). Accordingly, the degradation of coastal resources typified the decades of the 1960s and 1970s when the economic growth paradigm went largely unchallenged and served to confirm the view expressed by Butler (1998) that without ‘assigned responsibility for resource protection environmental decline is inevitable’. During that period, coastal management meant little beyond ad hoc schemes for the protection of vulnerable stretches of real estate. Although attempts to implement a more effective planning process did follow the advent of democratic government in 1975 and brought some order to development on the coast, it was not until 1988 that the Ley de Costas (Shores Act) (Ministerio de Obras Públicas y Urbanismia (MOPU, 1989)) provided a more holistic context in which coastal development could potentially be managed. Dating from that time, greater controls have existed on coastal development, while parallel actions to safeguard the physical integrity of the coastline have also been implemented.

The objective of this paper is to trace the post-war evolution of coastal policies and their impact, emphasising the role of the Ley de Costas in providing a theoretically sound framework for a more sympathetic and sustainable treatment of the coastal environment. However, in acknowledgement of the gap that has historically existed between policy formulation and its implementation in Spain, attention is particularly focussed on the effectiveness of the latest legislation in controlling urban development in the south of the country in the autonomous region of Andalucia. Within that region lies the Costa del Sol (Figure 1), which annually receives over 2 million hotel guests alone (Junta de Andalucia, annual). Opportunities to implement the new policies fully are greatly constrained on the
Figure 1 The Autonomous Region of Andalucía
Costa del Sol by the intensive urban development that already stretched virtually continuously from Estepona to Nerja by the end of the 1980s. Journey times from Málaga international airport have, until recently, limited pressures for development to the west of Estepona. However, with the upgrading of the N340 route in the 1990s and the opening of the inland motorway in 2000 (Figure 2), that coastline has been brought well within the compass of the mass holiday market and urbanisation is proceeding apace in Casares and Manilva, the most westerly of Málaga’s municipalities (Figure 2). As most of this development post-dates the **Ley de Costas**, this area offers an ideal laboratory in which to test the effectiveness of the legislation and thus the final section of this paper includes an examination of one of these local administrative areas, the municipality of Manilva.

### A Brief History of Coastal Policies and Legislation

Two themes commonly underscore coastal planning: coastal protection and the control of land use on the coastal margins. Until the 1980s these were largely treated as separate issues, although common ground was encountered when the construction of sea-front promenades provided both recreational and protective functions. Both coastal protection and coastal planning offer much scope for debate, the former in terms of the efficacy of alternative protection methods (and consequential effects of protecting one stretch of coast on adjacent sectors); and the latter in respect of the whole panoply of competing interests facing urban planners. On the Costa del Sol, the practice of coastal protection has the longer history, largely because of the failure of the planning process to deal effectively with the early growth of the urban communities that mushroomed with the package holiday industry in the latter part of the 20th century.

### Physical protection and management of the coast

Coastal protection work parallels the urbanisation of the coast and the consequent rise in value of shoreline real estate as fishermen’s cottages and vegetable gardens gave way to restaurants, bars, apartments, hotels and residential estates. The first notable engineering works affecting the then villages of the Costa del Sol date to the 1960s with the start of promenade constructions such as those in Marbella and Torremolinos (Figure 2). These were often subject to inundation during storm conditions, leading to demands for further protection or strengthening of the new promenades.

Promenades became important both for their protective and recreational roles, while they also enabled access to the *chiringuitos* or restaurants/bars that were located on the beach itself. Sea-walls fronting the promenades were considered the most feasible and appropriate defensive policy according to the prevailing accepted ideas. However, the western Costa del Sol began to experience an increasing erosion problem in the 1970s after the construction of most of the sea-walled promenades because of erosion induced by their structural characteristics. One of the most serious cases was at Estepona where, following the building in the 1960s of a promenade backing what was at the time an extensive beach, erosion was so serious that the beach suffered a reduction in height and width, so that the promenade itself was threatened with destruction (Fernandez Ranada, 1989).
Figure 2 The Province of Málaga and its municipalities
In an attempt to solve the problem, groynes were set into the beach at right angles to the shore in an attempt to protect the promenade and stabilise the eroding coastline (Fernandez Ranada, 1989). However, the process causing the erosion of the beach was not tackled because, although the groynes did control longshore drift, they failed to stop off-shore directed sediment transport. This led to the subsequent use of hammer-head groynes designed to cope with off-shore as well as long-shore movement. Such groynes became a common feature not only at Estepona but also to the east of Málaga (at Pedregalejo) and later at Benalmádena Costa and Marbella (Figure 2).

