5. The coast, land use, and the law

The previous chapters demonstrate that the coastal zone is a dynamic area where land, wind, wave, and organisms interact. The resulting rapid changes are especially apparent on barrier islands. We cannot build and live in this zone without some level of interference, or without risking the negative impacts brought about by natural changes.

Coastal dynamics preclude shoreline and island development patterned after traditional inland styles. A 1-story, ranch-style house at the back of the beach will block wind transport of sand, interfere with overwash, and ultimately behave as a seawall before being destroyed in its turn by storm waves and flooding. This traditional design in this dynamic zone would have a much shorter life expectancy than the same house in an inland location. The services for this house and many like it (for example, electric lines, gas mains, water lines), the sewage generated, and the roads, bridges, and service structures required for such development will exceed the carrying capacity of a barrier island much quicker than for a similar inland community. The resulting damage to the environment through pollution, loss of habitat, stabilization structures, and the like removes the amenities that most shore dwellers originally came to enjoy. Not only aesthetic value is lost, but the risk from coastal hazards is increased.

Wise land-use planning, environmental maintenance, and conservation of the coastal zone are necessary to protect the environment. But just as significant, they are necessary to protect ourselves. The ecosystem is as important to the human population as it is to a population of pelicans or a stand of sea oats. Curiously, laws are passed to protect the latter with the goal of protecting the former—sometimes from ourselves.

Population growth, affluence, and migration to the Sun Belt will necessitate increased regulation of the coastal zone. Florida's coastal population is expected to approach 10 million by the year 2000. By analogy, as the traffic increases, more traffic laws and regulations are required to avoid the certainty of traffic jams.

The best philosophy on shoreline development is that land use should be in harmony with the natural environments and processes that constitute the system. Of course, various segments of society view the coastal zone differently. The extreme views range from untouched preservationism to unplanned, uncontrolled urbanization. Increasingly, decisions on land use are made by governments under the pressure of various special interest groups. Existing legislation is often that of compromise, satisfying the various federal, state, and local levels of the political infrastructure. We can expect that regulations will continue to be established and modified with the intention of ensuring reasonable, multiple land use of the coastal zone, while attempting to protect both inhabitants and the natural environment. Developers have had this expectation in the past, and in some cases it has spurred unwise development.
That is, buildings have been constructed before tighter restrictions could go into effect. Current and prospective owners of coastal property, especially on barrier islands, should be aware of their responsibilities under current law and expect additional regulation with respect to development and land use.

A trip along Highway A1A demonstrates the inconsistency with which communities have approached coastal development. Like the New Jersey shore, southeast Florida’s coast is nearly continuous urban-suburban development. The same trend is apparent along most of Florida’s Atlantic coastline. One often does not need signs to denote community boundaries; they are apparent by the sharp contrasts in types of buildings and their position with respect to beach and dunes (if the latter are still present). A county ordinance limiting buildings to 4 stories is of little consolation if you live on the last lot next door to the county line, across which are clusters of high-rise buildings! The same is true for beach protection. It is not a curiosity of nature that the character of the beach and associated dunes often changes at or near community boundaries. Such changes reflect differences in land-use policy and regulations.

A partial list of relevant current land-use programs and regulations applicable to the Florida coast follows. The explanations provided are general and introductory in nature; appendix B lists the agencies that will supply more specific and detailed information. The regulations listed here range from federal laws that protect the interests of the larger society to state and local laws and ordinances that serve the interests of Florida citizens and the local community. A review of these regulations before investing in or undertaking property development anywhere on the coast will be in your best interest. We recommend that you contact your local county or municipal planning, zoning, or building departments to determine state and federal permit requirements.

**Coastal Barrier Resources Act of 1982**

Recognizing the serious hazards, costs, and problems with federally subsidized development of barrier islands, the U.S. Congress passed the Coastal Barrier Resources Act (Public Law 97-348) in October 1982. The purpose of this federal law is to minimize loss of human life and property, wasteful expenditure of federal taxes, and damage to fish, wildlife, and other natural resources from incompatible development along the Atlantic and Gulf coasts. The act covers 190 designated areas, covering 700 miles of undeveloped barrier beaches in the United States.

Specifically, the act prohibits the expenditures of federal funds, including loans and grants, for the construction of infrastructures that encourage barrier island development; these infrastructures include roads, bridges, water supply systems, waste water treatment systems, and erosion control projects. Any new structure built on these designated barrier islands after October 1, 1983, is not eligible for federal flood insurance. Certain activities and expenditures under the act are permissible. The act does not prohibit private development on the designated barrier islands, but it passes the risks and costs of development from taxpayers to
owners. All applicable federal, state, and local permits still must be obtained before any development begins in the designated areas.

The Coastal Barrier Resources Act affects all or part of 33 of Florida's barrier islands covering 110 miles of ocean beaches (Table 5.1). For exact boundaries of the designated areas, contact local city or county planning departments or the Florida Coastal Zone Management Program Office (appendix B).

**National Flood Insurance Program (NFIP)**

Florida's barrier beaches are prone to flood damage from hurricanes and tropical storms. The probability of a hurricane striking Florida's coastline is very high, up to 1 hurricane every 1.5 years. During hurricanes, storm surge and wave heights reach 12 to 20 feet above normal, and winds of 100 to 150 miles per hour are not uncommon. Between 1900 and 1980, hurricanes inflicted approximately $1.5 billion worth of damage in the Florida coastal zone. However, this figure is misleading because it is not in terms of today's inflated dollar. Given the present heavily developed Florida coasts, a single moderate hurricane could match or exceed this level of destruction!

The National Flood Insurance Act of 1968 (P.L. 90-448) as amended by the Flood Disaster Protection Act of 1973 (P.L. 92-234) was passed to encourage prudent land-use planning and to minimize property damage in flood-prone areas like barrier beaches. Local communities must adopt ordinances to reduce future flood risks in order to qualify for the National Flood Insurance Program. The NFIP provides an opportunity for property owners to purchase flood insurance that generally is not available from private insurance companies.

The initiative for qualifying for the program rests with the community, which must contact the Federal Emergency Management Agency (FEMA). FEMA will provide the community with a Flood Hazard Boundary Map (FHBH). Any community may join the National Flood Insurance Program provided that it requires development permits for all proposed construction and other development within the flood zone and ensures that con-
struction materials and techniques are used to minimize potential flood damage. At this point the community is in the “emergency phase” of the NFIP. The federal government makes a limited amount of flood insurance coverage available, charging subsidized premium rates for all existing structures and/or their contents, regardless of the flood risk.

