The Woodlands: Retrospect and Prospect

BY FREDERICK STEINER

After watching post-war suburbs sprawl across the landscape during the 1960s, a handful of developers, architects, and planners argued that Americans could do better. New communities, they claimed, could be built in harmony with nature and be open to people of all races and religions. Jobs would be close to homes and all buildings would be well designed. Idealism was these planners' driving force, even if some of the things they planned fell short of their aspirations or now seem odd. Their enthusiasm was fueled in particular by two new communities that had been developed during the 1960s—Reston, Virginia, and Columbia, Maryland. Even federal policy makers became interested, and in 1970 Congress passed the HUD Title VII Urban Growth and New Community Development Act, which guaranteed up to $50 million in support if a developer met specific social and environmental goals.
The Woodlands design concept was to subordinate the visual commercial signage to the larger natural environment. Left: Ian McHarg's team started with the relationships between community pockets attached to a larger Woodlands center that itself was attached to the regional arterial at I-45. Above: The Woodlands had been a source of raw materials from lumber to oil, for decades before George Mitchell saw its potential as a sustainable garden city.
Eventually, 13 new communities were approved for loan guarantees by the federal government under the Title VII program, plus an additional three funded by a related New York State program. Ten states were represented in all, most of them east of the Mississippi River. Texas, however, had three federally-funded new communities—Flower Mound near Dallas, the San Antonio Ranch, and The Woodlands. All of the communities had ambitious social and environmental goals, but the individual focuses varied, such as Soul City, North Carolina’s emphasis on African-Americans and new-town-in-town initiatives in New York City (Roosevelt Island), New Orleans (Ponchartrain), and Minneapolis (Cedar-Riverside). Like The Woodlands, most of the other projects were in green-field sites.

Twelve of the HUD Title VII new towns defaulted on their loans and went bankrupt. The one exception was The Woodlands, sitting only a short distance away from the unplanned sprawl of Houston. Now, three decades later, one might ask the question: Why was The Woodlands different?

I have a personal interest in the answer to that question. Title VII changed my life. In 1971, I began working for an idealistic Dayton, Ohio, homebuilder named Don Huber. Huber’s family was famous for building Levittown-like suburbs. Huber himself experimented with modular building techniques and initiated partnerships with church groups to build homes in African-American communities. I went to work for him designing brochures for his housing projects and taking pictures of 5,000 acres of rolling Ohio farmland northwest of Dayton. It was on this land that Huber dreamed of building a new community.

He decided to pursue a Title VII grant and hired a crusty Harvard MLA named Gerwin Rohrbach to lead the effort. Since I knew the 5,000 acres well, Rohrbach appointed me his administrative assistant. One of my jobs was to give the prospective master planners we interviewed a tour of the property. A bunch of old codgers from the Architects Collaborative came from Cambridge; Hideo Sasaki and Stu Dawson also flew in from Massachusetts. The Simonds brothers, John and Philip, traveled from Pittsburgh. Gyo Obata and Neil Porterfield arrived from St. Louis. And then there was O’Jack Mitchell and his Omnisan colleagues from Houston. One afternoon, while I was driving Harry and Ben Weese around in my VW bug, we interrupted a pair of naked hippies in a cornfield.

“Don’t see that in Chicago,” Harry Weese observed.

What made The Woodlands different? The short answer is George P. Mitchell, Ian L. McHarg, and Houston. Huber was a Dayton homebuilder, George Mitchell a Texas oilman. The difference in the level of capital they could apply was substantial. Huber’s goals were lofty, but his experience grounded in local homebuilding. Mitchell wasn’t constrained by prior development experience and followed the lead of his consultants, most notably that of Ian McHarg, best known for his book Design with Nature and his advocacy of the use of ecology in design and planning. And, of course, Houston was growing in the 1970s, while Dayton was not.