Groyne fields have also been deployed in an attempt to minimise erosion and control deposition around the new marinas that now form a regular feature of the coastal infrastructure. Moreover, they helped conserve sand in embayments, so providing expensive condominiums close to the marina in locations like Puerto Banús, Marbella and Benalmádena Costa with permanent beaches (Figure 2).

However, despite the large investment, such fields were removed in the 1990s because of their failure to perform well in practice, and a growing problem of sea-water pollution in the artificial embayments. Benalmádena Costa is a case in point: there, the inadequate design, mainly caused by poor groyne spacing, contributed to further damage to the sea wall and occasional collapsing of the promenade.

A new approach to protection was introduced with the application of beach nourishment. Yet, again, experiences on the Costa del Sol show that the application of beach fill has not been entirely satisfactory partly because of difficulties in solving a fundamental problem of sediment starvation in the coastal system. Inland sources of sediments are restricted by river flows that have been much reduced by dam building, leaving offshore sediment deposits as the only realistic alternative, despite the fact that they are not always sufficient or of ideal composition. Coarseness or shelliness of the sand, and/or a high lime content, have sometimes produced an uncomfortably abrasive surface for recreational use (Malvárez García et al., 2002). In Marbella’s case, the beach also failed the durability test as it was subjected to sub-surface erosion. In contrast, sediments utilised for nourishment of Málaga’s beach were of ideal characteristics, although it was still prone to sand loss due to the effects of recurrent storms after beach fill, so that replenishment with its attendant costs was demanded. Thus the extent to which coastal protection methods have been successful over the past 50 years is very much an open question despite the complete reversal of techniques from hard to soft structures.

Urban planning and the coast

The lack of effectiveness of Spanish urban planning in controlling coastal development in both the Franco era and the early years of democratic government has frequently been remarked upon (Naylon, 1986; Wynn, 1984a,b). Economic growth took precedence so that, despite the existence of planning regulations deriving from the 1956 Ley del Suelo y Ordenación Urbana (Land and Urban Planning Act), uncontrolled market forces prevailed to the neglect of integrated planning procedures or consideration of environmental parameters (Morris, 1996). The resulting freedom extended to private developers inevitably
produced the haphazard development typical of the Spanish Mediterranean coast from Catalonia in the north-east (Morris & Dickinson, 1987) to the Costa del Sol in the south (Pollard & Domínguez Rodríguez, 1993, 1995). While the reflection of such procedures in austere and tightly packed high rise hotel and apartment blocks fronting the shoreline might cause no more than aesthetic offence (García Manrique, 1984), failures in the provision of promenades, means of access to beaches, proper traffic circulation and parking facilities, parks and garden facilities, and sewage systems, offered more practical cause for concern for visitor and resident alike.

New political and administrative structures introduced following Franco’s death in 1975 were mirrored in changes in the planning legislation. The principal instrument was the Reforma de la Ley del Suelo y Ordenación Urbana (Reform of the Land and Urban Planning Act) with its requirement of each municipality to produce its own urban plan. Although it was the case that the previous 1956 legislation had demanded similar Plans, the response of Town Halls was slow to the point of non-compliance in some instances. On the Costa del Sol, Marbella was quickest off the mark, producing its plan in 1959 followed by a second in 1968: elsewhere Fuengirola delayed until 1969, Málaga until 1970/1, Manilva and Casares until 1973, Benalmádena until 1975 and Estepona and Mijas until the 1980s, i.e. after the original Act had already been superseded by the 1975 Reforma.

New Plans produced following the Reforma recognised problems inherited from the earlier legislation and made provision for environmental conservation and improvements in the social and economic infrastructure. Moreover, the application of the three broad land-planning categories of ‘urban’, ‘urbanizable’ (programmed for development) and ‘non-urban’ was more firmly established. Nevertheless, although there was widespread recognition of existing problems, many were beyond remedy, while economic development priorities continued to hold pole position (Morris & Dickinson, 1987). However, growing concerns over the image projected by the old established resorts gradually brought about a shift in emphasis, so that by the end of the century major improvements in the economic and social infrastructure (including promenade completion and sewage provision) had been made (Robinson, 1996).

