THE PRICE
OF PARADISE:

OCEANFRONT
LIVING
CAN BE
HAZARDOUS

By Brooks Preik

A n oceanfront home.
For many people, these words conjure
up paradise: the sunrise shimmering across
calm water, lacy sea oats swaying in
greeting to seagulls and sailboats, moist
breezes leaving a salty taste in the air. But
sometimes the peaceful ocean ripples turn
into crashing breakers, the soft air chums
into gale-force winds, storms level
protective dunes and erosion eats an ugly
swath along the beaches and beneath the
foundations of homes.
The land along the coast is in a
constant state of change — often a very
hazardous one — creating unique problems
for residents, developers and the real estate
agents who market this property.
At Topsail Island, a barrier island
wrecked by Hurricane Fran in 1996, the
Association of Realtors has kept a wry
sense of humor about its livelihood. Its
signs declare "And You Thought We Were
All Washed Up" — visible proof that
coastal residents' spirit is intact even though
their homes and properties were ravaged by
back-to-back hurricanes that year.
Yet the constant conflict against the
forces of nature requires more than a
courageous spirit. Residents wage a battle
that has reached monumental proportions.

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due in large measure to the rapid and unprecedented population growth in coastal areas. The battle can never be completely won, but its risks and casualties can be minimized with education and planning.

For years, geologists and engineers have warned of the dangers of buying on the coast, with good reason. Severe hurricanes like Fran, though infrequent, can have devastating effects. And even without the high winds and waves associated with hurricanes, research shows that ocean shorelines change constantly, and many experience long-term patterns of erosion.

New oceanfront property owners need to anticipate these changes and plan for them. Foremost, they should know how to build and where to build or buy. Informed decisions are important because replacing a beach once it’s gone is not easy — moving the house is easier. Quick fixes don’t exist, and the solutions are expensive.

Beach renourishment is one approach that some coastal communities have used to fight erosion. Dredges and pipelines pump offshore sand onto the beach, where neighbors hope it will stay. But this alternative must be constantly maintained and may pose problems because the supply of offshore sand is smaller than people think.

“Soon or later there will be serious problems with this,” says William J. Cleary, a geologist at the University of North Carolina at Wilmington and a Sea Grant researcher. “Sand is an important commodity and a depleting resource in our area.”

Not only is the availability critical, Cleary says, but “it’s going to be so incredibly costly.” It now costs from $2 to $5 a cubic yard to pump sand onto a North Carolina beach, making it unaffordable for many communities. In New Jersey, it costs about $50. Cleary says, “And in Japan, sand costs about $250 a cubic meter and has to be imported from Taiwan.”

The fix isn’t permanent because sand travels. Sand is moved offshore during storms, often with no way of returning to the beach, causing constant erosion and shoreline changes.

Shell Island, at the northern end of Wrightsville Beach, is one high erosions area that is experiencing costly problems. Shell Island Resort, a high-rise condominium at the tip of the island, has received national media attention in recent months because of the severe erosion caused by Mason’s Inlet. Property values have plummeted as anxious homeowners look for solutions, including building structures (such as bulkheads) that would halt the encroachment of the inlet. If nothing is done, the structure could be destroyed along with a valuable tax base. If

the state allows measures to correct the problem — if indeed it can be corrected — the ramifications may be even more far-reaching. A temporary wall of sandbags is now in place at the tip of Shell Island, but there is a limit on how long they may remain. Should the Shell Island homeowners succeed in their pending lawsuit to strike down the state’s ban on hardened structures, the decision could seriously undermine North Carolina’s entire system of coastal protection.

Hurricanes and rapid growth create other fears. Joyce Piner, a native of rural Pender County, lives on Harbor Island near Wrightsville Beach for 33 years. “For many years, we didn’t have any major hurricanes,” she says. But Piner has a vivid memory of the severe damage Hurricane Fran caused to her home.