FEMA may provide a more detailed Flood Insurance Rate Map (FIRM) indicating flood elevations and flood-hazard zones, including velocity zones (V-zones) for coastal areas where wave action is an additional hazard during flooding. The FIRM identifies Base Flood Elevations (BFEs), establishes special flood-hazard zones, and provides a basis for floodplain management and the establishing of insurance rates.

To enter the regular program phase of the NFIP, the community must adopt and enforce floodplain management ordinances that at least meet the minimum requirements for flood-hazard reduction as set by FEMA. The advantage of entering the regular program is that increased insurance coverage is made available, and new development will be more hazard-resistant. All new structures will be rated on an actual risk (actuarial) basis, which may mean higher insurance rates in coastal high-hazard areas but generally results in a savings for development within numbered A-zones (areas flooded in a 100-year coastal flood, but less subject to turbulent wave action).

FEMA maps commonly use the 100-year flood as the BFE to establish regulatory requirements. Persons unfamiliar with hydrologic data sometimes mistakenly take the 100-year flood to mean a flood that occurs once every 100 years. In fact, a flood of this magnitude could occur in successive years, or twice in one year, and so on. The flooding in Jackson, Mississippi, that has occurred over the last few years illustrates this point. If we think of a 100-year flood as a level of flooding having a 1 percent probability of occurring in any given year, then during the life of a house within this zone that has a 30-year mortgage, there is a 30 percent probability that the property will be flooded. The chance of losing your property becomes 1 in 4, rather than 1 in 100. Having flood insurance makes good sense.

In V-zones, new structures will be evaluated on their potential to withstand the impact of wave action, a risk factor over and above the flood elevation. Elevation requirements are adjusted, usually 3 to 6 feet above still-water flood levels, for structures in V-zones to minimize wave damage, and the insurance rates also are higher. When your insurance agent submits an application for a building within a V-zone, an elevation certificate that verifies the post-construction elevation of the first floor of the building must accompany the application.

The insurance rate structure provides incentives of lower rates if buildings are elevated above the minimum federal requirements. General eligibility requirements vary among pole houses, mobile homes, and condominiums. Flood insurance coverage is provided for structural damage as well as contents. Table 5.2 presents Florida’s coastal counties that are participating in the National Flood Insurance Program as of August 1981. Almost all coastal communities with barrier beaches are now covered under the regu-
## Table 5.2. Flood insurance policies in coastal counties of Florida (as of August 31, 1981)

<table>
<thead>
<tr>
<th>County</th>
<th>Regular (R) or emergency (E) program</th>
<th>Policies in effect</th>
<th>Dollar value of policies</th>
<th>County</th>
<th>Regular (R) or emergency (E) program</th>
<th>Policies in effect</th>
<th>Dollar value of policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counties with barrier islands and beaches</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Counties without barrier islands and beaches</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bay</td>
<td>R</td>
<td>4,005</td>
<td>222,805,400</td>
<td>Citrus</td>
<td>E</td>
<td>1,358</td>
<td>47,419,600</td>
</tr>
<tr>
<td>Brevard</td>
<td>R</td>
<td>18,294</td>
<td>1,419,068,800</td>
<td>Dixie</td>
<td>E</td>
<td>175</td>
<td>4,284,000</td>
</tr>
<tr>
<td>Broward</td>
<td>R</td>
<td>111,354</td>
<td>7,075,675,400</td>
<td>Hernando</td>
<td>E</td>
<td>625</td>
<td>20,663,600</td>
</tr>
<tr>
<td>Charlotte</td>
<td>R</td>
<td>8,865</td>
<td>423,679,850</td>
<td>Jefferson</td>
<td>E</td>
<td>12</td>
<td>297,800</td>
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<tr>
<td>Collier</td>
<td>R</td>
<td>13,900</td>
<td>785,170,200</td>
<td>Levy</td>
<td>E</td>
<td>231</td>
<td>7,211,600</td>
</tr>
<tr>
<td>Dade</td>
<td>R</td>
<td>95,424</td>
<td>5,130,950,800</td>
<td>Levy</td>
<td>E</td>
<td>11,576</td>
<td>408,839,800</td>
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<td>Duval</td>
<td>R</td>
<td>4,373</td>
<td>319,556,800</td>
<td>Taylor</td>
<td>E</td>
<td>111</td>
<td>3,910,300</td>
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<tr>
<td>Escambia</td>
<td>R</td>
<td>4,495</td>
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<td>Flagler</td>
<td>E</td>
<td>655</td>
<td>23,842,600</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Franklin</td>
<td>E</td>
<td>1,000</td>
<td>36,737,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gulf</td>
<td>E</td>
<td>389</td>
<td>11,117,000</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hillsborough</td>
<td>R</td>
<td>13,447</td>
<td>788,578,800</td>
<td></td>
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<tr>
<td>Indian River</td>
<td>R</td>
<td>4,601</td>
<td>43,623,400</td>
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<td></td>
</tr>
<tr>
<td>Lee</td>
<td>R/E</td>
<td>33,608</td>
<td>1,346,771,400</td>
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<tr>
<td>Manatee</td>
<td>R</td>
<td>10,549</td>
<td>577,315,000</td>
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<tr>
<td>Martin</td>
<td>R</td>
<td>5,916</td>
<td>285,064,200</td>
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<tr>
<td>Monroe</td>
<td>R</td>
<td>17,934</td>
<td>780,522,200</td>
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<tr>
<td>Nassau</td>
<td>R/E</td>
<td>753</td>
<td>37,482,800</td>
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<tr>
<td>Okaloosa</td>
<td>R/E</td>
<td>2,823</td>
<td>228,510,500</td>
<td></td>
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<tr>
<td>Palm Beach</td>
<td>R</td>
<td>47,334</td>
<td>3,527,099,000</td>
<td></td>
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<tr>
<td>Pinellas</td>
<td>R</td>
<td>57,019</td>
<td>3,132,366,200</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Santa Rosa</td>
<td>R</td>
<td>1,811</td>
<td>117,517,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarasota</td>
<td>R</td>
<td>16,467</td>
<td>889,767,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Johns</td>
<td>R</td>
<td>3,306</td>
<td>220,283,500</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>St. Lucie</td>
<td>R/E</td>
<td>6,134</td>
<td>233,698,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volusia</td>
<td>R</td>
<td>8,857</td>
<td>622,244,000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Wakulla</td>
<td>R</td>
<td>352</td>
<td>11,446,400</td>
<td></td>
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</tr>
<tr>
<td>Walton</td>
<td>R</td>
<td>1,156</td>
<td>73,556,400</td>
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</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>493,631</td>
<td>$28,683,128,700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compiled by Dinesh C. Sharma.