In the mid-1970s I entered the University of Pennsylvania to study with McHarg. By this time, planning for The Woodlands was well underway, and it was already being recognized as the most successful of the Title VII new communities. The Woodlands is often touted as one of the most complete and comprehensive examples of McHarg’s ecological planning method. Indeed, McHarg himself repeatedly made this claim in his books A Quest for Life and To Heal the Earth: Selected Writings of Ian McHarg. (Having McHarg on board, however, was not itself a guarantee of success. With his Wallace, McHarg, Roberts, and Todd colleagues, he helped propose two Title VII new communities. The Ponchartrain new-town-in-town in New Orleans never even received HUD approval. Only The Woodlands prevailed.) Still, one wonders how much of the positive commentary was hype, and just how successful The Woodlands is from today’s perspective.

Design with Nature and Money

Ann Forsyth, director of the Metropolitan Design Center at the University of Minnesota, who has conducted the most thorough critical assessments of The Woodlands to date, dubbed it an “ecurb.” By that she meant that The Woodlands is greener than other American suburban communities. Forsyth divides the planning of The Woodlands into five phases: early ideas from the mid-1960s to 1970; ecological design and the Columbus contingent, 1970 to 1974; Title VII in operation, 1975 to 1983; community building, 1983 to 1997; and post-Mitchell growth since 1997. Former CEO of The Woodlands Operating Company Roger Galatza’s less critical “inside story” presents a similar time line.

George Mitchell was born in Galveston in 1919 to Greek immigrant parents. He majored in petroleum engineering with an emphasis in geology at Texas A&M, and after graduation went to work for the Stanolind Oil and Gas Company (now Amoco) before spending World War II in the Army Corps of Engineers. Following the war he went into the oil drilling business with his brother. Their successful venture eventually became Mitchell Energy & Development Corp. Then in the early 1960s George Mitchell began to experiment in land development as a way to diversify the energy business.

In 1964 Mitchell purchased 50,000 acres of land north of Houston owned by the Grogan-Cochran Lumber Company; 2,800 acres of this purchase became the seed of what became a 27,000-acre new community.

Most Title VII new communities were in the 5,000 to 8,000 acre range, but the expansive acreage put together by Mitchell signaled the scope of his ambition. Mitchell consulted several Houston area architects and planners, hiring Robert Hartsfield away from one of those firms—CRS. A Penn graduate, Hartsfield introduced Mitchell to McHarg’s Design with Nature. Mitchell also sought out the advice of James Rouse, who had developed Columbia, Maryland, and later hired several people who had worked for Rouse on that pivotal new town. In her writing, Ann Forsyth has illustrated the similarities between Mitchell and Rouse, such as their business acumen and their commitment to interfaith cooperation and understanding, as well as the similarities between their resulting new towns. She also makes an important distinction, noting in her book Reforming Suburbia: The Planned Communities of Irvine, Columbus, and The Woodlands (see review, page 43) that “Rouse’s response [to community planning] had been to explore the potential for social science to solve the problems of city building; Mitchell, eventually, looked to the natural sciences and, in particular, ecology as it was being translated into environmental planning and landscape architecture in the late 1960s and early 1970s.” Given Mitchell’s background in geology, this is not surprising.

The first meeting between Mitchell and McHarg was transformative for both men. “I suggested to Mitchell that the most critical factor was cash,” McHarg reflected in A Quest for Life, adding, “God smiles on ecological planners.” Or, as Mitchell restated it in a recent interview, “God smiles on ecological planners when you make a profit.”

McHarg suggested using the natural drainage system of The Woodlands site to structure development. This would, he noted, help reduce the prospects for flood damage. Ever the geologist, Mitchell asked, “All right, natural drainage works, but what does it mean to me?”

“First, George, it means you’ll get $50 million from HUD and, second, it will save you even more money,” McHarg responded. “For instance, you won’t have to build a storm drainage system. This will save you $14 million for the first phase alone.” And so McHarg converted the oilman into an ecologist.

Wallace, McHarg, Roberts, and Todd proceeded to produce a series of four extraordinary reports to guide the planning and design of The Woodlands. One of these reports, an ecological inventory, resulted in an ecological plan, guidelines for site planning, and land planning and design principles for the first phase of development.