At the same time a more integrated and holistic approach to coastal planning that took account of both physical coastal protection and coastal amenity could be identified from the 1980s. Neither the 1956 nor 1975 Acts recognised the coast as a zone with any special requirements, although some attempt at coastal legislation had been enacted with the passing of a Ley de Costas (Shores Act) in 1969. This empowered the MOPU (Ministerio de Obras Públicas y Urbanismo [Ministry of Public Works and Urban Planning]) to undertake defensive and marina construction work, to be carried out by MOPU’s Dirección General de Puertas y Costas (Ports and Coasts Administration). That Administration’s remit comprised three elements, namely the physical protection of the coast, the recovery of public property and legislation for, and management of, that property, but efforts were largely limited to protection work.

A more coordinated programme was introduced in 1982 to bring about a legislative framework empowering the coastal authorities to integrate services and to significantly increase investment. There was little resistance to the increased spending, particularly when it related to coastal protection, but it was a different
matter when it came to implementing new regulations that impacted on the operation and siting of businesses located on the shoreline. The Jefatura de Costas (Central Office for Coastal Affairs) began lobbying councils and other interested parties from that date, although there was little response, failure to proceed being excused on technical or legal grounds (MOPU, 1988). Some progress with beach management was achieved by the late 1980s, especially in regularising commercial services offered on the foreshore.

It was, however, the passing of the new Ley de Costas in 1988, and the formulation of the linked Plan de Costas 1993–1997, that seemed to offer the opportunity to open a new era in effective coastal management. The Ley de Costas and the Plan de Costas provided the legal powers to protect the public coastal zone while underpinning the huge expansion in investment in public works on beach regeneration, promenades and sea-front rehabilitation, and access provision. The Ley de Costas established new rights and obligations in respect of use of the public domain and its immediate hinterland. Moreover, it required that any future development of virgin areas (or redevelopment within already urbanised areas) should conform to a more rational and sensitive system of land use. To a significant extent it echoes the language of the Rio declaration in summing up its approach in the following terms:

It is the responsibility of the legislation of our time to protect the integrity of (the Spanish coast), to preserve (it) as the property of the nation and to bestow (it) as such to future generations. (MOPU, 1989: 18)

Its two principal goals were thus to guarantee that the coast remained public property and to ensure the preservation of natural features, e.g. dune systems, wetlands and important vegetation complexes.

The legislation enunciated the right of the Spanish people to enjoy an acceptable environment and accepted that both planners and the public had an obligation to preserve that environment. In order to provide that acceptable environment, the government clearly spelt out its right to recover possession of coastal public property ‘regardless of the time elapsed’ (MOPU, 1989: 15). Furthermore, it was recognised that in certain circumstances it might be necessary to act on privately owned land where activities had a serious adverse effect on the coast. In this respect, particular actions were considered necessary:

(a) to avoid interruption of wind transportation of sand;
(b) to avoid closure of visual perspectives by the screening effect of buildings and the shadow projected by buildings;
(c) to control waste disposal; and
(d) to control gravel, sand and stone extraction from the lower courses of rivers where that impedes coastal sedimentation processes (MOPU, 1989: 16).

The geographical limitation of the Act’s scope was specified through the setting out of four zones (Figure 3), two of which are designated public property: these are, first, in-shore and territorial waters; and second, shore and beach. Inland from the shoreline are two private property zones, the first being an effective ‘buffer zone’ of 100 m extendable to 200 m. This is a protected area which may, nevertheless, include a paved pedestrian promenade and public service access covering the first 20 m back from the shoreline. Otherwise the area is
Figure 3 Zones designated by the *Ley de Costas* (Shores Act)
designated a *zona verde* (‘green zone’) in which some leisure uses such as camping and golf can be accepted. Beyond this zone in non-urban areas is a further 500 m strip in which development is restricted.