lar program. To determine if your community is in the NFIP and for additional information on the insurance, contact your local property agent or call the NFIP's servicing contractor (phone: (800) 638-6620), or the NFIP State Assistance Office at (904) 488-9210. For more information, request a copy of "Questions and Answers on the National Flood Insurance Program" from FEMA (see appendix B under Insurance).

Before buying or building a structure on a barrier beach, an individual should ask certain basic questions:

1. Is the community I'm locating in covered by the emergency or regular phase of the National Flood Insurance Program?
2. Is my building site located in the designated areas of the Coastal Barrier Resources Act, where no federal flood insurance for new structures will be available after October 1, 1983 (see table 5.1)?
3. Is my building site above the 100-year flood level? Is the site located in a V-zone? V-zones are high-hazard areas and pose serious problems.
4. What are the minimum elevation and structural requirements for my building?
5. What are the limits of coverage?

Make sure your community is enforcing the ordinance requiring minimum construction standards and elevations. After Hurricane Frederic (1979) a number of homeowners from Santa Rosa County, whose houses were flooded, put in claims for federal flood insurance. It developed that on direct order from the county commissioners the elevation requirements for insurance were not being enforced by the county. One woman who had paid $158 per year for her insurance discovered she should have been paying over $13,000 a year because her house was 5 feet below the 100-year flood level. Prior to construction, her house plans had been approved by the county and no mention was made of the elevation problem. Before payment of her $17,000 claim, the National Flood Insurance Program subtracted her correct $13,000 premium. Later all parties agreed on a lower, but still substantial figure for flood insurance premiums. More than 20 people in the National Flood Insurance Program in the local community were forced to continue paying exorbitant insurance premiums for buildings built below the required elevation because the banks that held their mortgages insisted on it. All of this cost and confusion because county officials said nothing about flood elevations when issuing permits. The then-incumbent county commissioners fared very poorly in the next election!

Most lending institutions and community planning, zoning, and building departments will be aware of the flood insurance regulations and can provide assistance. It would be wise to confirm such information with appropriate insurance representatives. Any authorized insurance agent can write and submit a National Flood Insurance Program policy application. All insurance companies charge the same rates for national flood insurance policies.

The National Flood Insurance Program states its goal as "to encourage state and local governments to make appropriate land use adjustments and to constrict the development of land
which is exposed to flood damage and minimize damage caused by flood losses” and “to ... guide the development of proposed future construction, where practical, away from locations which are threatened by flood hazard.” To date, development in the flood-hazard areas continues at a rapid rate.

Revision of minimum flood elevations in the V-zones of coastal counties takes into account the additional hazard of storm waves atop still-water flood levels. Existing FEMA regulations stipulate protection of “dunes and vegetation” in the V-zones, but implementation of this requirement by the local communities has not always been strong. The existing requirements of the NFIP do not address other hazards of “migrating” shorelines, for example, shoreline erosion or shifting of inlets. Thus, buildings may meet the minimum FEMA elevation requirements but at the same time can be located near highly exposed and eroding shorelines. In addition, to recognizing the flood hazard, the need exists to incorporate location and structural codes that reflect migrating shorelines, hurricane winds, wave uplift, horizontal pressures, and scouring to minimize the loss of structures as well as the dollars that have supported the insurance program. This is not to say that state and local codes and ordinances have overlooked the latter.

In the past the National Flood Insurance Program has been subsidized and has grown to become a large federal liability. As of August 31, 1981, more than 1.918 million flood insurance policies valued at $97.972 billion had been sold nationwide. Coastal counties had 1.165 million of these policies valued at $64.667 billion. Florida had more policies and coverage than any other state—531,091 policies valued at $30.563 billion along the coastal counties with beaches (table 5.2). During 1978–79 the average premium for federal flood insurance policies located in velocity zones was $131 a year. Because of Hurricane Frederic, the average expense and loss per policy was $422, making it a costly subsidy for the nation’s taxpayers. Such losses have encouraged the addition of requirements on wave heights to flood elevations and a major revision of the insurance rating system. As a result, insurance rates have been raised significantly.

Recognition of natural hazards and tax subsidy problems provided part of the rationale for Congress to pass the Coastal Barrier Resources Act in 1982. There is an urgent national need to address the problems of developed or developing barrier beaches that were not covered in the act in order to minimize hazards to human lives and loss of property in these areas. Incentive programs to encourage sound land-use planning, limit density of development, improve hurricane evacuation, and allow relocation of damaged structures after hurricanes need to be developed before a disaster hits the coast.

Tarpon Springs on the West Florida coast holds the distinction of having been the first community removed from the NFIP for not abiding by its agreements. Fortunately, the removal was only temporary and the community was reinstated to the program after improving its ordinance language and application forms, stiffening variance procedures, and adding to the staff responsible for administering the program.

Clearly, FEMA is serious about enforcement. If a community is removed from the program, the result is that property owners cannot renew their flood insurance when it expires or buy new
policies. Several other communities in Florida are probably in violation of flood insurance requirements and will face loss of insurability if they do not begin to enforce the program's requirements. One of the most common violations that local officials have ignored is the enclosing of ground-level portions of cottages and using them as parts of residences.

There are 2 ways the property owner is likely to get caught if he or she is in violation of the construction requirements. First, FEMA sends out inspectors periodically to see if communities are in compliance. Second, if you file a claim after storm flooding and damage, your property will be inspected. If your structure was in violation of construction requirements, you will be required to pay additional back premiums that could equal and even exceed the amount of the insurance claim. This has happened in Galveston Island, Texas.