With money and ecology forming the bedrock, Mitchell’s staff and team of consultants, which included economic and marketing specialists Gladding Associates, master planner and architects William Pereira Associates, and engineers Richard Browne Associates, prepared plans and obtained approvals. After The Woodlands received its commitment from HUD in April 1972, “infrastructure construction assumed a feverish pace" for the 1,750-acre first “village,” called Grogan’s Mill. The new community officially opened on October 19, 1974.

Through the rest of the 1970s development continued as one-by-one the other Title VII new communities failed. During this same period the relationship between HUD and The Woodlands became an
uneasy one. For example, disagreements occurred over financial management, project organization, affirmative action, and low- and moderate-income housing. Beyond the difficulties with HUD, Mitchell faced the other economic challenges of the decade, chief among them the Arab oil embargo and the resulting sag in Houston's real estate market. Still, despite the setbacks, Mitchell's Woodlands Development Corporation soldiered on with staff reorganization and financial readjustments.

In 1983, the Title VII status of The Woodlands ended, directly affecting the amount of affordable housing in the new community. (As Forsyth notes, most of the federally subsidized housing was built before 1983.) The change came during a period of slow national economic growth. As the price of oil dropped, the Houston economy especially suffered. Regardless, development in The Woodlands continued. Several key employers, among them Hughes Tool and Anadarko Petroleum, moved to The Woodlands. Schools, places of worship, and other key institutions such as the Cynthia Woods Mitchell Pavilion and the Houston Advanced Research Center opened. As a result of The Woodlands Country Club, with its three golf courses, the new community became associated with golf.

In 1997, the population of The Woodlands exceeded 50,000. That same year, Mitchell sold The Woodlands Corporation and all of its assets to a partnership of Morgan Stanley and Crescent Real Estate Equities for $543 million.10 The 2000 Census recorded a population of 55,649. As growth continued into the 21st century, the Rouse Company, developers of Columbia, purchased a 52.7 percent interest in The Woodlands.11

The Piney Woods

Given these changes, one might well ask what are the prospects for the future of The Woodlands, and what will be its lasting legacies. Driving into The Woodlands from the ugly suburban sprawl that has grown up on its borders, the first thing one notices is, well, the woodlands. Every year the residents of The Woodlands are asked what they like the most and, according to George Mitchell, every year they respond "the woods."12 As recommended by McHarg and his colleagues, large stands of loblolly pines and associated oaks, sweet gum, hickories, tupelo, magnolia, and sycamore have been preserved. In the Title VII plan, 3,909 acres were to be set aside as open space. Eventually, 8,000 acres of the total 27,000-acre community will become open space. This land includes public park and preserve land as well as five private and two public golf courses.

As anyone who has lived in the area very long knows, heavy rains and flooding are a frequent occurrence in and around Houston. To reduce the negative impacts of this excess of water, McHarg's strategy called for, first, the use of natural drainage systems to control storm water; second, the minimum clearing of native vegetation; and third, limited use of impervious surfaces. This strategy has proven successful, and as a result residents of The Woodlands have not been negatively affected by floods.

Wildlife habitat is an auxiliary benefit of large areas of native plants and connected natural corridors. Waterfowl, turtles, and small mammals are plentiful in the riparian areas along streams and around The Woodland's lakes. Residents also report seeing coyotes, a species particularly adaptive to changing habitat conditions.

In 1994, MIT planning student Russell Clive Class wrote a "retrospective critique" on the use of ecology in The Woodlands planning for his master's thesis.13 He used principles from landscape ecology to assess The Woodlands and found it lacking. He argued that several of the ecological principles "that underscored the planning phase are flawed by today's standards and would have been counterproductive to the achievement of contemporary conservation goals." Furthermore, he noted that The Woodlands Corporation "failed to pursue the ecological vision encapsulated in the early planning phase." In defense of The
Woodlands plan, the landscape ecology principles did not exist in 1974, when the plan was prepared. It was McHarg, in fact, who helped provide the interdisciplinary collaboration that contributed to the development of landscape ecology. However, his criticism about the failure of the developers to pursue the early ecological planning vision seems fair. Anyone who has ever been involved in a long-term, large-scale planning project can attest to the challenge of sustaining idealism and vision. Claus’ thesis reminds us that ecological science and ecological design continue to evolve. Some mechanism to incorporate new ecological knowledge into The Woodlands’ ongoing planning and design would have been a really significant innovation. Still, no development as expansive as The Woodlands has incorporated this newer science or design in its planning.

