

PROCEDURAL AND SUBSTANTIVE
LAND MANAGEMENT TECHNIQUES
OF POTENTIAL RELEVANCE FOR
THE NEW JERSEY PINELANDS

A REPORT TO THE PINELANDS COMMISSION

By

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VOLUME 4

THE FOREIGN EXPERIENCE

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INTRODUCTION

This is the fourth of a five-volume study prepared for the New Jersey Pinelands Commission by Ross, Hardies, O'Keefe, Babcock & Parsons. The purpose of the report is to describe and provide a preliminary analysis of land planning and management techniques which have been used, or proposed, in this and other countries. This report serves as a basis for later elements of the Ross, Hardies work program in which, following an additional data-gathering stage, Ross, Hardies will work with the Commission and its staff to narrow the range of planning and management techniques which merit the Commission's consideration and will, as its final work product, draft specific legislation and regulations designed to achieve the goals and purposes of the New Jersey Pinelands Protection Act of 1979.

The first volume of this report is devoted to a summary and analysis of the entire report. In the second volume, we present detailed descriptions of a number of state and regional land use programs for the purpose of illustrating the variety of organizational and procedural approaches that can be taken to regional land planning and management. In Volume 3, we discuss a variety of substantive approaches to land use regulation which may be useful

in the Pinelands either as regional regulations or as models for local adoption in response to regional guidelines. Volume 5 presents a preliminary legal analysis of the fundamental constitutional principles which must be accommodated in any land use regulatory program.

In this volume we describe and analyze a number of land management programs which are currently used in several foreign countries and draw several lessons for the Pinelands program from this foreign experience. A word of caution may be in order concerning the material presented in this volume. While the overseas experience can offer ideas for the Pinelands, it should not be assumed that the foreign land use tools described in this report could, or should, simply be imported and applied there. In the first place, the problems and failures of other countries may have as much to tell us as their successes; some of the experience described here may best serve as reminders of pitfalls to watch out for. Second, differences in our values and our system of government will impede the transfer even of many foreign successes. Some of the techniques described here may provide more protection -- for example, of the "visual amenity" so important to the English -- than is wanted for the Pinelands. And some may impose costs, particularly costs on landowners denied permission to develop, that may be unacceptable in this country. It is nonetheless useful to consider the

goals, techniques, procedures, and institutional arrangements established by these countries in the search for approaches that may be adaptable in the Pinelands.

This report is organized by country -- England, France, Germany, the Netherlands, Australia. Each country section contains a brief overview of that nation's development control process followed by a discussion of specific land use management techniques that may be of interest in the Pinelands.

This report was prepared by The Conservation Foundation, Washington, D. C., pursuant to a subcontract between it and Ross, Hardies. The basis of the report is data collected in the course of a multi-year study of international land use practice undertaken jointly by the Foundation and Ross, Hardies. Three of the authors were formerly associates of Ross, Hardies.

ENGLAND

I. Overview of the English Development Control Process

England* is a small country -- more than 50 million people in an area roughly the size of Wisconsin. In contrast to the United States, only a small percentage of English land is owned by government. These are the dominant facts underlying a land use control system that is one of the most sophisticated in the world.

Since passage of the Town & Country Planning Act in 1947, the whole of England has been subject to a comprehensive and strict system of land use controls. Structure plans, written statements of general growth policies in an area, are drafted by county councils. These plans provide a framework for more detailed local plans, drawn up by district councils, that resemble a U.S. zoning ordinance and map. Any proposed development** must be approved by the local planning authority,

This section was prepared by Christopher J. Duerksen, Senior Associate at The Conservation Foundation, and is based on research undertaken in connection with the Foundation's International Comparative Land Use Project.

* Including Wales.

** Development is defined very broadly, in Section 22 of the Town & Country Planning Act of 1971, c. 78, as "the carrying out of building operations, engineering operations, mining operations or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land." Development or management practices directly related to agriculture and forestry are not included in the definition.

which has a great deal of discretion in dealing with permit applications. District councils thus control planning on a day-to-day basis subject to the authority of a county council to "call-in" an application for review. Under English law, compensation is not required and rarely paid if development permission is denied. In fact, on and off since 1947, any development approved by a local authority has been subject to a betterment levy -- a tax on windfall development gains.

The central government in England plays a much more direct role in the planning system than does the federal government in the United States. The Department of Environment approves all structure plans, hears appeals from planning decisions of local authorities, and retains power to "call-in" and decide any application for a development of regional or national importance.

To this skeletal outline of England's planning system must be added an intangible element--what the English call "visual amenity." While environmental considerations are taken into account in reviewing development applications, planning authorities pay a great deal more attention to matters of design, scale, landscape, and other aesthetic factors. Protection of the postcard-perfect countryside and coastline is paramount.

This concern for visual amenity, coupled with the lack of public open space, has led to the special designation of

large tracts of land, mostly private, as National Parks, Heritage Coasts, and Areas of Outstanding Natural Beauty. These designations do not alter land ownership patterns, nor do they confer any new rights on the public or add any more planning controls (although, existing controls are applied more strictly). The main effect is to require that the national significance of the areas be recognized in their planning and management.

The English have been at the business of planning and managing these specially designated areas for many years -- the first national park was created in 1951. Their experience both positive and negative in dealing with the challenges of regulating and managing private lands for public benefit offers a number of lessons that may be useful Pinelands.

II. Lessons from the English Experience

A. Emergency Moratoria to Protect Critical Environmental Areas or Features: "Article 4 Directions"

With an area as large and diverse as the Pinelands, the Commission will not be able to contemplate every possible adverse impact of proposed development. How can the Commission best respond to this uncertainty? One way is to require thorough review of virtually all development, but this proves burdensome for applicants and administrators alike. Alternatively, some development can be approved with minimal review, but there is always a risk that such development may have an unanticipated adverse impact? What if, for example, the Commission usually allows expansion of a nonconforming use without environmental review, but discovers that one planned expansion will threaten critical habitat? England's "Article 4 direction" suggests one possible response.

Even in England's specially designated areas such as national parks, some kinds of developments do not require planning permission. No permission is required, for example, to drain a marsh for agricultural use, to alter a home's interior, or to add to a farm building.

This permitted development, which typically has no significant effect on environmental quality, can sometimes cause adverse consequences not contemplated in the local plan. To illustrate, a local authority may learn that the owner of an historic house plans a small addition, not normally subject to review, that destroys the building's character.

The authority is not helpless in these situations. It can issue what is called an "Article 4 direction"* prohibiting the proposed development on the ground that it would be "prejudicial to proper planning or constitute a threat to amenity." Such a direction, which expires in six months unless formally approved by the Department of Environment, may contain specific standards to govern theretofore permitted developments or it can simply prohibit certain types of alterations or changes. An Article 4 direction might thus be characterized in some cases as an emergency moratorium or in others as a floating overlay protection zone.

Given constitutional and statutory requirements in the United States, it would be important that any Article Four-type mechanism used in the Pinelands spell out in some detail the circumstances under which it might be invoked, its permissible duration, notice provisions and similar considerations. The actual direction or order might contain specific standards to control the development in question.

* So-called because it is found in Article 4 of the Town & Country Planning General Development Order of 1973.

B. Reconciling Agriculture and Forestry with Other Land Uses

What should the Commission do if a land-owner in the Pinelands wants to drain a marsh for a cranberry bog? Or clear land of critical environmental value to expand his blueberry growing operation? Is there a mechanism that would bring the proposed change to the attention of the Commission and enable it to consider the potential damage to the critical area and also the needs of the agricultural operation that it is charged by law with promoting? English experience suggests that agricultural practices may be especially difficult to control.

While the emergency protection provided by an Article 4 direction has proven useful in England, in many instances these directions adopted by a local authority do not take effect until approved by the Department of Environment. If an owner decides to convert part of his acreage from marshland to cropland or from forest to cropland (both are permitted developments), destroying a critical wildlife habitat in the process, the local authority cannot stop him unless the central government affirms the Article 4 direction.

In practice, local authorities have been reticent to control farming or forestry practices because of opposition from powerful agricultural and forestry organizations. Moreover, the Department of Environment, recognizing the need to increase national food and wood production, has rarely confirmed Article 4 directions affecting agriculture and forestry practices.

This lack of control led to controversy in several national parks. In Exmoor in Southwest England, for example, farmers were plowing moorland, which for centuries had lain fallow as grazing land, thereby destroying the landscapes and natural habitats the park was supposed to preserve. In other cases, "afforestation"--the planting of trees on unforested tracts of moorland and uplands--helped destroy the wild, barren landscapes so valued by the English.

These changes caused public protest, particularly with regard to Exmoor. The Labor Government responded by introducing legislation to allow the park planning authority to issue moorland conservation orders, which would have prohibited plowing or other changes in moorland without its permission. The new Conservative Government, opposed to expanding development controls at this time, has dropped the legislation and is instead relying heavily on cooperation between park authorities and land owners. In particular, the Conservatives have emphasized the availability of management agreements to conserve land of outstanding scenic interest; by entering

into such agreements, landowners can obtain exemption of their land from the national tax on capital transfers.

In sum, even in England, with its strong development control system and outstanding record of managing public/private parks, there have been difficulties reconciling public objectives that affect agricultural practices. This experience offers some valuable lessons for the Pinelands, particularly since the Commission is charged by its enabling legislation to promote the continuation and expansion of compatible agricultural and horticultural uses in both the protection and preservation areas of the reserve.

C. Project Review in Public/Private National Parks

In reviewing proposed development, can the Pinelands Commission focus its attention on the most critical areas and particular kinds of development--and rely on local governments to handle the rest? The "two-tier" approach recommended for England's national parks suggests one possibility.

The administration of English National Parks is in many ways similar to the system established for the Pinelands. A park authority made up of national and local representatives has responsibility for drawing up a park plan and reviewing all development applications to ensure that any approvals are in accord with the plan. In each park, the development

control system operates with special rigor, and almost all growth is restricted to existing settlements.

This strict policy of growth control has been quite successful in stopping incompatible development and preserving the parks against many pressures. However, it has also meant that the park authorities have found themselves devoting an inordinate amount of time to reviewing minor developments in park areas with relatively minor environmental or aesthetic value. The authorities have become bogged down in detail, with the result in some instances that developments that might have a serious adverse impact to important park values are not reviewed as comprehensively as they should be and resources to manage the most critical areas are spread too thin.

A recent report (September, 1979) by a government body, the Countryside Review Committee, makes several recommendations that are worth considering in the context of the Pinelands. The Committee has suggested a two-tier system of designation of areas within national parks. The first tier would consist of small areas of outstanding quality, similar to the Pinelands preservation zone. The second tier would cover the remaining area, larger in acreage and with more inhabitants, similar to the Pinelands protection zone.