Two points are clear. First, the property owner cannot rely solely on the developer, building inspector, or county commissioners to enforce the community ordinances required to qualify for and stay in the NFIP. Second, given the likelihood that developers will be long gone when the question of compliance arises, town and county officials are likely to be held responsible for the inaction in local enforcement and become the defendants in legal actions; that is, elected officials may lose more than the next election for not doing their mandated jobs. In California a group of homeowners who lost their houses in a landslide are suing local officials, claiming they were not warned of the hazard. A homeowner who loses his flood insurance coverage because the developer or community official was irresponsible is likely to take similar action.

**Hurricane evacuation**

The Disaster Relief Act of 1974 authorized FEMA to establish disaster preparedness plans in cooperation with local communities and states. Hurricane evacuation is a critical problem on barrier islands and coastal floodplains. Due to heavy concentrations of population in areas of low topography, narrow roads, and vulnerable bridges and causeways, plus limited hurricane warning capability (possibly 12 hours or less), it would be impossible to evacuate all of the people prior to hurricanes in many parts of Florida.

Several coastal communities in Florida have formulated detailed hurricane evacuation plans. You should check for hurricane evacuation plans with the county Civil Defense or Disaster Preparedness officer and find out if any potential evacuation problems will exist during a hurricane. They can provide information on the location of hurricane evacuation shelters. These same agencies are responsible for providing emergency and relocation assistance after hurricanes. The Civil Defense office also can provide information on expected losses from hurricanes.

**The Florida Coastal Management Program (FCMP)**

The Federal Coastal Zone Management Act of 1972 (CZMA) set in motion an effort by most coastal states to manage their shorelines and thereby conserve a vital national resource. Key requirements of the CZMA are coastal land-use planning based on land classification and identification and protection of critical
areas. The intentions are to ensure good land use and resource development, conserve resources, and protect the quality of life for citizens of the coastal zone.

While some states passed specific acts to set up state offices of coastal zone management, Florida established a program based on existing state laws. More than 20 statutes serve as the authorities for the Florida Coastal Management Program under the Florida Coastal Management Act of 1978 (Chapter 380, Florida Statutes), which was approved by the federal office of Coastal Zone Management (now the Office of Ocean and Coastal Resource Management) on September 24, 1981. The Department of Environmental Regulation is the designated coastal zone management agency, but it works closely with the Departments of Natural Resources and Community Affairs in implementing the program. The Interagency Management Committee (IMC), consisting of heads of state agencies involved in resource management, was established to solve complex coastal problems through joint efforts between agencies. In addition, the governor’s Environment Land Management Study Committee (ELMS) and a legislative Growth Management Committee are reviewing Florida’s environmental laws and may suggest legislative or administrative changes that could affect the Florida Coastal Management Program. For specific information, contact the Office of Coastal Zone Management (see appendix B: Coastal Zone Management).

Various aspects of the program are included under the following state programs and acts.

Hazard mitigation

Under the authority of the federal Disaster Relief Act of 1974 (P.L. 93–288) and Florida’s Disaster Preparedness Act (Chapter 252, Florida Statutes), as well as other codes, the Bureau of Emergency Management is charged with responsibility for peacetime emergency planning. The purpose of emergency management is to improve public safety by protecting life and property in the event of natural or man-caused hazards. In the coastal zone these hazards include storms, hurricanes, flooding, overwash, shoreline erosion, erosion by shifting streams or channels (avulsion), including inlet migration, dune migration, pollution hazards, and so on (that is, the same hazards on which this book focuses). Hazard mitigation simply means reducing the likelihood of damage from such hazards through actions taken before the hazardous process occurs.

According to the state’s Comprehensive Emergency Management Plan these are the long-term goals of the state’s hazard mitigation effort:

Protection of life and property through the reduction and avoidance of unnecessary and uneconomical uses of hazardous areas.

Preservation and enhancement of beneficial uses of hazard-prone areas.

Protection of natural systems that serve a hazard moderating or mitigation function.
Attention is focused in particular on predictable, recurring hazards, like those noted above, and on seeking nonstructural solutions to hazard mitigation.

The Division of Public Safety Planning and Assistance, Department of Community Affairs, acts as a coordinating agency for developing policy, disseminating information on hazard mitigation, and making recommendations to other units of government. The agency also is responsible for site-specific hazard mitigation studies.

Community officials, planners, and individual property owners in the coastal zone should make use of the services of the Bureau of Emergency Management within the Division of Public Safety and Planning Assistance when evaluating site safety, seeking ways to reduce hazard impact, or planning strategies to meet hazard crises (for example, hurricane warning, evacuation, poststorm recovery).

Florida's Save Our Coast Program

The Coastal Barrier Resources Act of 1982 did not provide any funds for the acquisition of undeveloped barrier islands and beaches for public recreation, habitat protection, or hazard mitigation purposes. In 1981 Florida's governor and cabinet recognized the serious problems associated with the development of barrier islands and beaches such as loss of public access to beaches for recreation, economic losses due to severe erosion and flood damage, logistics for hurricane evacuation, disaster relief assistance costs, and subsidies for infrastructures. As a result, they started programs intended to protect and manage the barrier beaches. Under the $200 million Save Our Coast Program for acquiring undeveloped barrier island and beach properties, the state has a systematic process for the nomination and selection of parcels for purchase. Many of these land parcels are the same as those listed in table 5.1. This new program is in addition to the Conservation and Recreational Land (CARL) Program under which Florida acquires land for public use and recreation.

The governor of Florida signed an executive order to limit the expenditures of state funds for the construction of public infrastructures such as water and sewer systems, roads, bridges, and similar structures in certain hazardous coastal areas. If you plan to acquire or sell properties on a barrier island, it is advisable that you contact the governor's Office of Planning and Budgeting to determine if your property is located in one of the units where the executive order is applicable, or whether the state is interested in acquiring the land under the Save Our Coast Program or the CARL program.

Development of regional impacts

In 1972 the Florida Legislature enacted the Florida Environmental Land and Water Management Act of 1972 (Chapter 380, Florida Statutes) to address the problems of large-scale develop-
ments in the state. Under this law “any development because of its character, magnitude or location that would have substantial effect on the health, safety and welfare of citizens of more than one county” is considered a Development of Regional Impact (DRI). Types of projects include, but are not limited to, residential projects, tourist attraction and recreational facilities, shopping centers, office buildings, parks, industrial parks, airports, port facilities, schools, and similar developments.