New Minorities

People who the U.S. Census classify as "white" are now a minority in Texas. Conversely, according to the 2000 Census, 87.5 percent of The Woodlands population is "white non-Hispanic." So one might well ask if the idea of racial diversity, which was a dream for new towns during the 1960s and a goal HUD established for Title VII communities, was ever really likely in The Woodlands. Pre-Title VII Columbia has achieved a good level of diversity, but then Columbia is located in the Washington, D.C., region while The Woodlands is in Texas, where integration of housing was an explosive issue even in the 1970s.

One remarkable aspect of The Woodlands in this regard is that George Mitchell appeared to be sincerely committed to diversity. There were efforts not to discriminate in housing sales based on race or religion. In the early years, the range of housing prices was more inclusive than in the later years of development. In addition, HUD supported a better mix of housing before withdrawing its support for low income housing in 1983, a move Mitchell calls "very disappointing." It is the prices of the homes in The Woodlands, rather than overt discrimination that appears to have limited the racial diversity. Although it is possible to purchase condominium units in the lower $100,000s, single-family builder homes starting above $200,000 and custom homes into the millions dominate The Woodlands real estate market. Galatas reports that The Woodlands Corporation currently does not address the lower 40 percent of Houston’s housing market.

Mitchell was more successful in encouraging religious diversity. According to Forsyth, “Mitchell was attracted by Rouse’s experiment with interfaith.” Mitchell consulted with Catholic, Jewish, and Protestant leaders and formed The Woodlands Religious Community Incorporated, now called Interfaith. This organization assumed many social planning and social services responsibilities in the new community and has overall been a positive force. For example, when a group of evangelical Christians organized a commemoration for the first anniversary of 9/11 that excluded Muslims and Jews, Interfaith held a more inclusionary event.

Keeping Up Appearances

George Mitchell exhibited considerable devotion to The Woodlands for more than 30 years. His was not a get-rich-quick scheme. Galatas reports that Mitchell said, “I didn’t want to sell The Woodlands, ... [it] is a great project and I was very proud of it.” At the time of the sale, Mitchell was 78 years old. He told Galatas “if he had been 50 years old in 1997, he would not have sold The Woodlands Corporation.”

The Woodlands is more than a bedroom suburb as a result of Mitchell’s leadership. The Woodlands has indeed become a community, albeit a rather “upscale” one. Homes continue to sell well, including those in the million dollar range. The retail establishments and golf courses indicate an affluent citizenry. The community’s proximity to Houston’s main airport and Interstate 45 have made it attractive to business and industry. In fact, Mitchell sited The Woodlands with the location of the airport and interstate in mind. In the beginning, he set a goal of providing
employment opportunities for at least one third of residents within the community.21
This goal continues, and as of 2004, there were 30,000 jobs in The Woodlands,
which represents a good jobs-housing balance.22 Employment near homes has
reduced the numbers of commuters somewhat in the Houston metropolitan region.
Mitchell originally expected Houston to annex The Woodlands and has been “dis-
appointed” that The Woodlands residents have resisted annexation. However, he is
“hopeful” that some day soon this will come to pass.23

The New Urbanists have renewed public and developer interest in new com-
unities. However, they tend to ignore the American new communities of the
1960s and ’70s and use earlier eras of town planning as their precedent touch-
stones. Real differences exist between the visions of the New Urbanists and
the earlier generation of American new community planners. There are few front
porches and many winding roads in The Woodlands. Except for an early bibilogra-
phy put together by noted New Urbanist Elizabeth Plater-Zyberk, the New
Urbanists have paid scant attention to The Woodlands or any other American new
community of the 1960s and 1970s. The New Urbanists focus on a specific design
aesthetic first and place a strong emphasis on circulation and connectivity second.
A few leading New Urbanists even express open hostility to environmentalism.
The New Urbanist developments that have been built thus far are more New
Suburban than urban. They are affluent neighborhoods that have been developed
for economic and aesthetic goals rather than for environmental protection or
social equity.