Within the first tier, land would be managed or farmed in conformity with conservation objectives, and the national significance of the area would be emphasized. Of greatest

relevance to the Pinelands, the park authority would have a more day-to-day involvement in development decisions affecting this first tier. In the second tier, although conservation would still be the primary objective, some development would be permissible. The park authority would establish overall growth and management policies, but the day-to-day running of the areas would be the responsibility of the relevant local planning authorities.

In the Pinelands, by analogy, the Commission might focus more of its attention on the preservation area and leave localities more discretion in the protection area. If any such two-tier system is adopted, however, the Commission will have to guard against the impression that the protection area is being given second-class status. If development in the protection area has significant impact on the preservation area or other critical environmental resource, it should be subject to the same scrutiny as developments within the preservation area.

D. Windfall Taxation: England's "On Again, Off Again" Experience

The Pinelands Commission, itself an innovative approach to land use management, is likely to receive suggestions that it explore experimental techniques to achieve its objectives. One technique sometimes

suggested is taxation of landowners' "windfall" profits. England has tried this for more than three decades. The English experience suggests that the road to a windfall profits tax is likely to be filled with pitfalls.

During the Second World War, the English government appointed a number of committees to examine proposals for a new planning system. One of these, the Uthwatt Committee, was directed to analyze the payment of compensation and recovery of windfalls--"betterment" in English parlance--with respect to the public control of land use. In its final report, the Uthwatt Committee recommend, among other things, that betterment--defined as any increase in the value of private land arising from central or local government action, permit or license--be recaptured by the public.

While the recommendations of the Uthwatt Report were never adopted, its underlying spirit was captured in the Town & Country Planning Act of 1947. That Act nationalized all development rights, required planning permission for all development, and levied a 100% development tax whenever permission was granted. The basic premise behind the 100% tax was that all betterment was created by the community, and should be retained by the community through the government.

The new system, though simple in theory, proved very complex in practice, and the high level of the development tax was viewed as a hindrance to post-war housing construction

The Conservatives abolished the windfall taxation aspect of the system in 1953.

Over the next 20 years, successive governments grappled with the betterment issue. In a planning system where development permission was so hard to come by, it did not seem fair to dole out huge windfalls to a select few property owners or developers when those denied permission received no compensation. In the mid-1960's, the Laborites again enacted a betterment tax on all sales, leases and material development of property, although this time the levy was set at only 40% in hopes of providing some development incentive. The betterment tax was coupled with a land banking scheme whereby a central government agency, the Land Commission, would purchase land at market value less the betterment tax and hold it for development. This measure, too, proved very unpopular, not only with developers but also with local authorities who resented the interference of a central government agency in local land markets and planning. The Conservatives regained power in 1971 and dumped the whole scheme.

Ironically, the early 1970's were boom years for commercial development in England. So many developers made so much money that the Conservatives in 1973 proposed reinstating a development gains tax, this time graduated according to the amount of gain. On taking power in 1974, the Labor Government enacted such a tax.

The Labor Government, however, was not satisfied with this solution since each time it attempted to recoup windfalls, its actions had been repealed by a subsequent Conservative Government. The Labor Government's answer was the Community Land Act of 1975 which provided for eventual municipal ownership of all developable land--with an interim development gains tax of 66-2/3%. By placing land acquisition powers with local authorities, the Labor Government hoped to avoid the animosity generated by the former Land Commission's interference with local planning. After a good deal of controversy, the Act passed Parliament in November, 1975.

Less than five years later, the Community Land Act is no more, repealed by a new Conservative Government. The reasons for its failure are many: lack of money by municipalities to purchase development land even at bargain rates; the reticence of landowners to come forward with development plans which would either trigger condemnation by the local authority or a biting windfall tax; and a general revolt against an increasing government role in social and economic planning. However, indications are that the development gains tax will survive, albeit at a reduced rate.

What can we infer from this tortured history of attempts at windfall recapture in England?

1. The very definition of a "windfall" is crucial.

Identifying the increment that should be recaptured is exceedingly difficult.

2. Any windfall recapture or land banking scheme must be reconciled with local desires to control land use.
3. If windfall taxation is to work, there must be a broad consensus that gains from land sales should be recaptured by government.

FRANCE

I. Overview of the French Development Control Process

French national planning goals are generally pursued through fiscal controls and direct intervention in certain large-scale development decisions. For the vast bulk of development-oriented decision-making (zoning, planning, building permits, infrastructure placement, and so forth), local government retains influence equivalent to its influence in the United States. A brief review of planning and permitting from the local perspective helps place French land use management techniques in a context that allows some comparisons with the techniques the Pinelands Commission may consider.

Local government in France includes some 38,000 units of municipal government (la commune), each of which works closely with an intermediate governmental unit called the department (le departement). Together, these two units form the "local collectivity" (les collectivites locales), a coalition of authority that forms the basic working unit for local governance. France has 95 departments which are grouped into 21 regional units with limited planning and budgeting authority.

A municipal unit has a mayor and council who typically represent a small geographic area and constituency. Their

This section is based on research conducted by John S. Banta as part of The Conservation Foundation's International Comparative Land Use Program.

most important function (after, perhaps, civil marriages) is land use because they share planning and permitting responsibilities with a technical services unit in the department and play an important part in infrastructure budgeting. Some metropolitan areas are governed under a different structure, but typically the metropolitan government, if it exists, is a coordinating unit with limited independent fiscal powers.

The department's chief executive officer, the prefect, who is appointed by the Minister of the Interior, acts in land use decisions as liaison with central government executive agencies, as executive for the departmental legislative council, and as final arbiter for local decisions such as building permit issuance.

Day-to-day development decisionmaking (and most local technical expertise) is assigned to the departmental director of public works. The director is technically an agent of a central ministry, but the intervening authority of the prefect and the close working relationship with the office of the mayor effectively insulate the director's regular business from central government interference.

Development in France requires a building permit (permis de construire). This is now a consolidated development permit that incorporates all conditions for development on a given site. In an ordinary case, an applicant files his application with the local mayor, who transmits

it to other responsible authorities like the director of public works.

The permit decision in an ordinary case is shared by the mayor and public works director. If they disagree, the prefect is the arbiter; he also will review a decision at the request of an applicant under certain conditions. As this makes clear, development initiatives supported by the prefect -- major public works, for example, and some commercial development assisted by the government -- are likely to prevail despite any local objections. But for the sorts of small development decisions that pose incremental threats to ecological integrity, local government retains the important voice.

Current French zoning plans resemble those in use in the United States with non-cumulative use districts and special "planned development" options. But they can incorporate additional provisions, the most important being administrative procedures that allow the exercise of eminent domain. Specific zoning plans must reflect a general regional plan that has some importance for fiscal programming and the national budget.

II. Protecting France's Sensitive Natural Areas

A. The Camargue -- A Regional Natural Park and Reserve

France's Camargue, a wetlands complex at the mouth of the Rhone River just west of Marseilles, has protections not unlike those established for the Pinelands. Some of the parallels are striking: the inclusion of private as well as public lands in the Regional Natural Park of the Camargue; a governing committee comprising representatives of multiple interests, including local governments; inclusion of local zoning among park protection measures. The Camargue experience suggests possible approaches to questions that are likely to arise in the Pinelands. How can local governments and landowners best participate in regional planning and conservation decisions? What relationship should exist between land use control and natural area protection?

The Camargue is a region of about 200,000 acres of Rhone River Delta lands traditionally devoted to agricultural, salt extraction, and, more recently, tourism. Until the early 1960s, the region was not under significant development pressure. While its reputation rested on the bulls and horses raised on its marshy flats adjoining the Mediterranean, the region also enjoyed spectacular flamingos

and other birds and animals.

In the mid-1960's, business fortunes of traditional agriculture and salt producers in the delta region began to decline just as the government initiated massive programs to promote tourism to the west and industry to the east. The wetlands and rural character of the Camargue were threatened by the service infrastructure -- expressways and housing -- and the increased visitation the new development would bring. Century-old dikes and drainage patterns that protected the wetlands were also threatened by neglect.

Protection efforts for some of the wetlands had commenced in 1942 when the national government classified a portion of the most critical area under France's Site Protection Law of 1930. Classification, which prohibits any alteration of a site, can be accomplished through voluntary agreement with a landowner or through a procedure roughly analogous to condemnation of an easement. In 1963, the entire Camargue region was registered under the Site Protection Law. Registry adds a consultative procedure to the building permit process before any alteration takes place. It also shifts the departmental development review process into non-routine channels.

The Camargue has also been subject to a special zoning designation, which authorizes zoning protection of forested areas and creates a preemptive acquisition

right for the department in certain situations. Neither, however, has played a central role in management of this area.

Beginning in the early 1960s, proposals for the creation of a national park were discussed for the Camargue, but were vigorously opposed by local governments in the area. There were, however, problems with the existing site protection techniques, particularly with their links to the urban planning process. The larger the site included under the 1930 law, the more likely major impacts would escape its narrow procedures as new roads, facilities, and economic trends increased pressure for change.

The solution proposed for the Camargue had two elements: a regional natural park to protect the delta setting, and a natural reserve, closed to both hunters and tourists, for the ecologically valuable central wetland complex. The proposed park would provide planning and local education to preserve the rural character of the area. The reserve would lock up the key critical areas in the hands of ecologist/managers well equipped to maintain their ecologic values.

In 1970, the Prime Minister signed the decree recognizing the Regional Natural Park of the Camargue (Parc Naturel Regional de Camargue), intended to provide coherent management for the region.

Park creation required approval by the local governments involved. The Camargue was fortunate that two of the many communes included in the registered site were

extraordinarily large by French standards, encompassing the critical central area and the bulk of the registered site. These two, St. Maries de la Mer and Arles, joined in supporting the proposal which then met the threshold size requirement of 5000 hectares.* (The other communes in the registered site are located in another department and are not a part of the Park.)

The national decree authorized operating and capital funds for the park manager. For operations, the national government provided 100% financing in the first year; 50% in the second; and 25% in the third. Assistance for a capital investment, typically at a level of 80%, is available on a continuing basis.

The manager of a regional natural park in France is selected by the local collectivity. In the Camargue, the local governments chose an unusual management arrangement: a private foundation with corporate status but no public powers. Other options they might have chosen included a quasi-public corporation or a lead agency chosen from the local collectivity.

The foundation approach had the advantage of directly involving local property owners in park management. The

* One hectare equals 2.47 acres.

park's foundation has an administrative council with representatives of all four major interest groups: local government, property owners, friends of the park, representatives of central government and the prefect. Special advisors in science and economics assist the prefect.

