Land Use and Critical Areas: Preservation and Development Compromise in England and Australia

David L. Callies *

The tension in land use between development and conservation is long established. Find an area worth preserving, and invariably a development idea is, if not in the parlor, on the doorstep. Conversely, discover a perfect development site, and critical values spring from underfoot. Those aspects of land and terrain valued by conservationists—coast, wetland, river, forest, dune—are also valued by the development community for commerce, waste discharge, recreation and aesthetics.[1]

Preservation of these "critical areas"[2] is a goal for which increas-

* Professor of Law, University of Hawaii School of Law. A.B., DePauw University (1965); J.D., University of Michigan (1968); LL.M., University of Nottingham (1969). This article is based in part upon research conducted under the auspices of The Conservation Foundation's International Comparative Land Use Project, with support from the German Marshall Fund of the United States and other donors. The author wishes to acknowledge with thanks the considerable research assistance of Christopher J. Duerksen, Esq., of The Conservation Foundation, and Richard J. Roddewig, Esq., of Shlaes & Co. (Chicago).

1. The point has been eloquently made elsewhere with respect to shorelands:

> In our society it would appear that there is an implicit law that enjoins all disposers of rubbish and garbage, all those who would gratify their heart's desire by filling land, to choose the marshes and bayshores for their fulfillment. This reveals a profound ignorance of the values of nature; the marshes and bays are among the most productive areas that we have. Thou shalt not fill or dump here.

I. MCHARG, DESIGN WITH NATURE 13 (1971).

2. A critical area may be any of an entire array of phenomena. Statutorily-protected examples in the United States include:

a) San Francisco Bay, protected by CAL. GOV'T CODE §§ 66600-66661 (Supp. 1979). *See* BOSSELMAN & CALLIES, THE QUIET REVOLUTION IN LAND USE CONTROL 108-20 (1971); *see generally* R. ODELL, THE SURVEY OF SAN FRANCISCO BAY (1972).

b) California Coast, protected by the California Coastal Zone Management Act, CAL. PUB. RES. CODE §§ 30000-30900 (1977 and Supp. 1979). *See* R. HEALY, LAND USE AND THE STATES 64-102 (1976).

c) Hackensack Meadowlands, protected by N.J. STAT. ANN. §§ 13:17-1 to

ing support is evident.[3] One commonly adopted device is governmental "designation" of the environmental values deemed worthy of preservation, followed by development of the requisite legal and planning mechanisms for protecting the area from damage or destruction.[4] Regardless of the particular methodology used, one encounters similar questions and problems in most systems designed to protect critical areas by designation:

1. *Designation Criteria: An Inventory*

What factors make an area "critical" for the purpose of designation? Who should control the designation decision? How should the boundaries of a critical area be determined?

2. *Protection and Management: Designation Categories*

Should designation by keyed to different protection and management schemes? What uses should be permitted in various types of designated areas?

3. *External Protection and Conflict Resolution*

How effective are methods available for protecting critical resources from outside pressures and activities? How does critical area protection mesh with existing or proposed patterns and systems of land use management and control? How should conflicts between protection and potentially damaging uses near critical areas be resolved?

Although American experience offers many examples, looking abroad for help in analyzing domestic land use problems has a dis-

13:17-86 (West 1979). *See* BOSSELMAN & CALLIES, *supra* at 293-95.

d) Vermont's mountains, protected by VT. STAT. ANN. tit. 10, §§ 6001-6089 (1973 and Supp. 1978). *See* BOSSELMAN & CALLIES, *supra* at 54-107.

3. Preservation of critical areas in the United States was prodded in the early 1970s both by development-caused environmental disasters and by federal legislation. Subsequently, state after state moved to protect both whole classes of critical areas and specific sites. Litigation sustaining state legislation is discussed in BOSSELMAN, CALLIES & BANTA, THE TAKING ISSUE 139-235 (1974).

The process of critical area designation was also aided by the American Law Institute's Model Land Development Code. *See* A MODEL LAND DEVELOPMENT CODE art. 7 (1975). Some states, most notably Florida, have adopted legislation following its pattern. *See* Finnell, *Saving Paradise: The Florida Environmental Land and Water Management Act of 1972*, 1973 URB. L. ANN. 103 (1973).