Further restrictions and prohibitions apply to each of the zones. Of particular relevance is the restriction on residential building, roads (apart from those for access), extractive activity, overhead power-lines, and advertising publicity. Moreover, commercial beach services are restricted up to 20 m from the shore. Of course, along large stretches of the Spanish coast, including much of the Costa del Sol, building already exists to the shoreline. Where building rights are already held, owners can continue subject to the 20 m easement. Beyond the 20 m zone, the Act does not apply to land urbanised prior to 29 July 1988 provided that constructions were legally built, in which case acquired rights were to be respected for the period of any lease, even though no building extensions were to be allowed (Ministerio de Obras Publicas y Transportes (MOPT), 1991). However, where buildings were illegally built, they would be subject to removal unless it were possible to show that they were in the public interest, in which case they could be legalised in retrospect.

The most recent administrative reorganisation has been the 1996 creation of a new Ministry for the Environment to which was transferred the Dirección General de Costas (Coasts Administration). This move from its former location within MOPU recognises the shift of emphasis away from infrastructural work and towards the overseeing of the broader coastal environment as encapsulated by the *Ley de Costas* and, theoretically, at least allows for a more sensitive approach to coastal planning. Now that environmental considerations have become the central focus, the emphasis is one of restitution or recuperation of the coast. For the first time, the *dominio público marítimo–terrestre* (public shoreline fringe) is being officially designated both on government maps and plans and physically marked with posts on the ground, while the *Ley de Costas* provides the necessary limitations on concessions within the controlled area. The Act also requires that the coastal municipalities comply with the new provisions when effecting their urban plans. The situation at the beginning of the new millenium is that five distinct activities in respect of the coast now come under the purview of the Dirección General de Costas. These are described by M.O.P.T. (1998) as follows.

1. **Boundary designation.** As noted earlier, this is concerned with defining those parts of the coast that form part of the public domain under the Act. As well as a legal requirement, this provides the first step in the protection or defence of vulnerable areas. Initially planned for completion within a 10-year period from the enactment of the *Ley de Costas*, this was not achieved, although there has been a rapid acceleration in activity since 1997. As far as southern Spain is concerned, boundary designation work is much more conspicuous in parts of the provinces of Huelva and Cádiz (Figure 1), that is those areas that largely escaped the early tourism-based urbanisation of Málaga province immediately to the east.

2. **Power of Sanction.** This allows the Dirección to take action against those abusing the public domain in a wide range of activities that impinge directly on both the physical integrity of the coast and recreational activities. Thus, the unauthorised extraction of materials (sands, gravels, etc.) that might
compromise marine processes can be controlled, as can unauthorised construction work, vehicle parking and camping. Almost 6000 prosecutions resulted in the first two years of operation alone and fines have been levied on defaulters.

(3) **Overseeing of urban plans.** The Dirección is responsible for ensuring plans comply with the Act and thus municipalities’ intentions are examined in respect to whether the sea-front harmonises with the various land-use, access provision and building restrictions.

(4) **Granting of title to use the public domain.** Certain activities, particularly concerning health and public safety, require proximity to the shoreline and the Dirección has power to grant title in these cases. Sanitation facilities fall into this category and upgraded units at Sorvilán and Motril in Granada province have been granted title (Figure 1). The growing problem of ensuring sufficient fresh water supplies underpins permission for a desalination plant at Marbella, again within the public domain.

(5) **Coastal projects.** Finally, the Dirección will assist developments to improve the infrastructure, provided that the law is respected in terms of provision of transit rights and recognition of the public domain and that the work does not promote urban expansion. Improvements to promenades come under this heading, as do the various other works of coastal protection that have traditionally been this authority’s responsibility, namely breakwater construction, cliff protection and beach stabilisation, together with the more strictly environmental concerns of dune, marsh and wetland conservation and recuperation of degraded coasts.

The Legislation in Practice

Evidence of willingness to implement policy rather than sitting on the sidelines while development proceeded actually predates the passing of the *Ley de Costas*. The beaches of the Costa del Sol had, for many years, been characterised by the presence of chiringuitos (restaurants and bars) as well as a number of other commercial activities directed mainly to the hiring of recreational equipment for use on both beach and water. Many of these had no legal title and raised important issues about the use of public property, restrictions of access and potential health hazards. In particular, official objections were based upon the restrictions on the beach area available to the public, the reduction in aesthetic or scenic amenity and the vital health consideration of burying of rubbish and sewage effluent in the sand (MOPT, 1993). It was also appreciated that there was an impact upon the seasonal profile of the beach and thus an interference with erosion processes.