A nine-man executive committee, with two representatives of each of the four main groups on the council and an at-large representative, handles regular administrative matters for the park. Council members are also organized into Commissions intended to facilitate understanding between the different constituencies of the park. The Commissions address substantive subject areas like agricultural practices, irrigation, science, and hunting.

The primary objective of the park is to maintain a rural character in the area. Among their priority studies, the park managers have attempted to identify the most valuable elements of the local economy to guard against squeezing out traditional activities through the inadvertent destruction of some key facility or service.

Local zoning has supported the Regional Park objectives. For example, in the mid-1970's the park managers faced a general plan calling for major improvements of the regional road system. In part, they dealt with this threat by consulting with municipal government and succeeded in altering specific zoning plans prepared by the department.

Thus, a major expressway proposal was replanned for a route outside the park. If these negotiations had failed, the park managers would have been forced to make an extraordinary appeal to the national government to change or reverse an official position of central executive agencies.

Minimum lot sizes of 50 to 150 acres have also been established for agricultural zones within the park in addition to nature protection zones. Because agricultural activities are exempt from permit requirements, however, protection of natural areas from the region's primary activity depends on cooperative action.

On an administrative level, park managers have also been brought into the local zoning review process. Zoning is enforced by municipal governments and the department through the building permit program with permit applications being referred to a departmental site commission that includes the park's executive officer. The Commission must review the application and may enter into informal negotiation for modification of the project or recommend formal permit conditions. The park staff also participates in this review process for applications that affect the park. For the park managers, this has been perhaps the most effective administrative entry into the land use decisionmaking process.

To ensure further protection and management, the area of highest scientific interest within the park was

placed in public ownership in 1975 and classified as a national reserve (reserve nationale de Camargue). This had the effect of closing the core area to the public and all other activities except an occasional scientific investigation. Creation of the reserve strengthened the national policy commitment to the region. The Reserve managers sit on the park council.

The techniques that address outside pollution threats -- the Regional Water Basin Agency (Agence de Bassin) and industrial pollution control programs -- are not well integrated into the Park management scheme. Pollution of the Rhone and Mediterranean are thus persistent threats to the Camargue.

B. The Vanoise -- A French National Park

The French have employed another approach to park management in the Vanoise, the country's first national park. Like the Camargue approach, the Vanoise assumes involvement of local governments and provides a method to reconcile growth with natural area protection.

Created in 1960, the Vanoise is located in the high Alpine region of the Department of Savoy on the Italian border. Increasing numbers of tourists from both France and Italy are visiting this area, which is located on a main travel axis between the two countries. The park's general objective is preservation of the high alpine flora and fauna and its interpretation to a highly urban French population. The park adjoins a somewhat similar protected area in Italy.

The initiative for creating the Vanoise National Park began with central government action by administrative decree in 1960 authorizing a public inquiry for classification of the park -- a procedure long on intergovernmental consultation and special commissions. A decree from the Council of State, a sort of administrative Supreme Court, completed classification in 1963, creating a servitude or public easement over the core of the park property. Though compensation to private parties may be due as a part of this procedure,

the classification decree for the Vanoise included only municipal lands, so no direct compensation was involved.

Classification took three years, and the first battle over park management involved the allocation of land between the classified or protected park zone and the "pre-park" or peripheral zone. Not only did the distinction mean the difference between an absolute prohibition on development or permanent habitation, but the French program also designated the pre-park a priority investment area for various tourist enterprises to encourage local acceptance of the park program. All of the 28 Vanoise municipalities were allocated land in both the pre-park and the park zones. The park, including the peripheral zone, includes some 200,000 acres. The classified park, or the protection zone, includes about 60,000 acres.

The long classification process had the beneficial effect of surfacing peripheral development proposals and directly addressing them. The park managers won some and lost some. In the end, the border of the protection zone was gerrymandered to include only the land with the lowest development capability. Critics have argued that the result is ineffective protection of sensitive natural areas.

The park is managed by an administrative council operating as a public corporation. There are 35 seats on the council, with seats allocated as follows:

local government -- 9

other local officials -- 2

individuals proposed by interest groups -- 7

individuals proposed by national government -- 3

civil servants -- 14

The council is dominated by government officials.

When they were accused of neglecting the natural resource management objectives for which the park was created, an advisory scientific committee was also created. There was, however, no change in the basic management structure.

The park management's primary objective was a development program for service and interpretive facilities for visitors to the park. This includes trails and interpretive centers, but it also included relatively intensive winter and summer ski development in the peripheral zone. In the classification process, a number of trade-offs ultimately permitted summer ski development in a high alpine area on a glacier -- to the consternation of ecologists who had believed park designation would prevent just this sort of incursion into the park zone.

The park management controls the park through the control of funds, including funds for local government and development, and through a veto power over local government development decisions. The veto is enforced through direct access to the Minister of the Interior, one of the most powerful central government cabinet ministers. Fiscal control can be exercised directly, or more typically through

contracts with the local collectivity. The Director of the Administrative Council exercises the other prerogatives in local decision-making.

From the beginning of the Vanoise Park, commentators have called attention to the special role of the pre-park, which serves as a development-oriented inducement to local government to support the park. The logic of the National Park program was apparently that well planned and funded development was better than either "no development" or "bad development" options. While the pre-park may contribute to a successful park in the public's mind, natural scientists appear to have been extremely concerned at this mixture of planning and preservation in the Alps.

C. The Aquitaine -- Use of Preemptive Purchase Rights for Conservation

The Pinelands Protection Act provides that any person who wants to sell land in the preservation area must give notice to the State Commissioner of Environmental Protection. The Commissioner then has the right of first refusal to purchase the land.

The workings of this provision could have a significant impact on implementation of the Pinelands management plan. What information will the Commissioner need in making a decision to exercise the right of first refusal? How should the right be enforced? How should a fair purchase price be established? In France's Aquitaine region, an organization called MIACA has exercised preemptive purchase rights for park protection since 1970.

Among the French examples discussed here, the Aquitaine has the closest physical resemblance to the New Jersey Pinelands. The region is large, about 130 miles by 25 miles, and heavily forested in pine. Soils are sandy; much of the forest is planted on reclaimed dunes. Though bordered by large population centers, villages within the planning region average only a few hundred permanent residents. Most of the Atlantic coast and the large inland

lakes of the region are only moderately developed.

By decree in 1967, the French government created an interministerial mission to plan the Aquitaine coast, generally referred to by its acronym, MIACA. MIACA, created for an initial period of three years, has had its mandate renewed for 3- to 5-year increments. Its first and principal effort was to prepare a general plan for the region. That plan, approved by the national government in 1970, subdivided the region into nine development planning districts separated by seven nature protection units. In 1972, the national government approved plans for each of the individual units and committed \$100 million in grant and loan funds over 10 years to assist in executing the plan.

MIACA is an action committee with a small staff that is outside the normal hierarchy of planning and zoning. Its decisions are directly ratified by a subcommittee of the Prime Minister's cabinet. Its managers also have direct access to central government capital budgeting decisions relating to the Aquitaine region through ministerial representatives who sit on the committee. As a result, although MIACA has no legal control over local zoning and permitting, over the 10 to 15 years of the program it will have significantly influenced the plans and the development of the region.

With the completion of the MIACA plans for development and preservation units, the mission initiated a three-pronged implementation effort based first on funding local preparation of revised zoning (POS) plans; second, on new and improved infrastructure (mainly roads and sewers); and third, on new development projects, often as joint public/private ventures including municipal governments. From MIACA's point of view, POS plans are relatively unimportant in the short term because of MIACA's influence over the purse strings. In the long run, however, the POS plans will be needed to carry on the overall protection/development philosophy for the region.

In addition to planning and zoning, MIACA assisted in creating a new regional park. MIACA directed about \$600,000 to the park in the early years of its operation and also provided some funds for acquisition and expansion of natural reserve lands.

Finally, MIACA initiated procedures to create preemption rights within the region to monitor and intervene in the land market. An interim preemption zone of about 100,000 hectares was created in 1970 with a three-year duration; it was trimmed in 1974 to about 44,500 hectares. During the interim period, about 480 hectares were acquired; by 1976, plans existed for preemption of another 370 hectares. The final zone will remain in place for 14 years.

The preemption right, called a ZAD, (zone d'aménagement differe) affects every proposed voluntary transfer of land

in the zone. Both property owners and notaries (who handle real property transactions) are required to send a registered notice to the departmental prefect and the local mayor before a valid property transfer can take place. In the Aquitaine, the department is the right-holder except in two instances where the right has been transferred to two local governments.

Property owners must give such notice of transfer in three instances: sale, exchange for other property, and transfers within a corporation. When the transfer is by sale, the price and all payment terms (e.g., delayed payment, interest discounts, etc.) must be revealed. In cases of exchange, a description of the equivalent property must be given.

Once notified of a pending transfer, the department, as holder of the preemption right, has two months to formulate a reply with:

- 1) acceptance of price and conditions; or
- 2) an offer of a price set by the department with optional recourse to an expropriation judge for valuation if the alternative price is rejected.

Each side in the proceeding is bound by its offers but may reject any alternate offer by the other and abandon the transaction. Either may reject the findings of the expropriation judge within two months of his finding.

In the case of renunciation by the department, the property owner is freed from the preemptive restraint. Even so, however, the price of any transfer must be the one specified in the public notice.

Some observers have cited benefits from ZAD that go beyond the opportunity to acquire needed land. Minister Robert Galley claimed in 1975 that ZAD-acquired land was costing half as much as land acquired through formal eminent domain proceedings. Also, since ZAD is a "voluntary" technique, no public inquiry is required, thereby removing an obstacle that delays expropriation. And, even when the preemptive right is infrequently exercised, the ZAD technique allows planners to monitor land prices.

On the other hand, although no enforcement data are available from the Aquitaine, information from other parts of France where the ZAD technique has been applied suggests that its requirements have often not been rigorously enforced. Lackluster enforcement may result in part from the lukewarm reception given ZAD by many municipal and departmental officials, perhaps because of the inequity of treatment between the ZAD zone and its immediate surroundings. Indeed, the attitudes of local officials, the tight financial straits of most municipalities, and the wrath of landowners, are all significant constraints on use of the ZAD technique. It appears to take central government intervention, as with MIACA, to make it work at all.

GERMANY

I. Overview of the Land Use Planning System in the
Federal Republic of Germany

American visitors to Germany have long been impressed by the seemingly vast forests and farmlands of this small, densely populated country containing 60 million inhabitants on a land area no larger than Oregon. With most of its land in private hands, Germany has developed a sophisticated system of reconciling private ownership with public needs. Some of its programs, such as protection of private forests, are rooted in experiences in the Middle Ages. Others are recent responses to pressure on rural lands for industrial, commercial, vacation home, or tourism development. During the past 20 years, these pressures have brought strict laws governing the sale and use of land, modernization of farms, subsidies for agriculture, reconciliation of conflicting demands on rural lands, and protection of the aesthetic quality of the landscape.