The procedures and rules pertaining to the determination and review of DRIs are contained in Florida Administrative Code, Rule 9B-16 and Rule 27F-1 Part II. Florida Administrative Code 27F-2 identifies those developments that are specifically presumed to be DRIs. The review and permit process is regulated by the Bureau of Land and Water Management of the Florida Department of Community Affairs (DCA). There are 11 Regional Planning Councils (RPCs) that actually conduct the DRI assessment and review (see appendix B for addresses). We recommend that you contact primarily the Bureau of Land and Water Management and also the appropriate regional planning council to determine if your project is a Development of Regional Impact. Projects located on barrier islands and beaches, around state aquatic preserves, or in environmentally designated areas are given closer scrutiny by the DCA and the RPCs.

Water pollution control and water supply

The Florida Air and Water Pollution Control Act of 1967 and subsequent amendments (Chapter 403, Florida Statutes) govern the discharge and regulation of domestic, municipal, and industrial water pollution. The state law incorporates the requirements of the Federal Water Pollution Control Act Amendments of 1972 and 1977. The Florida Department of Environmental Regulation (DER) has enforcement power over all natural or artificial bodies of water. The state has adopted a comprehensive set of water-quality standards. All waters in the state have been classified into 1 of the 7 classifications for the beneficial use of humans as well as propagation of fish, shellfish, and wildlife.

Water resources are being threatened with pollution, causing economic losses to both local communities and the state. In Florida one-third of all commercial shellfish harvesting areas have been permanently closed due to pollution! Protection of water quality is vital for human as well as other uses. State laws provide additional standards and protection of water quality if the waste disposal affects potable water supply (Class I), shellfish propagation and harvesting waters (Class II), aquatic preserves, or “Outstanding Florida Waters.” You need to contact the Department of Environmental Regulation to find out if your property borders on environmentally sensitive waters.

If you plan to locate on a barrier island, check with the local county or city planning and building departments to see if adequate public drinking water supply and sewer hookups are available. In case you plan to build your own sewage disposal facility with a capacity of less than 2,000 gallons per day, your county health department must be contacted for a permit. Minimum
standards for septic systems must be met. The first important standard is that the depth to the seasonally high groundwater table must be at least 3.0 feet below the bottom of the drainfield or about 5.0 feet below the ground surface in the wet season. The second important standard is that the drainfield must be set back a minimum of 50 feet from any surface water body. These minimum standards are intended to protect the public health and water quality. For any on-site sewage system or package treatment with a capacity greater than 2,000 gallons per day, contact the Florida DER for rules, regulations and guidelines.

The withdrawal or diversion of drinking water is governed by the Florida Water Resources Act of 1972 (Chapter 373, Florida Statutes). The responsibility for the enforcement of this law rests with the Florida Department of Environmental Regulation, but it is implemented through five water management districts (Appendix B). If you obtain your water supply from a public facility or plan to put in a small domestic well, you need no permit from any water management district. However, if you plan to drain the land, divert the water, or put in a large water supply system, contact the appropriate water management district for rules, regulations, and guidelines.

**On-site individual sewage disposal facilities**

In many instances, development on barrier islands requires individual, on-site sewage disposal and treatment systems when a public sewer system is not available. The installation of on-site septic systems in Florida is regulated by the Department of Health and Rehabilitative Services (DHRS) pursuant to Section 381.272 of Florida Statutes. The local county health departments are responsible for the direct regulation and permitting of these facilities under Rule 10D-6 of Florida Administrative Codes. Rule 10D-6 has specific standards for the capacity of septic tanks, soil types, depth to seasonally high water table, minimum distance from drinking water wells or public water supply, and minimum distance from surface water bodies.

If you plan to install an individual, on-site sewage facility with an estimated daily flow of less than 2,000 gallons for any establishment or structure, you must contact and obtain a permit from your county health department. Subdivisions of 50 or fewer lots, each having a minimum of at least 0.5 acre and a minimum dimension of 100 feet, may be developed with private wells and individual sewage disposal systems, provided satisfactory groundwater can be obtained, and all distance, setback, soil condition, water table elevations, and other requirements of Rule 10D-6 can be met. Residential subdivisions using public water supply systems may be developed with individual sewage disposal facilities for a maximum of 4 lots per acre, provided all other conditions are met.

The installation of septic systems on the highly permeable sandy soils of Florida barrier islands causes pollution of groundwaters as well as surface and estuarine waters. High groundwater tables during wet seasons make the septic systems a health hazard and vulnerable to failures. It is imperative that proliferation of on-site septic systems in highly permeable soils, close to the surface water
bodies, and under seasonally high groundwater table conditions, be discouraged to protect public health and water quality.

**Dredging and filling**

Saltwater and freshwater wetlands are considered extremely valuable natural resources in Florida. Florida legislative goals and policies reflect this concern under Chapter 253 and Chapter 403, Florida Statutes. These policies state in part,

> to prohibit the authorization of the dredging and filling of submerged lands, if such authorization would result in the destruction of resources or interfere with public uses to such an extent as to be contrary to the public interest [and] to prevent and abate pollution and to conserve the waters of the state for the propagation of wildlife, fish and other aquatic life, and for domestic, agricultural, industrial, recreational and other beneficial uses.

To minimize permit problems, delays, and frustrations, we suggest that you do not buy properties located in wetlands of barrier islands and coastal areas.

Barrier islands are characterized by the presence of freshwater and saltwater wetlands. If your plan requires any dredging and/or filling of wetlands or navigable waters, you need to obtain permits from the appropriate state and federal agencies. The dredging and/or filling activity may be associated with the construction of a homesite, access road, boat dock, or erosion control structure. Unauthorized dredging and filling is prohibited and punishable under state and federal laws.

The dredging and filling in Florida waters is governed by Florida Air and Water Pollution Control Act (Chapter 403, Florida Statutes), Florida State Land Trust Fund (Chapter 253, Florida Statutes) and Beach and Shore Preservation Act (Chapter 161, Florida Statutes). State agencies regulating the activities are the Florida DER and the Florida Department of Natural Resources (DNR). Federal laws regulating dredge and fill include the River and Harbor Act of 1899, the Clean Water Act of 1977, and the Marine Protection Research and Sanctuaries Act of 1972. The U.S. Army Corps of Engineers is the federal regulatory agency, while the U.S. Fish and Wildlife Service is another concerned agency. Florida DER and DNR and the Army Corps of Engineers have a joint dredge and fill application to facilitate the permit procedure.