4. Commentators have detailed a variety of concentric designations, some theoretical and some in use. *See* CLARK, COASTAL ECOSYSTEM MANAGEMENT ix (1974); Callies, *Lessons from the Camargue*, ULI ENVIRONMENTAL COMMENT 4-8 (July, 1978).

tinguished history.[5] The recent experiences of the United Kingdom and Australia in balancing preservation and development are worth particular examination. With the United States, they share common legal and institutional traditions and face development pressure on similar categories of natural features. Australia's state of Victoria is struggling to preserve a bay containing rich and varied wildlife from the demands of a young and burgeoning economy. Citizens' groups in the United Kingdom's Isle of Anglesey in Wales are fighting to protect an inlet and its ecosystem from the harmful effects of a supertanker oil facility that is important to the regional and national economy.

This article surveys briefly the geography of Westernport, Victoria, and the Isle of Anglesey, discusses the development tensions in the two areas, and examines the institutional mechanisms and legal tools available to each for critical area conservation in the face of potentially conflicting land uses.

Designation Criteria: Westernport Bay's Inventory

Westernport Bay in the state of Victoria ranks as one of the largest and most diverse critical environmental areas in Australia. An inventory of the environmentally critical features of the area is impressive. The 240-square-mile Bay waters include a natural deep-water harbor that is probably the second best in the country, surrounded by 640 square miles of land within the local planning authority's jurisdiction.[6] Although the Bay's littoral features are diverse, its wildlife constitutes its greatest natural asset. Over 220 species of birds are found in the area, thousands of which live in the lagoons, swamps and saltwater mudflats.[7] The Bay area is also the home of two animal species once thought extinct in Victoria, the New Holland mouse and the Potoroo or "rat kangaroo."[8] Finally, the inimitable koala and the Australian fur seal sustain large colonies in the area.[9]

5. *See* CLAWSON & HALL, PLANNING AND URBAN GROWTH: AN ANGLO-AMERICAN COMPARISON (1972); CONSERVATION FOUNDATION, GROPING THROUGH THE MAZE (1977); HAGMAN, URBAN PLANNING AND LAND DEVELOPMENT CONTROL LAW 592-662 (1975).

6. Westernport Regional Planning Authority, *Definition of Boundaries of Planning Policy No. 1 (Westernport) As It Applies to the Mainland* 3 (1972).

7. MINISTRY FOR CONSERVATION, A PRELIMINARY REPORT ON THE WESTERNPORT BAY ENVIRONMENTAL STUDY S-2 to S-4 (1975) [hereinafter cited as ENVIRONMENTAL STUDY].

8. ENVIRONMENTAL STUDY, *supra* note 7, at 495-98.

9. *Id.* at S-6 to S-8.

The geography, hydrology and physical characteristics of Westernport Bay account both for its unique flora and fauna and for its development appeal. The Bay is a tidal estuary composed largely of shallows and swamps between two elevated land formations: Mornington Peninsula on the west and heavily-developed highlands on the east.[10] Two channels with depths up to seventy feet make the Bay one of the deepest natural harbors in Australia. Two islands athwart its entrance, however, slow significantly the Bay's flushing and water circulation and exacerbate the effects of pollutants.

The Bay's ecological integrity faces two threats. First, use of the area by local residents and recreation-seekers from the Melbourne region causes direct damage to vulnerable natural systems and indirect damage to animal habitats and plant communities that are vital to the Bay's slow cleansing process.[11] Second, Westernport is a prime site for commercial and industrial development.[12] Located just thirty-five miles from Melbourne's labor and consumer markets, it also abuts oil and gas fields and coal reserves. The Bay's northern reach, where tidal flushing is slowest and where extensive mudflat habitats are found, is the location of both present and proposed industry.[13]

In fact, industrial development had altered significantly the coastline of the Bay's north arm by the time the local planning agency launched a systematic survey of the region's resources and the threats posed by additional development. That survey, the Westernport Bay Environmental Study,[14] was intended to overcome one of the major weaknesses of many critical area designation

10. Most of one side of the Peninsula is devoted to residential use, primarily second homes. On the side bordering the Bay, the land use pattern alternates between residential development and agricultural areas. Reclaimed swamplands northeast of the Peninsula are drained by three rivers that deposit heavy loads of sediment into the Bay. *Id.* at S-4 to S-5 and 38-48.