Private decisions about the development of private land in Germany take place within the context of the constitutional principle of the "social obligation" of property. This principle has been interpreted by the German courts to mean that, except in unusual circumstances, restriction of private land to its current use does not entitle the owner to compensation.

This section was prepared by Cynthia Whitehead, associate at The Conservation Foundation and European staff representative based in Bonn, Federal Republic of Germany.

Under its federal system of government, similar to that of the United States, the German government does not participate directly in substantive land use planning. Federal laws, however, establish a framework of general goals and specific procedures that govern land use planning and zoning by the states and municipalities.

One federal statute, the Federal Building Law enacted in 1960, is particularly important for understanding German controls on urban growth. That law declared that owners have no right to build on undeveloped private land in "exterior" areas--those outside the built-up areas of towns. (Certain buildings compatible with agriculture are excepted.) By contrast, owners do have a right to develop, consistent with surrounding land uses, in built-up "interior" areas of towns. This distinction between "interior" and "exterior" areas amounts to a national decision to zone all undeveloped land outside towns for exclusive farm or forest use. Rezoning of land from "exterior" to "interior" has become the key step in controlling urban expansion. Town councils grant this rezoning by adopting municipal ordinances.

Rezoning, like all municipal zoning activities, must conform to municipal, regional, and state land use plans adopted pursuant to a second federal statute, the 1965 Federal Regional Planning Act. The state must approve regional and municipal plans as conforming to the state plan before they go into effect. Regional planning associations,

composed of the municipalities and counties in a planning region, meet and make recommendations on every proposed municipal rezoning of undeveloped land for development. They are assisted by state-funded staffs of planners and scientists. The state or the municipality can sue to void a municipal rezoning for development if it violates the state or regional plan.

The federal government meets regularly with state land use planning ministries to agree on specific national land use programs, including channeling development into specified areas, and subsidies for economically disadvantaged areas of the country, such as along the North Sea and the East German border.

Many of the land use management techniques that have evolved under these statutes and the constitutional principle of the social obligation of property reflect two goals to which Germany has been committed since the 19th Century: maintaining its forests and its agricultural system of family farms. These goals have not been pursued solely for economic reasons, but also to serve a variety of other public and private interests: protection of the environmental and the aesthetic quality of unique natural areas, protection of neighbors against disruptive land uses, improvements in the quality of rural life, and improvement of the recreational value of rural lands.

Controls employed in Germany to accomplish these goals include restricting the harvesting of trees and the grazing of animals in ecologically vulnerable areas; granting public access to privately owned fields, forests, and lakes; and preserving rural architecture. They are supplemented by a variety of programs designed to help private landowners live with these restrictions: grants for the restoration of privately owned historic buildings, subsidies for small farms, and advice for farmers and forest owners.

II. Land Use Controls for the Protection of Rural Amenities.

A. Protecting and Managing Forests

Can the Pinelands Commission provide effective protection for trees, particularly those that are large or rare? And what of ecologically-sensitive areas within woodlands or aesthetically important forest landscapes? State laws and municipal tree protection ordinances provide such protection in Germany

In addition to their commercial function, forests in Germany are recognized as having public functions such as protecting settlements against weather damage and providing recreation. The Federal Forest Law, implemented through state laws and municipal tree protection ordinances, restricts the cutting of trees and the clearing of private forests. Municipal ordinances protect trees inside towns, while state forest laws protect rural groves and woods.

The municipal ordinances generally declare it unlawful to cut down any tree larger than a certain diameter (e.g., 8 inches) without a permit from the municipal park agency. Groups of trees are also protected if they have a certain minimum number (e.g., three) and if individual trees are of a certain minimum diameter. The permit requirement enables the municipality to ensure that trees on private lands are cut only for good reasons, such as potential

injury to people or damage to property, or if the tree is diseased. Some municipalities in Germany go so far as to prepare lists of specific trees declared to be "natural monuments" and under special protection.

The German state forest laws protect and maintain private forests outside built up areas by designating protection areas in which the forest owner must obtain a permit from the state forest office before harvesting any trees. The state forest office also gives free advice and service to forest owners in the cultivation of their trees.

The state laws accord special status to forests that fulfill three functions: protection, recreation, and special uses. The Bavarian State Forest Function Plan, for instance, defines the relative importance of these functions for every acre of forest in the state. These designations are based on careful analysis of the nature of the forest in relation to surrounding lands and the needs of the region, for example, clean water, protection from wind damage, or recreation. The designations are not used to prevent harvesting the timber. Rather the state forestry office ensures that harvesting takes place in a manner that will not injure the forest or the areas placed under special protection.

In forests that fulfill one or more of these functions, any action that destroys or substantially injures the forest generally requires a permit from the state forest office. No changes in the use of the forestlands are permitted if they

would harm the special use of the forest. After harvesting the trees, a private owner must replant within 3-5 years, and must protect and maintain the long-term viability of the forest. Under certain conditions, the forest owner will be compensated for the cost of replanting. If the owner cannot afford to replant a cleared section of forestland, the state forest office has authority to enter into the land and replant.

Protective forests are those that maintain a water table or protect against erosion, avalanches, or wind damage to buildings or fields. Recreation forests are those designated as such by a county government or the state land use program. Private owners of recreation forests can be required to provide recreation infrastructure such as paths, shelters, toilets at their own cost, but this requirement has not been applied yet.

Special use forests are those located near large urban areas that fulfill a special function in the region's ecology such as protecting water or air quality or providing recreation to nearby urban residents. The special use forest designation is a new, and as yet untried, tool to protect large, private forests near urban or developing areas threatened by other uses. In Bavaria, for example, it is about to be used to protect the Imperial Forest outside of Nuremberg. The construction industry is currently fighting the designation because it would mean an end to gravel mining and clearing in the forest.

To monitor and control the relationship between agricultural and forest lands, the Bavarian Forest Law also requires owners to obtain a permit from the regional office of the state forestry authority to plant trees on a previously open field and for the division and sale of forest lands. The permit to divide forest lands may be denied if the resulting parcels of land are less than 2 acres, or if the division would create uneconomically small parcels of forest land.

B. Public Access To Private Lands

People will undoubtedly want to hike and camp on large tracts of private land in the Pinelands. Some may demand access and ignore "no trespassing" signs. Should the Commission encourage owners to sell or donate the sorts of "wandering rights" that Germans have by ancient custom?

Traditionally, Germans have enjoyed the right to wander through private forests and fields on their holidays. Rural property owners may fence off their lands only to protect sensitive plants, eroded areas, or livestock, but not solely to keep people out. In turn, the visiting hikers and picnickers are required to stay on clearly marked trails and avoid damaging crops or natural vegetation. These "wandering rights" resemble in some ways the common law "open fields" doctrine in the American West, which allows the public to

cross private lands--for hunting, for example--if the lands are not clearly fenced and marked no trespassing.

The Bavarian state constitution, written only 30 years ago, extended these wandering rights to permit the public to use the shores of lakes and rivers located on private lands, but this new right has been difficult to implement. The state is currently engaged in lengthy litigation with many property owners to force removal of fences illegally blocking access to their lakeside property. It is currently preparing a public information campaign about the right of access to lakes and rivers and to inform these landowners of their responsibilities. Flexibility in enforcement is maintained by permitting lakeside homeowners to protect their privacy by planting hedges, building fences, or locating a path to the water at a distance from their home.

As a means to accommodate public demand for access to private land, the wandering rights doctrine is not directly transferable to the Pinelands. Indeed, the Bavarian experience shows that introduction of strict public access laws--in that case a law guaranteeing public access to rivers and lake shores--can cause resentment and lead to lengthy litigation with property owners. A related approach, the practice in Oregon and other states of negotiating "trail easements" through farmlands, may have greater promise in the Pinelands. On Sauvie's Island, near Portland, Oregon, the State Game Commission has acquired public access to trails through private farms by persuading farmers to

donate the easement and take a tax deduction for its value. Another option might be to pay farmers or forest owners to allow public access and maintain existing trails.

C. Programs for the Maintenance of Rural Areas

How might the Pinelands Commission help to assure that agriculture in the Pinelands remains economically sound and continues to provide a way of living that rural residents find acceptable? Bavaria gives cash subsidies to some farmers, and its "Alps Plan" protects the rural environment by channeling public investments into areas appropriate for development

Rural Germans bear many public obligations -- to provide access to their land, to maintain alpine trails, to forego building rights that would adversely affect the aesthetic value of the landscape. The amenities provided by alpine farmers, for example, are thought to be mainstays of the area's attractiveness to tourists: maintaining their picturesque, centuries-old houses and alpine huts, driving their cows up to the high meadows in the summer, maintaining alpine trails for their own and visitors' use, providing rooms for tourists in their homes, keeping the Alps populated with year-round inhabitants, and maintaining the traditions of rural culture.

Because of a short growing season and poor soil, these alpine farm families have usually been able to maintain only small, subsistence farms. Since 1972, first Bavaria and then the European Economic Community (E.E.C.) have subsidized these farmers in areas where farming is handicapped by altitude, difficult climate, or steep slopes. Subsidies and other assistance are given to rural inhabitants to conserve the traditional appearance of the countryside by maintaining a minimum population density. The subsidies include cash payments to farmers as well as programs for improvement in production and storage of fodder, roads, sewage systems, housing, and recreation.

The farmers and the E.E.C. are generally pleased with the success of the program. Migration from the countryside to the cities has been greatly slowed, and in many areas stopped, and the children of farm families are showing renewed interest in staying on the land. The Bavarian program has shown that rural residents are willing to relinquish the potentially higher profits of selling their land, or giving up farming for industry, if they are assured that their the quality of the rural environment will be protected and their farms will support them.

This trend has been encouraged in Bavaria by the "Alps Plan," a state program to protect rural areas by curbing development in environmentally vulnerable alpine areas.