“After Fran, we did give serious consideration to moving but decided to stay. It’s where our children have grown up. And it’s the way of life here on the island that is important to us,” she continues. “With the hurricanes, it’s sort of like living on the edge. As we grow older, it’s harder to deal with.”

It’s not just the hurricanes that have changed the Piners’ thinking. “There are other things that would influence me to leave now — the increased traffic, the rising cost of living and the fact that the slow-paced way of life is changing,” she says.

Because of rising property values, the sale of smaller properties has made way for larger and more expensive homes, changing the makeup of many coastal towns and beaches. And with improved transportation, easy accessibility and more money available to spend on leisure activities, the
The desire for coastal property is keener than ever. As the migration to the coast continues, it is imperative that these homeowners—many from out of state—understand the realities of buying beach property so that their investments and the coastal communities themselves are protected.

Real estate agents and developers have an important role in enlightening potential buyers. The stakes are so high that Gov. Jim Hunt recently made clear his position on the matter in a letter to real estate agents and developers. He said both professional groups are responsible for informing buyers of the inherent risks they face in purchasing coastal property.

"We have an obligation to help people who decide to purchase their places at the beach, by giving them as much information as possible about owning property on our coast, including the things they can do to protect themselves—and the things they can't," Hunt wrote.

Robin Smith, assistant attorney general with the N.C. Department of Justice and advisor to the Coastal Resources Commission, explains that coastal real estate is different from that in other areas. "In terms of property law, most of the effects of law on the oceanfront are more magnified," she says.

Coastal property is property that can have a moving boundary line. "With erosion, the property is getting smaller," Smith says. "You lose title to land that becomes submerged, and the state gains title."

When erosion moves the property line landward, the property owner actually loses land. Likewise, new property created by accreted sand belongs to the adjacent landowner.

The Coastal Area Management Act (CAMA) put in place protective rules such as oceanfront setback lines that prohibit building a home or small commercial building within 60 feet of the first line of stable natural vegetation or 30 times the long-term erosion rate—whichever is greater. The erosion rates are calculated by the N.C. Division of Coastal Management and updated every five years.

In areas with long-term or chronic erosion, property owners in years past have tried to save their homes and land by hardening the shoreline with seawalls and revetments. This practice, however, was banned by the Coastal Resources Commission in 1985 because it can cause erosion of neighboring beachfront property and it can interfere with public uses of the beach.

"There is now a lot of scientific data to show that the effects of this are adverse," Smith says.

Similarly, jetties, groins, and breakwaters control erosion by trapping sand moving along the shoreline. But in many cases, they solve one erosion problem only to create worse erosion farther down the beach. As a result, these structures can no longer be built on the oceanfront.

With all of these changes in the rules and the landscape, real estate agents find they need to learn more about the regulations North Carolina has imposed to protect both beaches and homeowners. Lois Dixon, a Wilmington broker with 20 years of experience, says she is now more careful than ever to point out possible hazards to buyers.

"I not only gather as much pertinent information as I can about the prospective purchase, but I give the buyers names and phone numbers of agencies and officials..."

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who can advise them further about the regulations that may affect their investment," Dixon says. "I also insist that they check on insurance prior to making a final decision."

The National Flood Insurance Program (NFIP), created in 1968, provides affordable flood insurance for hazardous areas. This insurance has helped bring economic stability and improved standards of construction to these areas. Opponents of the NFIP argue that people would not build in these locations if this insurance were not available. While flood insurance can be bought at an affordable cost, it covers only damage to the structure from flooding. It does not cover the loss of land from erosion.

Securing adequate homeowners’ insurance for wind damage to coastal property has become a critical issue since Hurricane Fran. Not only are insurers refusing to write new policies and canceling old ones, they also are raising premiums and cutting benefits on existing policies.

"There is no law in this state that requires insurance companies to write homeowners’ insurance," says Daschiel Proesp, chief deputy commissioner of the N.C. Department of Insurance. He adds that his department is concerned about the problem and is working to find a solution for insurers as well as property owners.