Several local communities in Florida have additional regulations against alteration, cutting, pruning, removal, or destruction of mangrove wetlands. In order to obtain the necessary information on application procedures, regulations, and guidelines, contact local county or city planning and building departments, the Florida Department of Environmental Regulation, or the U.S. Army Corps of Engineers (appendix B). These agencies will assist you in identifying the type and scope of information needed to process your application. There are 2 types of permit applications: short form and regular form, depending upon the size and scope of the project. It should be noted that permit review and approval is more closely scrutinized if a project is located adjacent to Class
I and Class II waters, state aquatic preserves, or “Outstanding Florida Waters.”

Local government comprehensive plans

In Florida the Local Government Comprehensive Planning Act of 1975 (Chapter 163, Florida Statutes) mandates that all local governments prepare, adopt, and implement a comprehensive plan that addresses present and future community growth and development needs. The act requires that each unit of local government (county, city, municipality, town, or village) establish a planning process and prepare, adopt, and implement a comprehensive plan. The law requires that the planning process be ongoing, based on effective public participation, and include regular plan review, update, and appraisal. Every community’s plan must contain the following required elements: future land-use plan; traffic circulation; sanitary sewer, solid waste, drainage, and potable water supply; conservation; coastal zone (along the coast); recreation and open space; housing; utilities; and intergovernmental relations. For communities in excess of 50,000, 2 additional elements are required: mass transit and port, aviation, and related facilities. The law requires that local governments set forth principles and standards to guide future development. Unfortunately, the law itself does not provide for any minimum standards or enforcement procedures, particularly in regard to the coastal zone.

Almost all of the counties and municipalities in Florida have adopted comprehensive plans. Many of these local plans are quite detailed with specific provisions for the use of beaches, dunes, marshes, bays, barrier islands, and coastal wetlands.

If you plan to buy property or build in the coastal areas of barrier islands, we suggest that you contact your local planning, zoning, and building departments. Their offices are generally located in or near the county courthouse or the city hall. You need to obtain the necessary zoning, subdivision, or building permits from the local government. These agencies will assist you in determining which kinds of development activities are permitted and which are not. The early contact with the local planning or building departments will enable you to find out which, if any, state and federal permits will be necessary for your project.

Coastal construction permits

The low-lying barrier beaches and coastlines of Florida render coastal construction a matter of particular concern to the state and to local communities. The Florida legislature addressed this concern by enacting the Beach and Shore Preservation Act (Chapter 161, Florida Statutes). The requirements and constraints of this law are in addition to those dealing with water-quality control and dredging and filling laws explained earlier. In 1971 the legislature established a goal that stated in part, “The Legislature finds and declares that the beaches of the State, by their nature, are subject to frequent and severe fluctuations and represent one of Florida’s most valuable natural resources and that it is in the public interest to preserve and protect them from imprudent construction which
can jeopardize the stability of beach-dune system.

The legislature directed the Florida Department of Natural Resources, Division of Beaches and Shores, to establish Coastal Construction Setback Lines (CCSBLs) that were replaced by Coastal Construction Control Lines (CCCLs) in 1978. The CCCLs are established under Legislative mandate "so as to define that portion of the beach-dune system which is subject to severe fluctuations based on a 100-year storm surge or other predictable weather conditions, and so as to define the area within which special structural design consideration is required to insure protection of beach-dune system, any proposed structure and adjacent properties, rather than to define a seaward limit for upland structure."

The intent of the law is to regulate coastal construction, to establish coastal construction control lines along the sandy beaches, seaward of which construction may not occur without an authorized permit from the DNR, and to administer a beach erosion control grants-in-aid program. The Florida DNR has established a coastal construction control line for each coastal county with sandy beaches fronting the Atlantic or Gulf after conducting a comprehensive study of the areas' coastal resources and processes. Coastal construction is undertaken pursuant to a CCCL permit. The 2 separate permit programs are described in the next few paragraphs.

Coastal Construction Permits (Chapter 161.041, Florida Statutes). The DNR coastal construction permits are required for any construction or change of existing structures and construction or physical activity undertaken for shore protection or erosion control purposes if that activity is located below the mean high-water line of any tidal water of the state.

Specifically included are such structures as dune walkovers, groins, jetties, mole, breakwaters, seawalls, bulkheads, and revetments. Physical activities, such as artificial beach nourishment, inlet sediment bypassing, excavation or maintenance dredging on inlet channels, and deposition or removal of beach material also require a permit.

Coastal Construction Control Line Permit (Chapter 161.053, Florida Statutes). If any structure is located seaward of the CCCL (or CCSBL) on any sandy shoreline fronting the Gulf of Mexico or the Atlantic Ocean, permits are required from the DNR before undertaking any alteration. Among the activities covered are excavation and construction of any dwelling house, hotel, motel, apartment, condominium, seawall, revetment, pool, patio, garage, parking lot, minor structure, and dune restoration. Driving of motorized vehicles or removal of sea oats on the beaches and dunes seaward of the control line also is prohibited except in 3 Atlantic coastal counties. There are certain counties without sandy beaches, and certain types of structures that are exempt from the law. In order to determine if you need any DNR permit, contact the Division of Beaches and Shores, Department of Natural Resources (appendix B).

In 2 cases (Lee and Pinellas counties) the DNR has delegated authority to the coastal counties and municipalities to administer the CCCL requirement. If you plan to buy or build on the oceanfront it is advisable to check with the county or municipality if
your property is located seaward of the CCCL because these areas are extremely hazardous, often unsuitable for permanent structures, and create serious environmental and economic problems for property owners as well as taxpayers.

_**State Land Lease Permit** (Chapter 253, Florida Statutes). If your project involves use of sovereign (state-owned) submerged lands in Florida, you need to obtain appropriate permits from the Bureau of State Lands Management of the Florida Department of Natural Resources (appendix B) pursuant to Chapter 253.77 of the Florida Statutes. Sovereignty lands include tidal lands, islands, sand bars, and lands under navigable waters, whether fresh- or saltwater, which Florida gained title to when it became a state. Generally, permits are more closely scrutinized if the project is in a state aquatic preserve, manatee sanctuary, or other environmentally designated sensitive areas. The rules and regulations for the issuance of permits are contained in the Florida Administrative Code Rule 160-21 (Sovereignty Submerged Lands Management Rule), Rule 160-18 (Biscayne Bay Aquatic Preserves Rule), and Rule 160-21 (Florida Aquatic Preserve Rules).