The "Alps Plan" was begun in 1971 to control development in alpine areas by limiting public investments in roads, railroads, gondola lifts, ski trails, and airplane landing

sites, thereby limiting new access to these areas. The state used the plan to channel public investments away from protected natural areas and towards towns that were designated as appropriate for development. Because development tends to follow improvements in access to rural areas, the state reasoned, the direction of rural development could be indirectly controlled by controlling access to selected areas. Therefore, the plan divided the sensitive alpine area into three zones: A Quiet Zone, which encompassed most remote areas and nature protection sites, a Buffer Zone, and an Open Zone. Construction of public facilities was banned in the Quiet Zone, permitted on a case-by-case basis in the Buffer Zone, and unrestricted in the Open Zone. Bavarian Planning Minister Max Streibl termed the plan an "emergency brake" which, despite initial scepticism on the part of nature protection groups and the press, was widely praised after five years of implementation. Because no exceptions were granted to the ban on new access roads and facilities in the quiet zone, tourist development in this zone was slowed considerably. The buffer zone became the battleground for fierce disputes between ambitious city councils supported by local landowners, and public and private environmentalists. In trade for inflexible protection of the quiet zone, the buffer zone has seen more building or roads and railroads than some areas need or can support with tourist income.

As in the Pinelands area, the Bavarian government could not try to prevent all development in the Alps, but focused on identifying those areas that clearly were in need of greatest protection and those areas that clearly were able to receive development without injury. In the areas that fell between these two categories, each development application was subjected to individual review of the need for public services.

D. Protecting the Aesthetic Quality of Rural Landscapes

Given its statutory mandate to protect the aesthetic quality of the Pine Barrens, the Pinelands Commission may want to consider regulations to protect the appearance of the landscape. The German experience provides experience in protecting the interrelationship between buildings and landscape.

A major tool to protect the aesthetic quality of the landscape in rural areas in Germany has been the designation of large areas of countryside, including towns, as landscape protection areas.

The intent of this tool is to protect more than the natural landscape. The visual interplay of hill and forest, small town and cleared meadow, picturesque farmhouse and church spire: the total relationship between the natural environment and human activities are protected in these areas.

The designation of a landscape protection area means that a permit is required for all construction or remodeling, and that no construction or alteration of existing structures that impair the aesthetic quality of the landscape may take place. In effect, this means that new buildings must be consistent with traditional rural architectural forms and blended into the landscape, and that the natural environment must be protected and maintained. The designation has not been applied generally to agricultural practices in Germany, so a farmer's decision to let a meadow lie fallow, or plow a field does not require a permit.

Regulation of agricultural practices that threaten the existing visual character of a rural area has been proposed in other countries--the moors of England, for example, as already described. In Loudoun County, Virginia, a combination of landmark protection regulations, scenic easements, and large-lot zoning has been used to protect rural landscapes.

THE NETHERLANDS

I. Overview of the Dutch Land Use Control System

The land use planning and development control system in Holland is less a technique for land use management or land use control than an integrated, systematic approach to land use applicable to all levels of government. Virtually all actions affecting land use, land development, and land management are linked to the planning and land use control system in some manner.

The Dutch system relies primarily on the three general purpose levels of government: the national government (the State), the province, and the municipality. In planning and land use matters, each of the 843 municipalities is responsible to one of the 11 provinces, and the provinces in turn are responsible to the State.

Land use planning, which forms the legal basis for land use controls, is conducted at all three levels of government. The national government, currently publishing its Third National Physical Planning Report Series, indicates the geographic component of national policy with respect to land use and urbanization, housing, transportation, employment, agriculture, the environment, and other topics. Provinces may prepare regional land use plans consistent with

This section was prepared by Richard D. Ducker, Assistant Professor of Public Law and Government at the University of North Carolina. It is based on research undertaken in connection with the Foundation's International Comparative Land Use Project.

national planning policy, and in turn, municipalities may prepare plans consistent with both regional and national land use plans and policies. Regional plans may be appealed to the Crown,* and municipal comprehensive plans may be appealed first to the provincial executive council and then to the Crown.

The primary land use control in the Dutch planning system is the municipal land destination plan. The Physical Planning Act, which took effect in 1965, requires municipalities to prepare these plans for rural or undeveloped areas and permits their preparation for other areas. Since the municipal land destination plan is the only legally binding plan, it can be thought of as a local land use control ordinance. Some municipalities prepare very general or "global" destination plans, establishing minimum development standards and segregating uses into districts much like a rural zoning ordinance in the United States. Other, more urban municipalities prepare very detailed land destination plans drawn to scale like a site plan. The contents of each destination plan must be approved by the provincial executive council, and that decision may be appealed to the Crown.

* Appeals to the Crown are heard before a committee of the Council of State. The Council of State is a national administrative tribunal and policy advisory committee that reports to the Queen. Members are appointed by the Queen. When the appeal primarily concerns land use planning matters, the Council of State customarily relies on the advice of the Minister of Housing and Physical Planning in preparing a suggested disposition of the case for the Queen's signature.

Development permission comes in the form of a building permit. The municipal executive council may issue a building permit only if a property owner's building plans conform both to the applicable land destination plan and to the local building code. Refusal of a building permit may be appealed to the full town council; no further appeal of a permit denial is provided by law. If a building permit is improperly issued, however, relief may be sought by taking the matter to the Crown, which has authority to quash the municipal action on public policy grounds.

In concept, the Dutch planning system constitutes one of the most comprehensive, integrated land use control systems in the world. Unfortunately, problems have arisen in its application. The elaborate approval and appeals systems for plans and permits is unwieldy and sluggish. Although only about 10 percent of all land destination plans are appealed to the Crown, a backlog of 500 to 700 cases generally awaits attention. In some cases, five to seven years may elapse between the time a land destination plan is approved by a municipal council and the time the Crown renders its decision on the plan.

Ironically, administrative bottlenecks might be worse if more of the smaller municipalities had enacted land destination plans. In some provinces, more than two-thirds of the municipalities still have not complied with the 1965 directive of the Physical Planning Act that municipalities

enact these land use controls for their rural undeveloped areas. Many of the smallest municipalities have neither the financial resources nor the technical capability to engage in planning and land use control, and the national and provincial governments have not yet exercised their authority to do the job for them.

Another irony is that some of the municipalities with the best planning programs have relatively little need for land destination plans of their urban fringe areas. The reason is that most mid-size and larger Dutch cities have active land banking programs and own the land to be developed on the urban periphery. When this land is sold or leased to a builder, sales contracts or leases usually include detailed development regulations and building schedules. These are often more detailed and restrictive than the regulations of the applicable land destination plan.

One continuing problem has been the inflexibility of most destination plans. Many place architects and builders in a regulatory straitjacket. Such concepts as density bonuses, land use intensity ratios, and clusering incentives are not reflected in most destination plans.

Local land use controls might be under less pressure if the national land use planning policies they are expected to reflect were not quite so doctrinaire. For 15 years, the national government has followed a national land use policy of "bundled deconcentration," which has two components:

development is to be directed away from the suburban countryside and into higher density growth centers. Growth has been especially discouraged in the interior of the Randstad, sometimes called the "green heart of Holland."

Another national policy of strong intervention to redirect growth out of western Holland has produced tension among the Ministry of Housing and Physical Planning, the provinces, and growth-oriented municipalities, and has made municipal land destination plans a source of continuing controversy.

Despite its problems, the Dutch planning and land use control system has continued to improve. Measures have been introduced to streamline the administrative appeals process. The Minister of Housing and Physical Planning has gained power to intervene in local development control controversies, without waiting until they are appealed to the Crown. The number of municipalities that have enacted land destination plans continues to grow, as does the number experimenting with simpler, more flexible regulations. Land use planning and development control are widely accepted in Holland. Both proponents and opponents recognize them as an influence to be reckoned with.

II. LESSONS FROM THE DUTCH EXPERIENCE

A. Subsidizing Private Non-Profit Organizations to Carry Out Land Purchase and Land Management Programs

Could the Pinelands Commission increase its effectiveness by relying on private, nonprofit groups to perform some of the land acquisition and management functions that the Commission itself or other public agency would otherwise perform? The Nature Conservancy, the Trust for Public Land, and other organizations in the U.S. have often aided government agencies in acquiring land needed for public purposes. Holland's "Natuurmonumenten" has received sizable public subsidies for more than a quarter of a century to buy, hold, or manage land.

There has long been a consensus in The Netherlands that national areas of special environmental significance are not truly protected unless they are controlled and managed by parties who see protection and conservation as their primary interests. In Holland, private non-profit organizations as well as public agencies play a crucial role in purchasing and managing environmentally-important areas. One organization stands out, however, by the amount of land it owns, its crucial role in carrying out national conservation policy, and its own peculiar approach and objectives. That organization is the Trust for the Preservation of Natural

Monuments in The Netherlands ("Vereniging tot Behoud van Natuurmonumenten in Nederland" or simply "Natuurmonumenten").

"Natuurmonumenten" dates from 1906 when it was organized as an action group to prevent Amsterdam from dumping its rubbish and garbage into a lake called the Naardermeer. A large group of influential citizens solicited funds from their membership to purchase the Naardermeer property in order to save it from being despoiled. The group became permanently established and began to count other organizations among its members. Through the years, the group grew and embarked on a program of land purchase for nature and landscape protection. It developed and managed these properties solely through member contributions.

An expanded role of "Natuurmonumenten" dates from 1952, when the organization began to receive government subsidies for the purchase of nature reserves. In 1952, the predecessor of the current Ministry of Culture, Recreation, and Social Welfare agreed to cover 50 percent of the land acquisition costs of nature reserves purchased by Natuurmonumenten if the province in which the property was located paid the other half. In 1956, the agency agreed to subsidize the operating expenses of all Natuurmonumenten properties purchased in part with its subsidies. This action has permitted the trust to reserve its membership dues and contributions for overhead and administrative expenses.

The land purchase subsidy system has remained intact for more than 27 years. The current arrangement does not require the Ministry of Culture, Recreation, and Social Welfare to subsidize half of the full purchase price of all properties purchased by Natuurmonumenten in any given year. Rather, the national government guarantees 50 percent of the financing arranged for each property sale. This guarantee enables Natuurmonumenten to obtain favorable terms from private lending institutions and from sellers. Then the ministry makes periodic subsidy payments to Natuurmonumenten for use in making down payments, in redeeming mortgage loans, and in meeting installment sales contract obligations assumed by Natuurmonumenten. The remaining 50 percent of the annual costs is normally subsidized in a similar fashion by the province in which the respective properties are located.

This arrangement has been extended from time to time to include subsidies to other national and provincial conservation groups. In recent years, the land purchase subsidy system has allowed private non-profits annually to purchase properties valued at about \$20 million.

Currently, Natuurmonumenten owns about 160 properties encompassing some 33,000 hectares. In addition, it manages another 6,000 to 7,000 hectares for other organizations, including some public lands. The organization receives an

*One hectare equals 2.47 acres

annual subsidy of about \$200 per hectare for managing the 33,000 hectares that it owns. It also receives annual dues of about \$15 per year from more than 250,000 members in addition to various contributions of money and property.