11. The Westernport Regional Planning Authority projects that the present pace of population growth and clearing of land for development could destroy all remaining natural vegetation and animal communities dependent on it by the year 2000. VICTORIA TOWN AND COUNTRY PLANNING BOARD, STATEMENT OF PLANNING POLICY NO. 2, 15-17 (1976) [hereinafter cited as STATEMENT OF PLANNING POLICY NO. 2].

12. VICTORIA TOWN AND COUNTRY PLANNING BOARD, STATEMENT OF PLANNING POLICY NO. 1, 8-10 (1970) [hereinafter cited as STATEMENT OF PLANNING POLICY NO. 1].

13. Victoria Fisheries and Wildlife Dep't, The Challenge of Westernport 5.

14. ENVIRONMENTAL STUDY, *supra* note 7, at S-2.

schemes: the lack of data on the geography and pollution tolerances of the ecological system's components.[15] The significance of an environmental inventory in the planning process was underscored by the imposition of a moratorium on commercial and industrial building for the two-year study period.[16]

The Environmental Study concluded that a middle course between the extremes of no development and heavy industrial development was possible. In particular, it noted that:

> — Prevention of significant water quality degradation required limiting the area's population growth to 135,000 from its 1975 population of 45,000;
>
> — Development of certain heavy industries, such as nonferrous metal smelting, paper manufacturing and sugar refining, should be prohibited;
>
> — Development of low labor, capital intensive industries with low pollution potential could assist the conservation effort by creating a barrier between ecologically sensitive zones and heavier industries.[17]

As a first step toward critical area designation, the Study also identified six coastal areas of major ecological significance and recommended that they be kept in their natural state.[18] Finally, it recommended steps in support of the designation process, including environmental impact assessments for every proposed industrial development, strict waste treatment standards, and limitations on heated effluents.[19]

Protection and Management of Designated Areas: Anglesey

The inventory technique serves to direct attention to the array of critical values in an area but does not necessarily establish priorities for their preservation. The relative importance of critical areas for designation purposes may be determined in a variety of ways. Australia seems likely to use a system with a single category of areas, each of which may contain multiple zones of protection.[20] In

15. *Id.* at S-2 to S-4.
16. *Id.* at S-2.
17. *Id.* at S-14 to S-17.
18. Six additional areas were recommended for further study. MINISTRY FOR CONSERVATION, WESTERNPORT BAY ENVIRONMENTAL STUDY (ABRIDGED) A-4, A-20 (1975); ENVIRONMENTAL STUDY, *supra* note 7, at S-21.
19. *Id.*
20. *See* notes 61 to 65 and accompanying text *infra*. This approach has also been

contrast, the United Kingdom matches multiple designation categories with a hierarchy of critical area values. The Isle of Anglesey provides a case study of the implementation of the latter technique.

Anglesey lies directly off the northwestern coast of Wales in the Irish Sea, separated from the mainland by only a narrow ribbon of shallow water. The Telford Suspension Bridge across that ribbon of shallows is the Isle's only road link with the mainland.

Among Anglesey's prime assets are its several nature reserves, especially Newborough Warren. The Warren, a natural landscape of sandhills, saltmarshes and dune grasslands,[21] is partially owned by the national government. Despite both government ownership and designation as a protected area, however, holiday seekers and seasonal residents regularly inundate its fragile dunes and plant and animal communities.[22]

In addition, conservation and preservation on Anglesey has been affected by recent interest in developing power and industrial complexes near existing population centers. Most critical is the decision of Shell Oil to locate at Amlwch an oil transfer terminal, with its potential for oil spills and the resulting despoiling of some of the most popular beaches and critical reserves and habitats in the United Kingdom.[23] The area's wildlife havens lie in the path of prevailing winds and tides and are particularly susceptible to destruction by any major oil spill in nearby waters. Moreover, the

adopted for France's Camargue region, a wetland area in the Rhine River delta that is under intense pressure from resort and industrial development and agriculture. Camargue is protected by a tripartite concentric designation scheme. The center, around a lake, is designated a Reserve, in which no private activity is permitted. The area surrounding the lake for several square miles is a Regional National Park, where land uses are primarily agricultural. Beyond the Park's boundaries is a registered natural site, within which more intensive agriculture and settlement are permitted. *See* Callies, *Lessons from the Camargue*, *supra* note 4, at 4-8.

21. The sand dune ecology includes whole dunes that "wander" under the impact of strong winds. Hollows between the dunes support many species of marshgrass and diverse animal communities. The Nature Conservancy, *Guide to Newborough Warren National Nature Reserve*.