The most common activities included under this permit program are docks for private and commercial use, reclamation of land lost by erosion or avulsion, and dredging of navigation channels. Certain noncommercial activities that are not located within state aquatic preserves or specially designated manatee areas are exempt from any requirements to make application for consent of use. In general, if you suspect that your proposed construction activity might involve use of state-owned lands, we recommend that you contact the Bureau of State Lands Management to determine whether or not you need a permit from the bureau or other state agencies.

**Building codes**

For residential dwellings other than mobile homes, Florida requires all communities to adopt 1 of 5 acceptable building codes (Chapter 553, Part VI, Florida Statutes), including the One and Two Family Dwelling Code (after the CABO, Council of American Building Officials), the Standard Building Code, the South Florida Building Code, the National Building Code, and the EPCOT Building Code. Of these the National Building Code is used in Duval County, the South Florida Building Code is used in Dade and Broward counties, and the Standard Building Code is widely used in the remaining coastal counties.

As examples, the Standard Building Code (formerly the Southern Standard Building Code; reference 81, appendix C) and the South Florida Building Code were compiled by knowledgeable engineers, architects, and code enforcement officials to regulate the design and construction of buildings and the quality of building materials. These codes do have certain hurricane resistance requirements, such as continuity, stability, and anchorage, all related to calculated reference wind speed as modified by height above ground and building shape factors to determine design load.

It is emphasized that the purpose of these codes is to provide _minimum_ standards to safeguard lives, health, and property. Com-
Communities have the right to strengthen the adopted code in order to improve it or to make it more stringent. By law, such improvements in a code cannot discriminate against materials, products, or construction techniques of proven capabilities; and there must be some unique physiographic condition (for example, geographic type or location, topographic features or absence thereof) that warrants the more stringent requirements. All barrier islands and beaches facing the open ocean and the threat of hurricanes should meet the latter requirement. As a result, numerous communities do have specifications that go beyond the Standard Building Code. The Florida Department of Natural Resources has made recommendations for a Coastal Construction Building Code (reference 81, appendix C) to supplement existing codes. Check with your local building inspector to determine the specific code for your area.

Individuals can and should insist on designs and materials that go beyond the minimum code requirements (see chapter 6 on construction). Sanibel Island has adopted one of the better codes in Florida with respect to coastal construction. You might contact Sanibel's building inspector's office for a copy of their code to see examples of performance-oriented criteria and coastal issues treated in greater depth. The State Division of Beaches and Shores also provides coastal construction guidelines and may be consulted for advice.

Persons concerned with planning and improving existing building codes should contact the Department of Community Affairs (appendix B). Their Bureau of Emergency Management offers the free publication "Hazard Mitigation through Building Codes."

Mobile home regulations

Mobile homes differ in construction and anchorage from "permanent" structures. The design, shape, lightweight construction materials, and other characteristics required for mobility, or for staying within axle-weight limits, create a unique set of potential problems for residents of these dwellings. Because of their thinner walls, for example, mobile homes are more vulnerable to wind and wind-borne projectiles.

Some coastal states have code requirements for mobile homes that are specific for units located in hurricane-prone areas. Florida does not, although mobile home construction must meet national code requirements. Regulation is through the Department of Highway Safety and Motor Vehicles.

Mobile home anchorage tiedowns are required throughout Florida. Tiedowns make the structure more stable against wind stress (for recommendations, see the section on mobile homes in chapter 6). Older metal tiedowns may be weakened through corrosion, or violations of anchorage or foundation regulations may go undetected unless there are a sufficient number of conscientious inspectors to monitor trailers. One poorly anchored mobile home can wreak havoc with adjacent homes whose owners abided by sound construction practice. Some mobile home park operators
or managers are alert to such problems and see that they are corrected; others simply collect the rent.

The spacing of mobile homes should be regulated by local ordinance. Providing residents with open space between homes, this type of ordinance preserves some aesthetic value for a neighborhood. It also helps to maintain a healthier environment. For example, if mobile home septic tanks are closely spaced, there is the potential for groundwater or surface water pollution. Similarly, if mobile homes are built too closely to finger canals, canal water may become polluted.

Prefabricated structure regulation

Modular unit construction is one of the new approaches to construction of multiple-dwelling structures in the coastal zone (see the section on modular unit construction in chapter 6). These prefabricated units are assembled at the shore as multiplexes and condominiums, commonly 2 to 4 stories in height. The Department of Community Affairs sets the building code standards for all prefabricated buildings, including modular unit dwellings. The department follows standard requirements that include wind design speeds of up to 130 mph in some coastal areas.

All such structures must meet the inspection of an independent, third-party testing architect or engineer who signs the structure off if it meets state requirements. The Department of Community Affairs not only approves the plans for such structures but assigns an insignia when the inspection is approved. It is the local building inspector’s responsibility, however, to check for the state insignia as well as making sure that service hookups for the buildings meet the local building code.

Historic and archeologic sites

It is the public policy of the state of Florida to protect and preserve historic sites and properties, artifacts, treasure troves, fossil deposits, prehistoric Indian habitations, and objects of antiquity that have historical values or are of interest to the public. The Florida Archives and History Act of 1966 provides the authority to implement these laws through the Division of Archives, History and Records Management in the Florida Department of State (appendix B).

Barrier beaches and coastal areas of Florida have been sites of historic exploration and early native Indian settlements. If you find that there are objects, sites, or structures of some historic archeologic or architectural value on your property, contact the Bureau of Historic Sites for technical assistance to preserve and protect them.

Endangered fish and wildlife species

Florida’s environment is blessed with diverse ecosystems that provide habitats for hundreds of common, endangered, and threat-
ened species of fish and wildlife. The protection of wildlife species and habitat is administered by 2 state agencies: the Game and Fresh Water Fish Commission (GFWFC) and the Department of Natural Resources. The state's enabling laws are the Florida Panther Act of 1978, Florida Manatee Sanctuary Act of 1979, and Feeding of Alligator and Crocodile Act. These state laws provide the protection of particular species of wildlife. Additional protection to endangered and threatened fish and wildlife species is provided by the Federal Endangered Species Act of 1973 and Marine Mammal Protection Act of 1972. The U.S. Fish and Wildlife Service of the U.S. Department of the Interior protects the species listed in the law and regulations.