The national and provincial governments that subsidize Natuurmonumenten attach remarkably few strings to the land purchase and land management subsidies. The Ministry of Culture, Recreation, and Social Welfare and the provincial councils do not normally approve individual acquisitions by the trust. Rather, Natuurmonumenten is free to buy properties it chooses. In addition, it may determine the techniques employed in managing land it purchased with governmental subsidies so long as these are generally consistent with conservation objectives. The trust is required to prepare a yearly status report on each property purchased and managed with subsidy funds. No property purchased with subsidy funds may be sold without the Ministry's permission. If a sale is allowed, the national government has a first option to purchase the property at its fair market value.

Natuurmonumenten determines the entrance restrictions on land it purchases. Only those conducting scientific research are admitted to some areas, and only those exhibiting a Natuurmonumenten membership card are admitted to others. However, most properties are open to the general public.

Natuurmonumenten is able to perform its land purchase and land management functions in a quicker, more flexible,

and more effective fashion than could the ministries or provinces acting in their governmental capacities. The Division of Nature and Landscape Protection in the Ministry of Culture, Recreation, and Social Welfare does purchase land in its own behalf, concentrating its \$8 million annual budget primarily on properties of demonstrated scientific importance. In a similar capacity, the National Forestry Service has a sizable land acquisition budget to expand existing national forests or establish new ones. However, land purchases by these agencies generally must be approved in advance as line items in the agencies' annual budgets.

Natuurmonumenten, in contrast, is free to enter into purchase agreements without prior authorization as properties become available. Also, because of its prestige, experience, and high visibility in the conservation movement, Natuurmonumenten is able to purchase properties that private property owners would never sell directly to the government. In addition, the organization receives many special bequests and gifts that would be unavailable to other agencies and organizations. Finally, the trust is willing to purchase remainder interests, to enter into long-term leases, and is willing to purchase productive lands and lease them back to farmers and property owners who agree to use Natuurmonumenten's management techniques.

This is not to suggest, however, that Natuurmonumenten takes a unilateral approach to acquiring properties for itself. Natuurmonumenten, the provincial landscape protection organizations, the National Forestry Service, and other public and private non-profit organizations are all represented on the national Nature Conservancy Council, which has been established to advise the Minister of Culture, Recreation, and Social Welfare on conservation matters. Council members regularly discuss which properties of environmental importance most need protection and which are likely to become available on the market. The representatives of the various public and private groups then determine which organization among them is best suited to purchase the property on the basis of available funds, the preferences of each organization or agency for particular types of property, the preferences of the prospective sellers, the managerial demands each property represents, the location of the property, and other considerations.

The land purchase and land management subsidy arrangement might seem vulnerable to changes in political administrations. In fact, however, the program has not suffered major breaks in continuity, although the appropriations made available to Natuurmonumenten have fluctuated from year to year.

Some critics have suggested that the subsidy arrangement has resulted in the purchase of many small nature

preserves, but has not permitted the purchase of large, critically located areas of environmental significance. The Dutch inability to protect larger environmental regions by acquisition is a valid concern, but there is no evidence that changing the role of Natuurmonumenten would help to resolve the problem.

Finally, Natuurmonumenten may appear to lack accountability to the public. It is customary, however, for Dutch governments to subsidize and rely on private nonprofit organizations to carry out public objectives in many areas of endeavor, and there is no hint of opposition to Natuurmonumenten's autonomy. The national government's subsidy arrangement with Natuurmonumenten seems to have stood the test of time.

B. Management Agreements with Private Property Owners

Would voluntary management agreements with private landowners enable the Pinelands Commission to achieve public objectives for which neither land acquisition nor regulations seem suitable? Do such agreements represent an opportunity to assure, for example, that timber is harvested only in ways that do not adversely affect a downstream cranberry bog or marsh? Dutch experience suggests both advantages and limitations of these agreements.

Dutch conservationists have sought for some time to preserve historical Dutch landscapes, traditional rural areas with distinctive character and ambience. A characteristic landscape may include farm land originally reclaimed in small polders surrounded by hedge rows and many small canals. Or pasture lands where wildflowers grow. Or peat or cranberry bogs where rushes grow and where harvesting is done by hand. In addition, a landscape may include man-made elements such as an old windmill or the thatched roof and broad gable of an old farmhouse. Such a landscape, then, includes both natural and man-made elements in a form that the Dutch believe has aesthetic, cultural, historical, and scientific value.

To retain these lands in their customary rural form, the national government has experimented with private contractual agreements with property owners. The terms of these voluntary agreements oblige the property owner to manage his lands in a manner designed to protect the historic rural character of the area and to protect natural features and environmental elements of particular significance.

These voluntary management agreements come in two forms. The first, sometimes called a maintenance agreement, requires the farmer or rural landowner to take affirmative steps to maintain defined natural landscape elements on his land. Such an agreement may require a farmer to trim trees, cut willows, or prune hedges, shrubs, and berry bushes. Or it may require a landowner to maintain the reeds and rushes in a marsh on his property, or to mow grass lands in a way that preserves wildflowers. In principle, a farmer's traditional farming routines are not to be disturbed by these maintenance agreements. Rather, the agreements provide an opportunity for a farmer to supplement his income by assuming responsibilities in addition to his traditional farm activities.

Maintenance agreements of this type are administered by the regional field office representatives of the Ministry of Culture, Recreation, and Social Welfare. Their use is limited but growing; they are expected to affect 3,000 hectares by 1980. The sums paid property owners pursuant to

these agreements have ranged from \$60 to \$750 per hectare. Normally the agreements are for a term of six years. If the property owner sells his land, the agreement terminates.

The second type of management agreement might be called an abstention agreement. These agreements, pay property owners to abstain from taking actions that would diminish or destroy landscape elements found on their land. This type of agreement might require a farmer to refrain using fertilizers or pesticides where such use might destroy certain vegetation or wildlife habitat. Or the farmer might agree to abstain from dredging or filling a canal or marsh on his property even though the local water board might have no objection to his doing so. Or the farmer might agree not to convert his farm into a cattle feedlot. In principle, this type of agreement is designed to compensate the farmer, not for the maintenance tasks he performs in behalf of conservation, but rather for the loss of farm income he suffers by refraining from making the most agriculturally productive use of his land.

The use of these abstention agreements, administered by the Ministry of Agriculture and Fisheries, is in its infancy. Plans in the mid-1970's called for over 35,000 hectares of land to become subject to such agreements, but the government has fallen far short of its target.

There is some question as to whether these abstention agreements should be thought of as voluntary contractual

agreements at all. A good portion of the funds available to farmers under these agreements comes from farm subsidy programs. The subsidies are designed to compensate farmers who have failed to keep pace with the transformation of Dutch agricultural methods into large-scale, intensive agricultural operations. Normally, eligible farmers would receive these subsidies with no strings attached. However, the farmers who have difficulty adapting to the newer farming methods and values often own the very farms that still retain landscape elements conservationists believe should be protected. As a result, the Ministry of Agriculture is tying certain subsidy grants to promises by the affected farmer that he will abstain from certain environmentally harmful practices. In effect, the subsidy payment becomes the compensation for the abstention agreement.

The terms of abstention agreements vary widely, taking into account the economics of farming in particular locations and the value of the natural features and landscape elements on particular properties. One of the more common provisions requires the farmer to refrain from using certain fertilizers and farm chemicals in his production. The sums paid pursuant to these agreements have ranged from \$150 to \$750 per hectare.

Although it is a bit early to evaluate the Dutch experience with these two types of management agreements with private land owners, certain problems appear to remain unresolved. First, it seems clear that landscape protection

as the Dutch conceive it requires a holistic approach. The landscape to be protected is a unity made up of many individual natural and man-made elements. Yet there seems to be no way of ensuring that all of these elements are preserved. For management agreements to be effective in protecting rural landscapes, a substantial number of property owners must participate in the program. Preliminary experience seems to indicate that where even a modest number of property owners refuse to participate, the development of an effective landscape protection program can be seriously hampered.

A related concern is that management agreements at best provide temporary protection. The typical management agreement runs for six years. The agreements create strictly personal covenants; the obligations do not run with the land. A land servitude designed to achieve nature and landscape protection objectives (such as a conservation easement under our law) is precluded by the Dutch agrarian tenancy laws, which restrict the splitting of real property interests in agricultural land. Since servitudes running with the land cannot be created in most rural areas, the result is that the government must renegotiate the agreements every six years and commit itself to an ever increasing stream of payments. If the agreement is terminated or a farmer fails to renew his agreement, the environmental investment made by the government over a period of years may be lost.

Some critics of these management agreements point to the elusive nature of what they are designed to achieve. There has been a tendency for Dutch landscape protection efforts to be oriented more to visual, historical, and cultural values rather than scientific values. As a result, critics claim, the criteria for evaluating landscapes worthy of protection are suspect, as are the methods for preserving them.

Nonetheless, many of the results of using management agreements with private landowners have been positive. The scientific, historical, and methodological bases for landscape protection are now receiving more and more attention. The Dutch are not deceived into believing that the use of management agreements provides a single, long-run solution to the landscape preservation problem. It is generally recognized that landscape protection objectives can only be accomplished by using a variety of regulations, incentives, and subsidies to supplement these agreements. In addition, it is generally recognized that some fundamental changes in Dutch law will be required in order to establish conservation easements permitting environmental obligations and restrictions to run with the land or to become enforceable by third parties. Finally, the use of management agreements seems to indicate that the Dutch have concluded that the public ultimately cannot hope to achieve conservation objectives on private lands without providing the owner some compensation.

C. Financial Incentives to Preserve Private Forests
and Open Them to The Public

Another form of Dutch incentive to private landowners may also be of interest in the Pinelands. To preserve private forests and encourage owners to open them to visitors, the Dutch provide preferential tax treatment and even cash subsidies. In the Dutch context, these measures seem to have worked rather well.

Forested land has always been scarce in The Netherlands. According to one estimate, the last remaining stand of virgin timber was felled about a century ago. Today there exist only about 225,000 hectares of forested land in the entire country.

As early as the 1920's, it was recognized that private forests were declining in size and significance. Many private forests and wooded areas were located on country estates, which were being broken up as taxes encouraged rural landowners to subdivide and sell their land. Since many of these estates were not self-sustaining productive units, there was also a constant temptation for property owners to harvest timber to supplement their income. Not only was the long-term productivity of Dutch forests being reduced, but the beauty of the countryside was being destroyed as well.

To arrest these trends, the Dutch Parliament in 1928 enacted the Natural Beauty Act. That act, which remains

today in a slightly different form, provides tax benefits for owners of qualifying country estates if they agree to restrictions concerning the management of their woods. Still greater benefits are available if the property owner open his woods to the public.