22. Interview by author with Peter Schofield, Assistant Director, The Nature Conservancy Council Wales (Nov., 1974).

23. The terminal provides anchorage facilities for huge tankers about one and a half miles off the coast from Amlwch. The tankers pump their oil cargo through a marine pipeline to on-shore storage tanks. From there, the oil is piped to the Mersey refining complex near Liverpool. For a discussion of the oil facility, *see* West & Foot, *Anglesey: Aluminum and Oil* in THE POLITICS OF NATURAL RESOURCES 202-32 (P. Smith ed. 1975).

pipeline connecting Amlwch with Shell Oil's refinery crosses a large expanse of tidal foreshore that serves as an important waterfowl feeding and roosting area and fishing ground.[24]

Hierarchical Designation

Few countries have as complete a system of land use management and control as the United Kingdom. Its hierarchical designation scheme is but one tool, although an important one. Description of the degree of protection and type of management attached to each designation category reveals the strengths and weaknesses of this mechanism for critical area preservation.

1) *National Nature Reserves*

National Nature Reserves (NRR) are designated by a quasi-official conservation organization, the Nature Conservancy Council (Conservancy),[25] in areas with natural systems judged to be of national importance. Most NRR's, therefore, are among the best examples of particular ecosystems in Britain.[26] Unlike government ownership of National Parks in the United States, however, the British government owns, at best, only a small portion of each critical area. NRR's may also be established by lease or formal agreement with owners or occupiers, permitting governmental management to maintain the values which led to an area's designation.

Neither major development in an NRR contrary to Conservancy policies nor acquisition by another public authority can occur without the consent of the Secretary of State for the Environment. Programs of management for NRR's permit public access within limits deemed necessary to protect each area.[27] The degree of preservation achieved, however, depends on the impact of polluting effects from development outside the NRR. Local planning authorities are

24. *Id.*

25. The Nature Conservancy Council is, in effect, the "official" wildlife organization of Britain. The national Secretary of State for the Environment appoints the governing body himself and provides most of the funds for its operations. It has the authority to establish or to help establish National Nature Reserves, Sites of Special Scientific Interest, and Local Nature Reserves. National Parks and Access to the Countryside Act 1949, 12-14 Geo. 6, c. 97 § 15; Nature Conservancy Council Act 1973, 22 & 23 Eliz. 2, c. 54. *See* J. CULLINGWORTH, TOWN AND COUNTRY PLANNING IN ENGLAND AND WALES 226-27 (1971).

26. D. BIGHAM, THE LAW AND ADMINISTRATION RELATING TO PROTECTION OF THE ENVIRONMENT 296-97 (1973).

27. CULLINGWORTH, *supra* note 25, at 227.

under no statutory compulsion to consult, or even to notify, the Conservancy in considering an application for development *adjoining* an NRR and may permit development regardless of the consequences.[28]

2) *Sites of Special Scientific Interest*

The high cost of acquisition and management forbids extensive NRR designation. To encourage the protection of other areas of particular interest because of their scientific value and natural history, the Conservancy may designate a Site of Special Scientific Interest (SSSI) by notifying the pertinent local authority.[29] Local planning authorities must consult and evaluate the views of the Conservancy before granting permission for development within a designated SSSI.[30]

The degree of protection afforded an area by SSSI designation varies. Final development decisions lie with the local planning authority. Safeguarding of these sites by current owners or occupiers is voluntary.[31] Finally, SSSI designation gives the Conservancy neither any special right of access to the site nor any right to regulate existing access. Nonetheless, SSSI designation has enabled the protection of smaller critical environmental areas at little public cost and provides a good example of the cooperative arrangements that are used extensively in Britain for management and protection.

3) *Heritage Coasts*

In 1970 Great Britain's Countryside Commission[32] recommended that a new system of controls be instituted for coastline stretches, to be called Heritage Coasts, with particularly important scenic or environmental values. Designation would have largely prohibited nonrecreational land uses. The national Department of the Environment, however, failed to support the new designation; instead,

28. BIGHAM, *supra* note 26, at 297.

29. National Parks and Access to the Countryside Act 1949, 12-14 Geo. 6, c. 97 § 23, *as amended by* Nature Conservancy Council Act 1973, 22 & 23 Eliz. 2 c. 54.