MOPU’s report upon its activities to re-establish public control over the beaches of the Costa del Sol (MOPU, 1988) referred to the ‘anarchic proliferation’ of huts and commercial premises along the Spanish beaches. Fishermen’s shacks were typical of the two westerly provinces of Cádiz and Huelva, whereas illegally located chiringuitos and other commercial enterprises were the principal source of the problem in the more tourism-dominated provinces of Almería, Granada and Málaga (Figure 1). Almost 400 chiringuitos had been erected during the era of tourism expansion in Málaga Province alone. Their distribution
naturally accorded with business opportunities in that province and thus concentrated on the tourist hot-spots of Torremolinos, Marbella, Fuengirola and Estepona (Table 1, Figure 2). With an average size of 325 m², they caused a substantial intrusion on beach space in those municipalities. In the absence of legal title in all but 15 cases, almost one-quarter (23%) were removed altogether, whereas a further 42% were forced to relocate outside the beach area (MOPU, 1988). The remainder received authorisation to remain on an annually renewable lease but a prefabricated, sectional construction was required to permit their removal out of season. In practice, removal has not generally occurred with owners arguing on the grounds of difficulty of moving premises, while the extension of the season in recent years provides a stronger business logic to remain in situ. Nevertheless, on balance there has been a marked opening up of the area of the sands available for general public use, together with sand levelling and hygiene improvements through sand aeration following cesspit removals. Regular cleaning operations and zoning for commercial and non-commercial uses have, undoubtedly, improved the beach environment in all the major resorts, albeit with some antagonism generated in the business community through its enforced compliance to the new regulations (Malvárez et al., 2002).

Table 1 The location of chiringuitos in Málaga Province, 1988

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Number</th>
<th>Municipality</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algarrobo</td>
<td>2</td>
<td>Mijas</td>
<td>17</td>
</tr>
<tr>
<td>Benalmádena</td>
<td>17</td>
<td>Nerja</td>
<td>13</td>
</tr>
<tr>
<td>Estepona</td>
<td>26</td>
<td>Rincón de la Victoria</td>
<td>22</td>
</tr>
<tr>
<td>Fuengirola</td>
<td>43</td>
<td>Torremolinos</td>
<td>85</td>
</tr>
<tr>
<td>Málaga</td>
<td>53</td>
<td>Torrox</td>
<td>21</td>
</tr>
<tr>
<td>Manilva</td>
<td>10</td>
<td>Vélez Málaga</td>
<td>39</td>
</tr>
<tr>
<td>Marbella</td>
<td>47</td>
<td>All municipalities</td>
<td>395</td>
</tr>
</tbody>
</table>

Source: MOPU (1988)

Control of Urban Development

Whereas effective management of the beach zone was already being put in place by the time of the passing of the Ley de Costas, actions behind the shore-line have met with more limited success. Few localities are more appropriate for studying the impact of the new legislation and coastal management structures upon development than the municipalities situated at the western extremity of Málaga Province (Figure 2). Until recent years the two municipalities of Casares and Manilva had escaped any noteworthy urban development of their coastlines (Marchena Gomez, 1987). In part this may be explained by a complex landholding structure of small properties discouraging development, and an indifference in earlier years of the governing Izquierda Unida (United Left) to tourism development. However, more pertinent is their distance from Málaga’s international airport, the principal point of entry for foreign tourists to the Costa del Sol. The main coastal highway, the N340 (Figure 2), provided a dual carriageway as
far as Estepona, a distance of approximately 85 km from the airport. Even a journey as far west as this required negotiation of the intervening urban settlements and inevitable congestion until the opening of a series of by-passes between Torremolinos and Estepona brought the latter resort to within an hour of the airport by the end of the 1990s. The construction of an additional motorway paralleling the coast reached Estepona by 2001 (Figure 2), further facilitating access to the west. The last remaining major gap in the road infrastructure will be closed with the provision of a dual carriageway system on the original N340 road between Estepona and Guadiaro. That is due for completion in 2003, and will bind inextricably the municipalities of Casares and Manilva into the tourist nexus of the Costa del Sol.