The North Carolina Beach Plan, established in the 1960s as a market for last resort for beach areas, is costly and was never intended to be the only source of homeowners’ insurance for beach properties.

"There is a concern that the inability to obtain affordable homeowners’ insurance is a serious threat to the residential real estate market as a result of recent hurricanes," says Bob McKoy, president of the Wilmington Regional Association of Realtors. McKoy met in January with Proesp and real estate representatives from 11 other coastal counties to discuss the situation. "This could have a negative impact on our business. There is a need for us to be proactive in trying to prevent that from happening."

And the implications might be felt well beyond the coast. A significant portion of North Carolina’s income each year comes from tourism and taxes on property sales. A negative impact on the coastal real estate industry would eventually be felt throughout the state, possibly through a tax increase for all state residents, not just those along the coast.

Meanwhile, experts are trying to find more hurricane-resistant methods of construction in coastal areas.

“One of the best ways to look at what things work along the coast and what things don’t is to go in and look at buildings in areas that have been hit by hurricanes," says Spencer Rogers, North Carolina Sea Grant’s coastal erosion and construction specialist. "There are usually some very clear-cut reasons why some survive and some fail. First of all, the cardinal rule is never, ever to get hit by a wave."

Rogers isn’t joking. The greater damage in a storm is usually sustained from surging water rather than strong winds.

At Left: Bulkheads contribute to erosion at Pine Knoll Shores.
Water and wind destruction from seven major hurricanes that hit the state in the 1950s brought about important changes in the North Carolina building code. "In the 1960s, the building code called for structures that were elevated on pilings at least 8 feet in the ground," Rogers says. "Prior to that, the houses were built on the ground, very susceptible to wave and erosion damage. The code helped change the public perception of a beach house in North Carolina to one on pilings with parking underneath."

This design became popular even in areas where pilings were not required. "Because of that shift in building — far beyond the limited application of regulations — damage in Hurricane Fran was much lower than it would have been earlier," Rogers adds.

The keys to hurricane-resistant construction are measures to resist erosion, flooding waves and wind, Rogers says. The foundation should be deep enough in the ground so that it's not undercut by erosion. It should also be high enough to withstand waves and flooding. The building should be tied together with good connections (nails, bolts, straps) from top to bottom to resist high winds. Good roofing pays off in hurricanes, and window protection (storm shutters) prevents shattering.

Coastal builders are now implementing these measures and more.

At Waterfronte Villas and Yacht Club, a 35-unit condominium complex under construction at Carolina Beach, safety features and aesthetic appeal are of prime importance, says project manager Tom Cunningham. Glass windows and doors used in the buildings are now designed to withstand higher wind speeds. Anchor bolts attaching the building to the footing were increased in size and number, and special attention was paid to the attachment of the roof and the sheathing to the building. The larger, heavier metal clips enable the trusses to support more weight and hold the roof better.

"The rules are more stringent now," Cunningham says.

These rules can give buyers confidence that their new waterfront homes have the latest hurricane-resistant features. And as demand grows for homes with a view of the water, it's important that safety features evolve with the latest research about building to survive storms unique to the coast.

The attraction of the coast remains undiminished by the grim realities of recent hurricanes. But it's important to remember that beach replenishment, building regulations, rising insurance costs and the constant danger of erosion, flooding and storm damage are problems not limited to coastal residents. These concerns and the astronomical costs of federal and state disaster aid are issues that affect everyone. □

**Brooks Preik is a real estate agent in Wilmington.**

In late 1997, nearly 500 real estate agents and developers learned about building, marketing and selling coastal property through a series of workshops sponsored by North Carolina Sea Grant, the N.C. Division of Coastal Management and the N.C. Real Estate Commission.

A free brochure, **Questions and Answers on Purchasing Coastal Real Estate in North Carolina**, is available from Sea Grant at 919/515-9101 or the Real Estate Commission at 919/733-9580. The Division of Coastal Management offers Where to Find Out, a guide for real estate agents whose clients have questions about coastal property. Call 919/733-2293 for a free copy.