30. Countryside Act 1968, Eliz. 2 c. 41 § 15.

31. NATURE CONSERVANCY COUNCIL, FIRST REPORT (1975) [hereinafter cited as FIRST REPORT]. Although the Conservancy usually attempts to enter management agreements to assist owners and occupiers in protecting site features of special importance, few such agreements have been concluded.

32. The Countryside Commission replaced the National Parks Commission under the Countryside Act 1968, Eliz. 2 c. 41 § 1.

it merely urged local authorities to identify significant coastal areas in consultation with the Countryside Commission and to incorporate resulting policies in local plans.[33] Thus the Heritage Coast designation scheme neither guarantees against development nor protects against overuse by tourists.

4) *Local Nature Reserves*

Local Nature Reserves are designated by local authorities in consultation with the Conservancy.[34] They are intended both to conserve scientific values and to provide opportunities for public education about wildlife. Due largely to lack of funds for management at the local level, however, few have been established.

5) *Areas of Outstanding Natural Beauty*

An Area of Outstanding Natural Beauty (AONB) may be designated either by the Countryside Commission or by the local authority,[35] but responsibility for administration and preservation generally lies with the local authority alone.[36] In practice, AONB designation has provided only limited protection for critical areas. Unless incorporated into the development plan for the region, designation ensures no greater control than would exist without it. Only if public opinion is aroused by an application for development is the local authority likely to hesitate in granting permission.[37]

Designation on Anglesey

Anglesey has no dearth of designated areas, especially along the coast at and near Amlwch. First, just outside Amlwch and adjacent Shell Oil's onshore site are about ten miles of Heritage Coast. Near Amlwch is the Cemlyn Bay Nature Reserve, as well as a designated AONB. Finally, numerous SSSI's dot the area, especially along the Heritage Coast.

Whether these designations, standing alone, can effectively preserve Amlwch's critical areas, however, is questionable. For example, only inclusion of the Heritage Coast in the local planning authority's system of land use controls gives this designation any real

33. H.M.S.O., THE COASTAL HERITAGE (1974).
34. CULLINGWORTH, *supra* note 25, at 226-27.
35. BIGHAM, *supra* note 26, at 307-08.
36. *Id.*; CULLINGWORTH, *supra* note 25, at 214-15.
37. CULLINGWORTH, *supra* note 25, at 215.

protective significance.[38] Moreover, designation of the Cemlyn Bay Nature Reserve, the "top of the line" in the hierarchy of protective schemes, does not extend control over activity outside the Reserve, even if that activity is destructive of values within the Reserve.

A combination of designation and partial ownership by the Conservancy affords Newborough Warren a greater degree of protection than other critical areas on the island. The Conservancy also holds leases, many of them long-term, with owners of property within the Warren and permits no development of leased lands.[39] Because of the demand for recreational space, however, the Conservancy has chosen to try to accommodate use and preservation of natural values rather than close the area entirely.

External Protection and Conflict Resolution

Westernport's inventory of critical values and Britain's hierarchical categories of protection demonstrate two essential elements of successful designation schemes. Each element has its weaknesses, however. Inventories may be underinclusive and neglect values of environmental significance, or overinclusive and result in conflict, rather than accommodation of competing land use demands. Hierarchical controls require means of reckoning with development outside designated critical areas. Both the British and Australian systems of land use controls include additional mechanisms that help guarantee the internal integrity of critical spaces and that provide opportunities for resolving conflicts between conservation goals and development goals in areas with commercial potential and environmental value.

The English System of Planning and Development Control

Since passage of the Town and Country Planning Act of 1947,[40] England and Wales have been subject to a comprehensive system of development controls.[41] The system has two basic elements:

38. Interview by Christopher Duerksen with W. Morris, Deputy Planning Officer, Anglesey Borough Council (Nov. 1974).

39. Interview by Christopher Duerksen with Dr. G. Howells, Deputy Regional Officer, Nature Conservancy Council, Bangor, Wales (Nov. 1974).

40. 10 & 11 Geo. 6 c. 51 (1947). The current version of this statute is Town and Country Planning Act 1971, 20 & 21 Eliz. 2 c. 78.