In anticipation of these developments, urbanisation along the coasts of both Casares and Manilva is already well advanced. Of the two municipalities, it is the latter which is most affected by virtue of its longer coastline, which also significantly includes a long sandy foreshore comprising the beaches of Las Arenas, El Negro, Los Toros, La Duquesa and Sabinillas (Figure 4). These account for over 80% of the coastline of Manilva and represent the last major untapped beach resources in the Province. In many respects their future development has the potential to mirror that of the earlier resorts of the Costa del Sol. As at Caribueza (Torremolinos), El Palo (Málaga) and Marbella, initial occupation of the shoreline was restricted to small fishing communities at San Luis de Sabinillas and Castillo with the main economic focus based upon the agricultural pueblo situated inland at Manilva itself. The population of the municipality in 1981 was 3779, a figure that had shown some volatility during the century, but nevertheless was no more than 520 higher than it had been in 1900 (Diputación Provincial de Málaga, 1989).

At the start of the 21st century population has already grown by a further 40% (Instituto de Estadísticas de Andalucía, 2002) but the present infrastructure of hotels and catering establishments remains quite limited showing no more than the incipient development typical of the early stages of resort growth. Two hotels with a capacity for 234 guests are to be found, in addition to four guest-houses capable of boarding a further 43 visitors, while two camp-sites complete the accommodation provision. The focus of much of this development is the marina and golf-course at La Duquesa (Figure 4). Whereas the hotel sector remains quite weak, a number of urbanizaciones (private, serviced housing estates) have been constructed as retirement homes, second homes or for rent to visitors. A number of these date back to the 1970s and 1980s (Table 2) and, as such, they can be linked to the 1973 Plan General de Ordenación (Development Plan). However, the urban development process was neither massive nor continual at that time, with major breaks occurring especially over the years 1980–85. It is during the period of the current (1990) Plan General de Ordenación that the rate of construction has escalated but only from the late 1990s as the projected improved road links moved towards implementation (Table 2). At the start of 2002 less than 10% of the coastal strip has not been sold out of agricultural use, so that the 7 km of Manilva’s beaches are virtually continuously backed by actual or projected urban development from Punta Chullera to the boundary with Casares municipality in the east (Figure 4). As a result, the Manilva coastline is well on the way to replicating the remainder of the Costa del Sol in respect of human occupation of the coastline,
Figure 4 The urban development of Manilva Municipality
although the development pattern is more reminiscent of the urbanizaciones of Estepona than the high-rise developments further east (Barke & France, 1996). The precise siting of the new development, which approaches the shoreline to the maximum extent permissible, is particularly relevant in the context of expectations under the Ley de Costas. Nowhere was the opportunity taken to establish a buffer zone of 100 m, let alone the 200 m ‘green zone’ or 500 m set-back area which might have been implemented in a formerly undeveloped area. The protected zone has, in fact, been reduced to its legal minimum of 20 m to provide for a paseo marítimo (promenade) and access of public service, including emergency, vehicles. Yet there has been no bending of the law here, for this land had already been designated urbanizable as long ago as the 1973 Plan. A prescient Town Hall had, at that time, foreseen the potential for this stretch of coast to follow in the footsteps of municipalities further east, and had accordingly catered to future developers’ needs. Even if the land had not been so designated at that earlier date, there is little in town planning legislation to prohibit re-zonation from rural to urbanizable, so that an extensive buffer zone at any point along the Mediterranean coast is, in most instances, illusory. Only where

### Table 2 Tourism-based urban development in Manilva Municipality, Málaga Province

<table>
<thead>
<tr>
<th>Period</th>
<th>Urbanización</th>
<th>Other Tourist Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971–75</td>
<td>Punta Chullera&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Los Hidalgos&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Hacho&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1976–80</td>
<td>Jardín Tropical Playa Gobernador Tubalitas</td>
<td>Hotel Puerto de la Duquesa</td>
</tr>
<tr>
<td>1981–85</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>1986–90</td>
<td>Princesa Kristina Hacienda Guadalupe El Tábaro Duquesa Golf Villas&lt;sup&gt;c&lt;/sup&gt; El Manantial&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1991–95</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>1996–</td>
<td>Loma del negro&lt;sup&gt;d&lt;/sup&gt;</td>
<td>El Tábaro Golf Course Magic Hills Golf Courses (2) and Park</td>
</tr>
<tr>
<td></td>
<td>El Duque</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bahía de los Rocos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aldea Hills/Lama Blanca</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jardín tropical (ext.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Tábaro (ext.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Magic Hills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Los Hidalgos (ext.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Rondana</td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Molina</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Prior to 1973 Plan.
<sup>b</sup> Post 1973 Plan.
<sup>c</sup> 1990 Plan operational from October of that year.
<sup>d</sup> Not yet implemented.
environmentally sensitive areas have been officially designated are enforceable restrictions or prohibitions in order. None such exists along the Manilva shoreline. Now that the coast has been effectively urbanised, attention is being directed inland where larger agricultural properties are providing the foundation for golf-course, theme park and villa developments in juxtaposition with the new motorway infrastructure.