The new communities of the 1960s and ’70s emphasized environmental
and social concerns. Landscape design prevailed over architectural design. In
The Woodlands, transportation systems may have catered to the automobile, but
roadways were designed to fit the terrain. Pedestrian and bike trails weave through
the piney woods, connecting residential neighborhoods to shopping and office
areas. Design standards effectively control signage and utilities are buried and hidden
from sight.

The building architecture in The Woodlands is, well, suburban in appear-
ance. Perhaps this is why its design has not attracted much interest from the
New Urbanists or the broader architectural community. In this regard, The
Woodlands can be compared to two other Wallace, McHarg, Roberts, and
Todd projects from the early 1970s, Amelia Island in north Florida and the
Austin, Texas neighborhood where I live. Amelia Island presents similarities to The
Woodlands in both landscape and building design, although new developments
during the past decade display a noticeable New Urbanist influence. My neighbor-
hood, which is inside Austin’s city limits, developed following the Wallace,

Although in my neighborhood oaks are preserved rather than pines, the residen-
tial and retail structures as well as the street patterns display similarities to their
Woodlands cousins.

**Prospects**

So how exactly does one judge The Woodlands 30 years on? In the envi-
ronmental and economic realms, The Woodlands can point to many suc-
cessful achievements. Its social record, however, is more disappointing, with
modest racial diversity. Over time, The Woodlands has become a more affluent,
more exclusive community. Its landscape design is accomplished and pleasant, but
its building architecture lacks innovation and excitement.

But then there is the dream. The Woodlands began as a dream, and one
can imagine another dream that builds from it. One can imagine a new com-


22. Employment near homes has reduced the numbers of commuters some-
what in the Houston metropolitan region.

The natural habitat is lined with bike and jogging trails that link village pockets.
lively and inventive. This new community would draw on the most up-to-date knowledge in ecological science and ideas from ecological planning. The developer would possess the business acumen and stamina of George Mitchell. The new community would be linked to the world by rail and internally through bike and pedestrian trails. All new buildings would be built to platinum LEED standards and schools would have windows. The community would also be dedicated to achieving social equity and racial diversity.

George Mitchell helped change planning, design, and development practice in Texas. As he reflects, "When we started planning The Woodlands, there wasn't the architecture or land planning talent to design and build a new town in Houston. That's why I hired ten people from Columbia, plus some of their consultants and talent from all over the nation, like McNair. Now there's the talent in Houston, but it would be impossible to assemble the land for a new community like The Woodlands."225

Mitchell and his wife Cynthia continue to live in The Woodlands. He has used much of the wealth generated from the sale of The Woodlands and his energy interests to advance sustainable development, historic preservation, and environmental research. Mitchell's ten children inherited his idealism and have pursued studies and careers as environmentalists and architects, as developers and scientists.

We can also be inspired by George Mitchell's idealism. A success in the oil and gas business, he did not need to venture into the risky business of building a new community. But he did, largely because of his belief that we can do a better job designing our built environment. Now that we have entered the first urban century, with more than half the world's population living in city-regions for the first time in history, we need to pursue this ideal with a renewed commitment. As we have become a more urban planet, many more people have joined us with more on the way. As our numbers have increased, we face a future with finite or declining land, water, and energy resources. The Woodlands is not perfect, but George Mitchell's vision illustrates the practical reality of dreaming big.

Notes
11. Ibid., p. xvi.
12. Mitchell interview.
15. Forsyth, Reforming Suburbia, p. 182.
17. Ibid., p. 155.
18. Galatas, The Woodlands, p. 156. Galatas reports that Mitchell would have preferred to sell his energy interests but they were entangled in litigation. He sold the energy company about three years after liquidating The Woodlands.
20. Ibid.
21. Ibid.
23. Mitchell interview.
25. Mitchell interview.