41. For a general review of the English development control system, *see* Garner, *An Introduction to English Planning Law*, 24 OKLA. L. REV. 457 (1971); Garner, *The Law of Land Use Planning in England Today*, 15 NAT. RES. J. 491 (1975); Garner & Callies, *Planning Law in England and Wales and in the United States*, 1 ANGLO-AMERICAN L. REV. 292 (1972).

structure plans and local plans.[42] Structure plans, prepared by local planning authorities, are written statements that outline broad policy goals for the area within the authority's jurisdiction[43] by indicating generally appropriate land uses and development stages.[44] The national government's Secretary of State for the Environment must approve structure plans before they take effect.[45] To this extent, England can be said to have a national land use plan.

Local, or development, plans are far more detailed and are accompanied by maps similar to those contained in American zoning ordinances. Local plans must conform to the broad policy goals of the structure plan.[46] They differ from American zoning maps, however, in that they serve only as guides to developers and planners. Designation of a specific category of development does not authorize the owner actually to carry out development.[47] The linchpin of the system is the requirement that permission of the local planning authority be obtained for development.[48] The authority is not bound in its decision by the development plan.[49]

Only by inclusion of critical area designations in the local plan are conservation values afforded any measure of legal protection. Once included, designations serve to direct attention to critical area preservation in the planners' evaluations but do not control the development decision. Local authorities are required to consult the Conservancy about development proposed for sites designated as Nature Reserves or Sites of Special Scientific Interest; in the

Thorough and detailed analyses by English authors are contained in CULLINGWORTH, note 25 *supra*; R. HAMILTON, THE SOLICITOR'S GUIDE TO DEVELOPMENT AND PLANNING (1964).

For surveys of current issues in English development control law, see HEAP, THE LAND AND THE DEVELOPMENT (1975); Duerksen, *England's Community Land Act: A Yankee's View*, 12 URB. L. ANN. 49 (1976).

42. Town and Country Planning Act 1971, 20 & 21 Eliz. 2 c. 78 §§ 7, 11.

43. The jurisdiction of all planning authorities is contiguous. Theoretically, then, all of Great Britain is covered by development plans. CULLINGWORTH, *supra* note 25, at 44-45, 81-84.

44. Town and Country Planning Act 1971, 20 & 21 Eliz. 2 c. 78 § 7.

45. *Id.* § 9.

46. *Id.* § 11.

47. Development is defined as "the carrying out of building, engineering, mining, 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." *Id.* § 22.

48. *Id.* § 23.

49. Duerksen, *supra* note 41, at 51-52. For developments of regional or national importance, the Secretary can "call in" the application for planning permission and make the decision himself. Town and Country Planning Act 1971, 20 & 21 Eliz. 2 c. 78 §§ 35-39.

case of other designation categories, such consultation is discretionary. These consultations provide crucial opportunities for environmentalists to inject their values into the planning process. The structure and local plans articulate the principles that will be used as reference points in specific development permission decisions. Under the statutory scheme, these decisions are intended to reflect both the philosophy of the structure plan and the detail of the local plan, and, *a fortiori*, the values that the plans have incorporated.

On Anglesey a structure plan was adopted favoring "medium growth," including industrial expansion and concomitant employment opportunities.[50] The policy emerged after an extensive series of public hearings and consideration of a planning consultant's report, which noted local concern about potential damage to environmental values.[51] At least in its broad policy goals, then, the plan reflects interest in critical area protection.[52]

Implementation of the "medium growth" goal of Anglesey's structure plan, however, demonstrates the difficulty of accommodating developmental and conservationist interests even under as comprehensive a system of land use controls as that of Great Britain. For instance, the local plan for Newborough Warren[53] incorporates policies directed to continuation of the agricultural industry[54] and to encouragement of tourism.[55] The two policies represent a compromise between boosters of the local economy and owners of second or retirement homes who favor preservation of the area's physical amenities.[56] Conservation of the critical wetlands areas seems to have been left by the wayside in the decisionmaking process.[57]

Construction of the Shell Oil terminal at Amlwch provides an

50. ANGLESEY COUNTY COUNCIL, COUNTY STRUCTURE PLAN WRITTEN STATEMENT §§ 4.1.2, 4.2.1-4.2.4 (Mar. 1974) [hereinafter cited as COUNTY STRUCTURE PLAN].

51. Interview by Christopher Duerksen with W. Morris, Deputy Planning Officer, Anglesey Borough Council (Nov. 1974).

52. ANGLESEY COUNTY COUNCIL, STRUCTURE PLAN REPORT: SURVEY & DISCUSSION OF ALTERNATIVES §§ 3.6.4, 3.9.1 (Jan. 1974).

53. COUNTY STRUCTURE PLAN, *supra* note 50, at § 7.1.1.

54. *Id.* § 7.2.1.