Barrier islands and beaches are habitats for many endangered and threatened fish and wildlife species. The Florida GFWFC and U.S. Fish and Wildlife Service classify endangered and threatened species into three categories:

**Endangered.** A species, subspecies, or isolated population that is, or soon may be, in immediate danger of extinction unless the species’ habitat is fully protected and managed for its survival. The American bald eagle, Atlantic green turtle, Florida panther, and West Indian manatee are some examples.

**Threatened.** A species, subspecies, or isolated population that is very likely to become endangered soon unless the species or its habitat is fully protected and managed for survival. Some examples of this group are loggerhead sea turtle, eastern indigo snake, brown pelican, and mangrove fox squirrel.

**Species of special concern.** A species, subspecies, or isolated population that warrants special protection because (1) it may, due to pending environmental degradation or human disturbance, become threatened unless protective management strategies are employed, (2) its status cannot be classified as threatened until more information is available, (3) it occupies such an essential ecological position that its decline might adversely affect associated species, or (4) it has not recovered sufficiently from a past decline or disturbance. Examples in this category include the American alligator, gopher tortoise, roseate spoonbill, limpkin, pine barrens, treefrog, and beach cotton mouse.

The Florida Game and Fresh Water Fish Commission and the U.S. Fish and Wildlife Service (appendix B) provide technical assistance and coordination to identify endangered and threatened species via the development permit review process. Appendix B provides the legal status of endangered and potentially endangered species in Florida as of July 1982.

**Other regulations.** In addition to the statutes and regulatory requirements outlined above, the attention of state law also has focused on defining ownership of coastal-zone lands (uplands, tidelands, submerged lands). Title to coastal lands is always more complex than for inland property because of the rapid changes due to submergence, erosion, accretion, or shifting of waterways. When purchasing coastal property, make sure you know exactly what you are gaining title to in terms of private ownership.

**Florida’s coastal future: more regulation**

A drive along Florida’s East coast will reveal to even the casual observer that federal, state, and local regulations have not stopped
development in coastal high-hazard zones. Such statutes have not halted the addition of engineering structures that ultimately destroy natural protective beach dune systems.

Present and future citizens of coastal communities should not assume that existing statutes and ordinances will guarantee their safety, that of their property, or protect existing beaches and dunes. Existing regulations address but do not solve the problems of living in the coastal zone.

Most regulations do not prohibit development in high-hazard zones; they only set limits. The national Coastal Barrier Resources Act may deny flood insurance and federal funds for development of certain barrier islands, but it does not necessarily prohibit such development. The National Flood Insurance Program establishes a minimum standard for structural elevation in a flood zone to qualify for flood insurance, but generally it does not prohibit locating in such a flood zone. Similarly, state and local building codes set minimum standards.

Florida's Beach and Shore Preservation Act is an innovative law, establishing the Coastal Construction Control Line (CCCL); but this line is one of the state permitting jurisdiction, not prohibition. Special structural design may be required for proposed structures beyond the line to protect the structure from hazards and to protect adjacent properties as well as the beach dune system. Variances are given, and therein lies the problem. The delicate balance of providing for beach and dune protection while assuring the reasonable use of private property is difficult to achieve. "Reasonable" may be viewed differently between the property owner and the state; but when construction does take place seaward of the control line the impact is likely to be that of the pre-CCCL past, that is, ultimate loss of beach and dunes.

Most of the 250 miles of beaches in Florida that are experiencing "critical erosion" had structures placed too close to the water. As a result, many coastal communities in the state are seeking state and federally subsidized beach nourishment projects to protect the threatened properties. These "protective" projects are extremely costly to general taxpayers as well as to property owners, and are only temporary in nature. An effective CCCL program should limit the growth of such problems in the future, given strict interpretation and enforcement. Keep in mind also that there are no setback requirements for any structures located on nonsandy shorelines of the tidal areas. As explained in chapter 2, such areas also are experiencing significant erosion due to the sea-level rise and drowning of the coastline.

Likewise, the Local Government Comprehensive Planning Act may require planning by local governments, but if this planning takes place without minimum standards or within a system void of land-use planning and zoning that is sensitive to fragile coastal environments and high-energy coastal processes, then it provides no security for the coastal citizen. Even the best of plans is meaningless if there are no provisions and resources for enforcement.

In some respects the approach to coastal regulation is like that of traffic control at a dangerous intersection. The general rules of the road (not to develop in a hazardous zone) are ignored by some drivers, creating unsafe conditions for all (loss of beaches and dunes in front of formerly low-hazard zones). Accidents (property losses) result. Automobile insurance (national flood insurance)
spreads the cost to all drivers, recovers a portion of the loss to the victims, but does not make a broken leg whole again or take away paralysis. A group of concerned citizens requests a stoplight (prohibition of unsafe development), but another group believes that a stoplight will back up traffic, slow things down, hurt business (cool the hot economic climate of coastal development). A compromise is reached—the speed limit is reduced (first set of ordinances), but accidents continue to occur (growing property/beach loss), so a blinker light is installed (additional statutes and ordinances). The rules of the road are still being violated (and nature is still gnawing at the shore). Finally a fatal accident occurs; perhaps someone whom all of the community knew and loved is killed (a hurricane strikes, wiping out a community with loss of lives as well as property). Everyone cries, “There should have been a stoplight at that intersection five years ago” (additional legislation is still needed). Perhaps 1 or 2 years will go by while surveys are done; and perhaps another fatal accident or accidents will occur. Eventually there will be a stoplight, but the dead will remain dead.

Although Florida has pioneered the enactment of far-reaching coastal legislation, problems remain. The growth in both tourism and coastal development will increase the likelihood of possible conflict between public access rights and private littoral rights. Florida does not have a mechanism for guaranteeing public beach access, although below the high-water line is state land and in the public domain. New laws or changes in existing regulations should be expected. Similarly, building codes, setback lines, and other minimum protective regulations are likely to be more strictly en-