Being There: Living in The Woodlands

Long before The Woodlands welcomed its first homeowners, George P. Mitchell had gathered a team of environmentalists, hydrologists, land planners, and engineers to help him plan an environmentally sustainable community. The Woodlands goes beyond such typical environmental measures as shared parking for parks, churches, and schools, limiting impervious surfaces and planning for storm water management. As an example of the proactive environmental ethos that has been a part of The Woodlands plan from the beginning, protected areas have been allocated for endangered species like the bald eagle and the red cockaded woodpecker. The planned development has grown to include 27,000 acres, but it still maintains its commitment to sustainability.

Over its 30-year history The Woodlands has been recognized with 38 environmental awards, including a 2003 gold award in the prestigious Nations in Bloom competition, the world's only competition that rewards local communities for achievements in environmental management and the creation of livable communities. Endorsed by the United Nations, Nations in Bloom encourages best practices, innovation, and leadership in providing a vibrant, environmentally sustainable community that improves quality of life.

The Woodland's environmental office conducts educational outreach programs including the annual Arbor Day Tree Giveaway each January, when 30,000 tree seedlings are distributed to residents. Earth Day in April provides opportunities to learn about composting, xeriscaping, and other earth-friendly programs. Each fall, The Wildflower Festival brings together local businesses to sponsor a wildflower seed giveaway—thousands of wildflowers bloom in the spring in neighborhoods and along roadways as a result.

As an unincorporated area outside of any city jurisdiction, The Woodlands had to create its own governance structure, and the one it came up with fosters a sense of community and commitment to the environment. The community is divided into villages, with each village composed of several neighborhoods. Each village has its own elected, unpaid association officers including a Residential Design Review Committee (RDRC). The RDRC reviews all exterior changes requested by homeowners to ensure that standards are enforced. Regular public meetings give village residents an opportunity to express their views about issues within the community and to learn about new initiatives.

As the community grows, environmental quality continues to be important. A high performance, green building team at the Houston Advanced Research Center (HARC) is called upon for advice on commercial, public, and residential projects and to offer outreach programs. HARC also maintains a vigorous research agenda designed to explore advanced concepts for building within a sustainable frontier. The successful Cultivate Green initiative is an example of the team's work. With funding provided by the Texas State Energy Conservation Office, this program educates the public in using sustainable materials and practices for residential construction and remodeling.

Over the next ten years the community is expected to grow to a population of 125,000. It will have 22 public schools; eight private schools; 60 religious congregations; 1,000 miles of roadway, 300 miles of pathways. 150 parks; 2,750 employers, 72,700 employees, 32,000 homes; 7,000 apartments and assisted living facilities; and 4,000 town homes and condominiums. Even as it grows, 8,000 of the community's 27,000 acres will remain green space in the form of parks, golf courses, bike paths, and forest preserves.

One of the areas of The Woodlands that will experience the greatest and most concentrated growth is the Town Center, a mixed-use urban core of homes, offices, shops, restaurants, entertainment, and specialty stores. The Center is a catalyst in building a richer social environment and facilitating economic growth. The Center's newest addition, the mile long Woodlands Waterway, links Town Center establishments by water taxis, trolleys, and pedestrian walkways.

My wife and I truly enjoy living in The Woodlands. Being empty nesters, three years ago we selected a small, two-story neighborhood where approximately 75 percent of the 47 households are in a similar stage of life. Our neighbors have become our extended family, we can walk the streets and name the people who live in every single house. Rarely do we travel outside of The Woodlands as we find all of the amenities we need right here. We enjoy free concerts in the parks, the entertainment offered at the pavilion, and a wide variety of restaurants and shopping opportunities. A particular favorite is the now Market Street area where we can walk and explore the many small boutiques. Environmentally focused events are also a must on our calendar, especially "Landscaping Solutions," where we learn about native plants and how we can personally protect the environment.

The emphasis on living in harmony with nature is a true blessing for us, providing a very full and rewarding quality of life experience. In The Woodlands we have found a satisfying lifestyle: a vibrant local economy, high standards for the maintenance and protection of the natural and built environment, opportunities for continuing education, and rich social interaction. — Richard C. Hout, Ph.D.