To qualify for preferential tax treatment, a rural property must be jointly designated as a "country estate" for purposes of the act by the Minister of Culture, Recreation, and Social Welfare and the Minister of Finance upon recommendation of the National Forestry Service. The requirements are relatively simple: the property must be at least five hectares in size, most or all of it must be forested, and its survival in its present form must be desirable to protect its natural beauty. Eligible property may include residences and out buildings. Cultivated land may be included if the land adds to the aesthetic value of the property.

A property owner voluntarily applies for the designation. To enjoy the tax benefits it provides, the property owner must agree not to fell any trees on his property without the permission of the Forestry Service. In addition, the property owner may be required to follow certain other forestry management practices.

The tax benefits that accrue to the owner of a designated property are substantial. First, the designation affects the assessment of the property for property tax purposes. A special use value is calculated to reflect

the value of the land in its present forested state and to reflect the assumption that no trees will be felled for at least 25 years after the designation begins. Under the act, tax rates are applied to only two-thirds of this special use value. If the property is opened to the general public, value subject to the property tax is reduced to one-quarter of this special use value.

The designation of property as a country estate is not necessarily terminated when the property is sold or the owner dies. The designation can be withdrawn at any time by the owner if he wishes to change the use of his property. The designation can also be withdrawn by the government if the owner fails to comply with his obligations under the act. If, however, the designation is withdrawn before it has been in effect for 25 years, the owner is liable for the difference between the taxes that would have been owed had the property been assessed normally and the taxes that were owed under the preferential assessment. If designated property once open to the public is closed, back taxes also become due.

Until recently, property taxes in The Netherlands were levied by the national government. Now the authority for imposing this tax has been placed in the hands of municipal governments. Since preferential assessment reduces local real property tax revenues, the national government provides a supplemental revenue to affected municipalities to compensate them for their loss.

In addition to property tax benefits, there are benefits to be gained under several other taxes. So long as the property retains its preferential assessment, this special use value assessment is deemed to be the basis of the property for estate and gift tax purposes as well.

The greatest tax benefits under the Natural Beauty Act accrue to property owners who are willing to open their woods to the public. To qualify for additional tax benefits, the property owners must allow visitors free access to this land on all paths and drives except in the immediate vicinity of residences. However, the granting of access to the general public has always been a sensitive issue.

Under pressure from property owners, the law was interpreted to permit property owners to sell admission tickets for a fee just sufficient to cover the cost of printing and issuing the tickets. Property owners reasoned that visitors who paid a few cents admission might appreciate their visit more. Other owners claimed that tickets helped them monitor the number of visitors on their land. In the period prior to 1966, the owners of approximately 80 percent of all qualifying country estates took advantage of the tax benefits that accrued by opening their land to the public, but only 20 percent allowed visitors without paying admission. Although admittance statistics have generally not been available, it was generally believed that requiring tickets for even a small fee caused public use to decline.

In 1966, a new financial incentive became available. The Forest Subsidy Regulation provided direct forestry maintenance subsidies to private forest owners willing to provide visitors free admittance to their property. This subsidy, which remains in effect, applies to owners of forests of at least 10 hectares and amounts to \$25-\$30 per hectare per year. To qualify, the property owner need not permit visitors to use all roads or pathways on the property; the property must merely provide "satisfactory recreation." Although the eligibility requirements of the Forest Subsidy Regulation are somewhat different from those that apply to the Natural Beauty Act, a substantial number of property owners have been able to qualify under both. More than 55 percent of "country estate" now provide free admittance.

Generally speaking, the Dutch experience with these incentive programs for private forest owners has been satisfactory. Some critics have charged that the Natural Beauty Act has merely provided a windfall for the landed gentry and that, since these incentives are voluntary, a property owner may convert his land to another use at any time. In this regard, some of the criticisms of preferential use value taxation in the United States may also apply. However, the strongest policy emphasis in these programs has always been that of making the scarce Dutch forests available for public enjoyment, and the programs have accomplished this objective rather well.

AUSTRALIA

I. Overview of the Australian Land Use Planning System

Australia is the least densely populated country in the world (1.7 persons per square kilometer) yet also the most urbanized (85.6% of the population in urban areas). The Australian continent is approximately the same size as the continental United States, but the continental U.S. has about 14 times as many people. More than 60% of all Australians live in only seven cities, and more than 40% live in the two largest cities, Sydney and Melbourne.

With its small population so heavily concentrated in a few urban areas, popular support for techniques to protect "critical environmental areas" has taken longer to develop in Australia than in either the United States or England. However, during its term in office from 1972 to 1975, the Labor government of Prime Minister Gough Whitlam, borrowing from the British and American experience alike, did enact environmental impact assessment procedures and a federal program to designate national parks. Because the constitutional powers of the central government to protect the environment are severely limited, the Whitlam government hoped its environmental initiatives would prod the six Australian states to adopt their own comprehensive programs for the protection of the environment.

This section was prepared by Richard J. Roddewig, a Chicago attorney. It is based on research conducted as part of The Conservation Foundation's International Comparative Land Use Project.

But policy conflicts within the Whitlam government and fear of antagonizing state governments caused the Labor government to proceed gingerly in putting environmental laws into practice. The Conservative government of Prime Minister Malcolm Fraser, elected in December of 1975, has been even more cautious in implementing protective measures for critical environmental and natural areas.

The Australian experience most relevant to protection of the New Jersey Pinelands is not, therefore, its still developing devices for the protection of critical environmental areas or the establishment of public parks. There is much to be learned, however, from Australia's attempts to deal with the urban sprawl that has accompanied its intense urbanization. Sprawl and the price of urban land are serious problems in Australia, because of the average Australian's demand to own a home: approximately 67% of all Australian families own their own home, which is likely to be a single-family detached house in a suburban subdivision.

Australia has long recognized that land use planning, zoning, and capital facilities planning must be merged to make land use controls effective. Local land use plans and zoning schemes are mandatory only in the State of Victoria and in the Perth metropolitan area in Western Australia. In the rest of Australia (including all of the states of New South Wales, Queensland, South Australia, and Tasmania), local planning is optional. The state, however, reserves the power to step in and prepare a binding plan for any local council area. This

assures that almost all local councils in Australia do have local planning schemes.

The preparation of a local planning and zoning scheme is subject to review and approval by each state. Local council planning and zoning schemes must be submitted to the designated state agency, usually a state planning authority. That agency reviews the local draft scheme for compliance with state plans and policies. Each state planning authority or agency, therefore, has a plan for controlling growth and development.

In Australia, road construction, water and sewer service, and even police and fire protection are the responsibility of the state. This allows direct coordination of capital facilities planning with the state land use policies and plans for areas of high growth. It also allows the state to review local land use plans and zoning schemes for consistency with state capital facilities plans and sewer and water service extensions. In Victoria, the coordination of capital facilities planning and state planning is so refined that the Melbourne and Metropolitan Board of Works, the regional water and sewer authority for the Melbourne metropolitan area, is also the designated state planning authority for the Melbourne metropolitan area.

It would seem, therefore, that the Australian land use planning and zoning system should be quite effective in controlling urban sprawl and protecting important natural, cultural or scenic areas within metropolitan areas experiencing

rapid urbanization. By comparison with the American experience, it may be. But the system has not lived up to the high expectations of many Australian planners and government officials.

Three principal reasons account for the gap between expectations and results of the planning and regulatory system. First, despite the coordination of capital facilities planning with land use planning, state water and sewer authorities have not had large enough capital budgets to keep pace with the demand for urbanization. Thus the private development industry has often met the demand for housing by building subdivisions on septic tanks rather than sewerage systems.

Second, although local planning and zoning schemes must be approved by a state planning authority, individual development applications are reviewed and approved solely by local councils. Councils with lots of developable land often encourage new development without paying much attention to possible adverse environmental consequences.

Third, even though regulations bar development of some fringe areas, more land must be zoned for development than is needed to meet current demand so that the private market has a large enough supply from which to select parcels for development. As a result, however, development may not go where the planner wanted it. Instead of filling in a 10-mile corridor northeast of a metropolitan area, for example, development may go to the northwest because of the availability of excess developable land or because the homebuying public prefers that area.

II. Lessons from the Australian Experience: "Positive Planning"

The Australian response to the limitations of its regulatory system has been active intervention in the private development process. Often referred to as "positive planning," this intervention is through one of three techniques: land banking and public land development, substitution of leasehold for freehold tenure, and property tax adjustments to encourage land development. The Australian experience with all three of these management techniques can offer some instructive lessons for the Pinelands.

A. Land Banking

How will the Pinelands Commission react if its regulatory powers prove to be inadequate in directing new development to built-up areas, an explicit goal of the Pinelands Act? Or if capital facility coordination with state agencies and local governments proves to be ineffective in regulating growth? The State of South Australia appears to have had considerable success in using land banking as part of a larger strategy to manage growth.

In the Australian state of South Australia, the concept of "positive planning" through land banking has had its most significant development. In the 1930's, South Australia stimulated recovery from the depression by selling publicly owned industrial sites conveniently served by public transportation and provided with free improvements such as power,

water, drainage, roads, wharves, docks and railroad sidings. The industrial sites were offered at highly competitive prices and were selected on the basis of sound planning policies and principles.

To attract and hold a labor force, South Australia actively participated in housing development as well. A South Australian Housing Trust was created to build working class homes adjacent to the industrial developments, and it continued to operate even after the depression. By the early 1950's, the Housing Trust was the largest developer in South Australia and was constructing annually 40% of all homes. Between 1951 and 1967, the Housing Trust completed an average of 3,200 housing units per year.

Housing Trust subdivisions were high quality projects accompanied by significant state investment in public improvements such as roads, parks and sewage treatment plants. The land use development pattern of Adelaide, South Australia's largest city and the principal focus of Housing Trust activities, was "planned" in the sense that where the Housing Trust went, private developers followed.

Once it began to produce subdivision sites and finished homes for the private market, the Housing Trust became a revolving fund with little need for additional capital contribution from the state. The most important cost savings passed on to home buyers were attributable to economies of scale and to the low acquisition prices of the large tracts acquired by the Housing Trust. The Housing Trust bought on the

private market without using the power of eminent domain. Because it bought raw land 10 years ahead of the demand for finished homes, it paid relatively low prices and its "land bank" increased in value as development activities (its own and those of other developers) crept closer to the area purchased years earlier. By 1968, the cost of a subdivision homesite in Adelaide was one-third the price of a similar site in Sydney; one-half that in Melbourne; and one-fourth that in Perth, in Western Australia.