55. *Id.* § 11.1.1.

56. Interview by Christopher Duerksen with W. Morris, Deputy Planning Officer, Anglesey Borough Council (Nov. 1974).

57. As the structure plan noted, "There is a conflict between agriculture and natural conservation interest over the question of the 'wet lands' of Anglesey." COUNTY STRUCTURE PLAN, *supra* note 50, at § 7.3.3.

even more dramatic example of planning control inadequacies. Citizen opposition highlighted the proximity of the proposed complex to recreational beaches[58] and cast doubt on the economic necessity of the operation.[59] Notwithstanding an adverse report by its planning officer and some of its own planning committee members, the Anglesey County Council approved both the onshore facilities and the off-shore tanker buoy of the Shell proposal.[60]

Interim Control and State Planning Policy in Australia

In common with most of Australia, the Westernport area is subject to a state-administered planning law framework capable of remarkably precise land use determinations. Local planning agencies, such as the Westernport Regional Planning Authority, fill in the area-specific details of state planning legislation and policies. Aside from state-owned parklands,[61] critical area designation is *ad hoc*, usually following one or more inventories or investigations that catalogue critical values. Unlike the United Kingdom, there is no hierarchy of designations related to the level of protection required in a particular area. The basic unit of critical area protection at this regional level is the "special area," or area of special significance.[62]

58. A similar mooring and pipeline system constructed by Shell Oil had a demonstrably poor spill record. In addition, a tanker accident at Amlwch is most likely to occur during a northerly gale that would also sweep spilled oil toward the Island's beaches and wildlife areas. Interviews with W. Grove-White, chairman, Anglesey Defense Action Group, by Christopher Duerksen (Nov. 1974) and by author (Apr. 1975).

59. Debate centered on the adequacy of existing facilities at Mersey and the potential impact of England's recent North Sea oil discoveries.

60. West & Foot, *supra* note 23, at 220. The Council also agreed to sponsor a private bill in Parliament, where a Select Committee had been appointed to hold hearings. The Committee narrowed its inquiry to the incidence of oil spillage at other Shell terminals. Shell offered impressive (and largely unchallenged) statistics which, combined with the assertion that Amlwch would become the best supertanker facility in Europe, convinced the House of Commons. *Id.* at 231-32.

61. State-owned lands are treated much like national parks in the United States. National parks in England, on the other hand, are largely privately-owned. Preservation of these parks is worked out by agreement. *See* Garner, *supra* note 41 15 NAT. RES. L.J. at 498.

62. Areas of special significance should not be mistaken for areas reserved exclusively for the protection of critical environmental values. Special areas in Westernport include metropolitan growth corridors and industrial ports as well as forest, shoreland and wetlands. The special area designation may contribute to development and conservation compromises as much as it may protect absolutely the integrity of particular critical areas. *See, e.g.*, STATE OF VICTORIA, WESTERNPORT CATCHMENT REPORT ON ADMINISTRATIVE AND LEGISLATIVE IMPLEMENTATION OF THE FINDINGS OF THE WESTERNPORT BAY ENVIRONMENTAL STUDIES 1973-74, Ap-

Because both the development of comprehensive plans and the inventory of critical values require substantial amounts of time, present regulatory scheme depends on a series of interim measures called interim development orders (IDO's).[63] A local planning authority may exercise its land use control either through a regional plan, subject to state government approval, or through IDO's, which are effective, theoretically, only until completion of the regional plan.

At present, land use control in the Westernport area is exercised under an IDO rather than under a formal planning document. In fact, planning authorities prefer to work under an IDO because it gives them far more power than they would have if the formal planning scheme were in place. Each development proposal can be made subject to approval on its merits, much like the operation of special use permits under local zoning ordinances in the United States. Under a formal plan, on the other hand, some types of development are permitted as of right.[64]

The Westernport IDO is a rough indication of permitted land uses in the form of a map and an ordinance that is neither as comprehensive nor as detailed as the typical American zoning ordinance. Three general land use classifications are included in the IDO: urban areas, nonurban areas and "areas of special significance." This particular IDO happens to afford the Regional Planning Authority less power than is theoretically possible under interim measures. Thus only certain kinds of development require special permission. In urban areas, only regional shopping centers and regional industry require permits. On the other hand, in areas of special significance, all uses require permits.[65]

The Westernport Regional Planning Authority's IDO provides a skeletal structure upon which protection of the Bay may be hung. The flesh and blood of critical area preservation, however, is the implementation by the planning authority of the *state* government's statements of planning policy.[66] Regional planning bodies must

pendix 2 at 2 (Jan. 1976) [hereinafter cited as CATCHMENT REPORT].