Although construction along the Manilva coastline hardly reflects the spirit of the *Ley de Costas*, the latter has been effective in controlling, and indeed reversing, development on the public domain. The case of the *chiringuitos* has been previously mentioned, and Málaga Province has been at the forefront in actions to clear its beaches under the forceful leadership of the head of its Dirección de Costas (Coastal Administration). More widely publicised has been the case of El Gran Hotel de Atlanterra, near Zahara de los Atunes in the Tarifa municipality of Cádiz Province (Figure 1), which has been heralded as something of a *cause célèbre* in the efforts of the Ministry of the Environment to reclaim the public domain. The demolition of that hotel at the beginning of 2002 has been described as ‘bringing down the major monument to urban aggression’ and thus putting a brake on this ‘urban invasion of the coast’ (*ABC*, 11 January 2002: 38). As a building of nine stories and 45,000 m$^2$, its removal (detonated by the Minister of the Environment himself) is not without a certain symbolic value in the application of the *Ley de Costas*. It is especially significant in reflecting a growing willingness to apply the law rather than turning a blind eye, particularly if the promised removal of similarly sited illegal constructions takes place (*El Sur*, 18 January 2002: 68).

However, the demolition of El Gran Hotel is not an indication that urban development of the coast is now under control and that building will be significantly restricted under prevailing legislation. For this hotel, situated as it was on the public domain, had been illegal since its building began in 1970. Litigation over its future had, in fact, proceeded for most of its life: it had consequently never opened to the public, while the owners (who did receive compensation for the demolition) are constructing a new luxury hotel some 200 m from the original building (*El País*, 11 January 2002: 5). The new location will be better integrated with the apartment blocks and *urbanizaciones* that have proliferated in Atlanterra in recent years, but those new estates have themselves been subject to criticism for their obtrusive location on the shoreline, and allegations that their building resulted from corrupt planning procedures. In those cases licences were awarded for apartment building on *urbanizable* rather than urban land and against rulings of the regional court, the *Tribunal Superior de Justicia de Andalucía* (*El País*, 11 January 2002: 5). However, the *Ley de Costas* is not applicable in this instance as the land is not public domain and there is little indication that the regional government is about to revoke earlier land zonation decisions, however questionable.

**Conclusion**

The final two decades of the 20th century witnessed the integration of environmental considerations into planning procedures that apply to all parts of Spain. In particular, the appearance of explicit consideration of the coastal environment represents a focus that many would argue was urgently needed in the aftermath
of the rapid and uncontrolled urbanisation of the ‘development era’ that began in the 1950s and extended well beyond the demise of authoritarian government. Unfortunately this earlier development has thwarted good intentions by limiting opportunities to implement major environmental improvements in built-up areas. Notwithstanding, there has been substantial investment in specific projects, such as promenade construction and the enhancement of beach conditions and services to more exacting European Union standards, all of which have raised the environmental quality of many sea-fronts. Such is exemplified by the popular Costa de Sol resorts of Torremolinos and Marbella and is replicated elsewhere on Spain’s Mediterranean continental coastline (Vera Rebollo, 2001) and the Balearic Islands (Buswell, 1996). Furthermore, noteworthy improvements to sea-water quality have taken place (Kirkby, 1996), and expenditure on coastal protection measures has been heavy, although the means used to control the forces of erosion are still a matter of debate (Malvárez García et al., 2000).

Legislation in the form of the Ley de Costas together with the activities of the government department responsible for the administration of coastal affairs clearly reflect a sea-change in both official and public attitudes to the coast. The casual abuse of planning regulations and social infrastructure requirements of earlier times have been held in check, and illegal building within the public domain is no longer ignored. Such progress reflects a change in attitudes towards the law and a growing official intolerance of the worst environmental excesses in the face of development prerogatives, and provides evidence of the ‘message of sustainability’ having at last been heard (Stabler, 1997).