The Australian government of Prime Minister Whitlam, impressed by the South Australian Housing Trust performance over the years, enacted a Land Commission Act to encourage similar programs in every Australian state. Each Land Commission would purchase land on the fringes of the metropolitan area, bank it long enough to coordinate public servicing, and either develop it or systematically release it to private developers for home construction. The inducements to state participation in the Land Commission Program were 30-year loans from the central government at the then-current long-term bond rate. No interest or principal was to be repaid during the first ten years, and the interest rate could be adjusted downward whenever the long-term bond rate dropped. The central government would also guarantee any losses that might result from the program. Once funded, each land commission would become a revolving fund.

South Australia established a land commission separate from the South Australian Housing Trust. Like the Trust, the Commission proposed to carry a 10-year land supply. In its acquisition program, the Land Commission paid close attention to the Metropolitan Adelaide Development Plan of 1967, which zoned land for urban development up to 1981 and had designated some areas for "future urban use" in the 1981-91 period. The South Australian Land Commission split its purchasing efforts between the two urban development periods.

The South Australian Land Commission objective was to control somewhere between 50% and 80% of the homesite market in any particular year. Unlike the South Australian Housing Trust, however, the Land Commission tracts were sold as homesite lots (with all services provided) to private individuals who would then hire a home builder. Some of the serviced Land Commission parcels were released to speculative home builders. Some larger tracts were scheduled for release, unserviced, to private developers who could then subdivide, service, and resell the land as individual homesites. On parcels made available to speculative home builders or to subdividers, the Commission would impose conditions restricting the price of resale and even the return that the developers could receive on resale to the ultimate homesite purchaser.

The South Australian Land Commission was well on its way to self-sufficiency when the Labor Government of Mr. Whitlam was defeated in 1975. The new Fraser government immediately cut back funding, thus crippling the Commission's program.

B. The Canberra Leasehold Tradition

Public purchase of all critical areas in the Pinelands will not be feasible. And, although the Pinelands Commission has authority to regulate development, regulation has both legal and political limits. Another option to control growth is public land purchase coupled with long-term leases to developers with restrictions to protect aesthetics and natural resources. Such a leasehold system has been developed in Canberra, Australia, where it has proven effective in controlling the pattern of urban growth in an area with great scenic attraction and important agricultural and timber resources.

Although leasehold development is rarely undertaken by U.S. developers, it has achieved wider acceptance in Australia because of the experience of Canberra, the national capital. The site of Canberra, a rolling plain surrounded by low mountains, was selected in 1909 for the capital of the Australian federation of states. From its inception, Canberra has been a planned city. In 1911, the Chicago architect and planner Walter Burley Griffin won an international competition for its design.

The City of Canberra, with a current population of less than 250,000, covers about 20%, or 200 square miles, of the 1,000-square-mile Australian Capital Territory. The rest of the Capital area is devoted to a variety of uses including

intensive agriculture, grazing of sheep and cattle, mining, and active and passive recreation. By 1964, all but 17% of the land in the Australian Capital Territory was in public ownership. In 1970, the Australian government adopted a resolution proposing to acquire all remaining freehold land in the Australian Capital Territory and to bring it under the leasehold system as soon as possible.

Section 9 of the Seat of Government (Administration) Act of 1910 establishing the national capital requires that "No Crown land in the Territory shall be sold or disposed of for any estate of freehold. . . ." Through leasehold tenure, the Australian parliament desired to eliminate the opportunity for land speculation and to assure that the "unearned increment" in the value of Canberra land created by the public investment and development of the national capital should accrue to the people of Australia and not to land owners.

The Australian government claims three main advantages for the leasehold system. First, planning and development control are improved. Like land banking, leasehold tenure creates a system of "positive planning." Instead of zoning, Canberra has a comprehensive development plan, and restrictions are attached to each lease specifying the use, the date construction must begin and end, the minimum cost of improvements, and controlling the design, location, and size of the building on the leased lot. In some cases,

actual design and construction must be performed by the National Capital Development Commission.

Second, the leasehold system can create effective public control of the land development market. According to the Department of the Capital Territory, the leasehold system assures that "the availability of land is not necessarily determined by the price; thus land can be released in accordance with anticipated demand or need."

Third, the government claims that leasehold tenure can eliminate land speculation. By leasing development sites subject to conditions on their use and design, the public authorities can assure that the price of land will be a true reflection of its use value rather than its speculative value for some higher or different use.

Assurance that land use will comply with lease terms is guaranteed by enforcement penalties. Breach of lease conditions may result in a fine not exceeding \$200 plus \$20 for each day of the violation. Continued violation of use provisions may result in forfeiture of the lease.

Lease terms relating to use of the land may only be varied upon application to the Supreme Court of the Australian Capital Territory. The central government Minister for the Capital Territory can overrule the Supreme Court grant of a variation if, in the Minister's discretion, "the variation would be repugnant to the principles governing Canberra's construction and development." When a variation in use is

granted by the court and approved by the Minister, the lessee must pay a "variation premium," roughly half the value added to the leasehold as a consequence of the change in use or purpose.

As a land use planning technique, the Canberra leasehold system of tenure is extremely effective. There is no sprawl in Canberra, and development only occurs when the National Capital Development Commission decides to release land for development. The system has also kept the cost of homesites in Canberra lower than in any other major Australian city except Adelaide, where prices are low because of innovative policies of the South Australian Housing Trust. Land prices are particularly low for first-time home buyers because some homesites are offered at "restricted auctions" for first-time home buyers only.

Although there has been little criticism of leaseholds as a planning technique, there has been significant controversy over the disposition of leasehold interests and anomalies created by the system of lease valuation. For the first 50 years of Canberra development (1920-1970), the leasehold system operated as follows:

The lease term would not exceed 99 years.

Leases would be offered at public auctions.

The development authority would establish an upset price (reserve price) which must be equalled or exceeded before the land would be leased. After 1935, the successful bidder had to pay the difference between bid price and upset price to the Australian government. Land rent would be 5% of the bid price.

The unimproved value of the land, on which the annual 5% payment was determined, would be re-appraised every 20th year.

The 20-year period between rent reappraisals created anomalies in the amount of rent paid by homeowners in quite similar neighborhoods because the value of land increased rapidly as Canberra grew. Other problems were caused by the inability of the National Capital Development Commission to keep pace with homesite demand. High demand in the 1950's and 1960's led to dramatic increases in the premiums that developers were willing to pay over and above the established upset price. The higher prices in turn affected the reappraisal prices of leases that came up for 20 year re-evaluation. Home owners began to protest the high land rent they had to pay upon renewal.

Even though homeowners complained, however, the combination of premium payment over established upset prices, land rent, and property tax levies did not meet the public cost of providing serviced sites to developers and continuing municipal services to homesites after construction. The leasehold system was therefore modified in 1971. After that date, bidders at lease auctions no longer paid only the difference between the bid and upset price. Instead, the entire amount of the bid had to be paid, and annual rental payments were eliminated. Although this required a larger front end payment, it allowed the ultimate home purchaser to secure a mortgage covering not only the value of the improvements but also the capitalized value of the leasehold. Annual property

tax rates were also increased to be more reflective of the actual cost of providing municipal services.

Many believe that Canberra land use planning through leaseholds has been too effective. The requirement that use variances be approved by both the Supreme Court of the Capital Territory and by the Minister for the Capital Territory makes the variance process--in effect the rezoning process--lengthy and expensive. Strict limitations on the number of leases allowed for such uses as service stations has driven up prices. (Service station site leases were selling in the early 1970's for \$250,000 to \$300,000.) Some critics also contend that Canberra lacks the soul and character of a city that has been developed, destroyed and redeveloped by the private marketplace.

C. Australian Land Value Taxation

There is continuing interest in the U.S. in the role of property taxation in growth management. One long-discussed possibility is to replace the traditional property tax, which is levied on both land and buildings, with land value taxation. Proponents argue that land value taxation would create a significant disincentive to speculative holding of unimproved land. This, they maintain, would discourage speculative acquisition of rural land in anticipation of future development and would encourage in-fill development on vacant urban land. Australia, more than any country in the world, has been captivated by this concept of a "single tax on land."

The wholesale alienation of Crown land holdings in Australia, the concentration of those purchases into large estates, and the inability of Australian governmental authorities to cause estate owners to improve their lands, were among the most serious problems in 19th century colonial Australia. A Tasmanian newspaper editor by the name of Henry Melville first proposed in 1835 that land monopolies could be destroyed, and sufficient government revenue generated, by abolishing all taxation except a single tax on the unimproved value of land. But it took 40 years, and publication of the works of American newspaper editor Henry George,

before serious discussion of the land tax idea began in Australia. Queensland in 1879 passed legislation requiring assessment of the property tax on an unimproved land value basis. Other states followed suit. While no Australian state adopted the pure single tax notion proposed by Melville and George, a number of variations on land value taxation have been enacted.

The Australian government levied a progressive tax on land between 1910 and 1952. The effective rate of the national land tax, in conjunction with the state land tax, was as much as 50% of the rental income on unimproved land. The maximum rate imposed by the Australian government was 5% of unimproved value annually. The maximum rate imposed by any Australian state has been 4% of that value annually. Although local governments in five of the six Australian states (the exception is Tasmania) are empowered to impose a land value taxation system, not every local government does, and there is wide variation in the rates.

The real effect of the land value taxation system on urban development in Australia is difficult to measure because property taxes produce only limited revenues for Australian state and local governments. In 1963, state and local property taxes produced 7.7% of all state and local tax revenues. By 1973-74, they produced only 5%. Since then the percentage of total state and local revenue derived from the property tax system has continued to fall.

In 1968, the state of Western Australia, concerned that its land value tax of 0.5% of the unimproved capital value of land (1% on land held longer than two years) was not eliminating land speculation, appointed a special committee to study land value taxation in the state. The study committee reported that the land tax was not high enough to discourage speculation. It proposed an increase in the land tax to make it a progressive tax based on the total value of the unimproved land held by the speculator. A sliding scale was recommended that would result in a 3% annual land tax on all unimproved land holdings with a total value greater than \$20,000.

The committee report did not stop there. To reduce speculation further, the committee recommended a "betterment levy" of 50% of the increase in land value on all unimproved land, to be collected upon sale. However, neither of the recommendations of the Western Australia special committee were adopted.

While Australia has more experience with land value taxation than the U.S., several cities and towns here, including Pittsburgh and Harrisburg, Pennsylvania, have adopted a land value tax system or are giving it serious consideration. Of course, a land value tax system for the Pinelands would have to be considered in the context of constitutional and statutory restrictions in New Jersey, as well as practical limitations. For example, a uniform Pinelands-wide land value tax system might have the unwanted

effect of spurring development of environmentally sensitive areas outside built-up areas. One possible way to deal with this problem would be to establish a two-tier land value tax whereby built-up areas would be subject to a site value tax to spur in-fill development, but farms, forests and parcels with critical environmental value would be taxed only at present use value.

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