Despite these undoubted successes in promoting ‘a better balance between environmental quality and economic efficiency’ (Robinson, 1996), it must be recognised that continued urban development of the coast up to the very limits of the shoreline is, in any practical sense, difficult to tackle effectively. Most construction during the ‘development era’ took place perfectly legally on land that was designated urbanizable (or re-zoned as such by municipalities compliant to developers’ wishes). The Ley de Costas is impotent to act retrospectively in those circumstances. However, it is of greater concern from a forward-looking perspective, that almost unrestricted development can continue to occur, using the simple expedient of the redrawing of the urban plan. Where economic interests persist in taking precedence, plans submitted to the regional government for final approval are unlikely to be turned down unless territory has been declared espacio protegido (protected ground), that is protected by virtue of National/Natural Park or other environmental designation. At present such land is very restricted on the Mediterranean coast of southern Spain, the major exceptions being the marshlands of the Doñana National Park at the mouth of the Guadalquivir and the Natural Park of Cabo de Gata-Níjar (Figure 1). The core of the Costa del Sol lies in Málaga Province, wherein the only protected areas are the Cliffs of Maro east of Nerja and the mouth of the Río Guadalhorce between Málaga and Torremolinos (Figure 1). There have been no successes in controlling development interests along the lines reported by Morris (1996) with the establishment of a regional park in what remains of the wetlands of Castello in Catalonia.

The overall situation is thus one of some improvements to environmental quality and public access in already urbanised areas but little realistic prospect of
significant recovery of coastal land to the public domain. At the same time, any brake on urban development elsewhere is unlikely within the present legal framework, even to the extent of implementing buffer zones between the building line and the coastal margin. Thus, the more wide-ranging expectations for the impact of the *Ley de Costas* seem destined for disappointment, at least in this part of Spain. Consequently, limitations will continue to be imposed on the maintenance of a quality environment for the enjoyment of citizens and visitors alike.

It might be argued that it is in the context of southern Spain’s visitors and the region’s tourism interests that pressure for further coastal protection may come. The precise part played by an attractive coastline in the potential visitor’s decision-making process can be disputed, but it cannot be gainsaid that the role of tourism in the Spanish economy demands the maintenance of a competitive global position. Consequently, the country is in no position to afford any undermining of its image through the degrading of such a prime resource. To date, significant efforts that are made to improve that image tend to be geographically limited to the resorts themselves, and therefore provide evidence of a strong economic underpinning to an environmental rehabilitation that aims to sustain local investment interests. Such would be typical of the efforts made by municipalities on the Costa del Sol supported by the *Patronato Provincial de Turismo* (Barke & France, 1996). The extrapolation of such thinking to safeguard the environment along less developed stretches of the coast is insufficiently supported in the Town Halls where planning responsibility lies. Although the capacity exists to overrule decisions at the regional level, there is little tendency to do so provided that municipal plans are legally sound. Thus the economic directive and development prerogative still dominate. It is true that pressures on the environment of the undeveloped areas are unlikely to come from any expansion of mass tourism, but those pressures are not diminished for that. In their stead, they are replaced by the expansion of the more residential type of tourism that derives from an increasingly affluent European hinterland that promotes a ‘gravitational shift of population to the coast’ (Buswell, 1996) through demand for second-home ownership, coastal retirement homes, golf courses and support services. All are extensive users of land and will inexorably increase demand for high quality coastal locations, a demand that is satisfied by local authorities eager to maximise their local tax revenues. While development may be less disorderly and aesthetically offensive than in the past, it seems unlikely that it will take sufficient cognizance of the best concepts embodied in the coastal legislation without a significant attitude shift within municipal planning circles, or an extension of protected area status that might otherwise control present economic and social pressures for urban expansion to the very margins of the coastline.

**Correspondence**

Any correspondence should be directed to John Pollard, School of Biological and Environmental Sciences, University of Ulster, Coleraine, N. Ireland BT52 1SA.

**References**


Junta de Andalucía (annual) *Boletín de Indicadores Turísticos de Andalucía.* Sevilla: Dirección General de Planificación Turística, Junta de Andalucía.