63. Interview by author with Brian Harper, Director, Westernport Regional Planning Authority (Nov. 1974).

64. Town and Country Planning Act 1961, 6849 VIC. STAT. §§ 17-18 (1975).

65. STATE OF VICTORIA, WESTERNPORT REGION INTERIM DEVELOPMENT ORDER § 7 (1970).

66. STATEMENT OF PLANNING POLICY NO. 1, note 12 *supra*; STATEMENT OF PLANNING POLICY NO. 2, note 11 *supra*. The process by which statements of planning policy are adopted is complex. Responsibility for the first draft statement

comply with state policy documents in both the development of a permanent land use control scheme and the granting of development permission.[67]

Two planning statements emerged for the Westernport Bay Area. The first provided for development of a major specialized port and heavy industry complex.[68] In the process of preparing a detailed plan to implement the statement, however, the regional authority made no definitive or specific commitment to industrial areas. Instead, it accommodated the terms of the policy statement by tentative and general designation of some areas around the Bay for industrial development.

The second statement of planning policy had a decided environmental protection bent and required the Regional Planning Authority to develop a "conservation plan" for Mornington Peninsula.[69] The basic control mechanism of the Conservation Plan[70] is the "land unit," thirteen of which were created on the Peninsula. Regulations based upon landscape, cultural and natural systems inventories and evaluations determine the land uses and development characteristics within each unit.[71]

In addition to the basic land units and their regulations, two "overlays" identify critical natural areas (cliff and dune areas, for example) and "special human interest" areas (such as historic and scientific sites) around the Bay. Every development application

lies with the state Town and Country Planning Board, which then surveys and investigates the regions for which a statement is proposed. The statement is sent to local councils and regional planning authorities with jurisdiction in the area, for review and comment before it is adopted. Town and Country Planning Act 1961, 6849 VIC. STAT. §§ 9-12 (1975). *See* FOGG, AUSTRALIAN TOWN PLANNING LAW, UNIFORMITY AND CHANGE 73-74 (1974).

67. While the statute appears on its face to apply to the drawing up of plans, it has been interpreted to apply to the granting of development permission as well. *See* FOGG, *supra* note 66, at 73-74.

68. The Statement concluded that the area was to be planned "primarily as a major specialized port and heavy industrial complex" and was to be regarded as "a principal generator of future urban growth to be integrated with development in the metropolitan area. . . ." STATEMENT OF PLANNING POLICY NO. 1, *supra* note 12, at §§ 2.1-2.2.

69. The Statement provided that the area's natural resources were to be "conserved for their recreation and scenic value and biological and geological significance" and that urban development "of such scale and type as to prejudice the conservation of the area" was to be discouraged. STATEMENT OF PLANNING POLICY NO. 2, *supra* note 11, at §§ 2.1-2.2.

70. WESTERNPORT REGIONAL PLANNING AUTHORITY, CONSERVATION PLAN—MORNINGTON PENSINSULA (May 1975).

71. *Id.*

must be considered in light of the applicable land unit regulations and the elements highlighted by the overlays.[72] Development permission negotiation for the Peninsula thus involves analysis of a broadly-defined group of critical areas.

The protection offered the Westernport Bay Area by the state's second policy statement is buttressed by the Westernport Catchment Report,[73] based upon the earlier Environmental Study inventory.[74] In superseding the development moratorium that had been in effect during the study period,[75] the Catchment Report suggests the application of strict performance standards in any industrial, urban or agricultural development that takes place.[76] It recognizes "the integrated nature of the land and sea systems and the ultimate effect that any development on the land area might have on the water systems of the Bay."[77]

Conclusion

Anglesey and Westernport Bay share more than the water-related nature of their critical areas and threats to survival. Their institutional structures and legal systems are largely English in character. In addition, the state of Victoria in Australia is nearly as sovereign in land use and environmental matters as the United Kingdom. Thus they have many of the same strengths in critical area protection: a long tradition of land use planning, a comprehensive land use management and control system with plans as its basis and centralized decisionmaking. Moreover, both Anglesey and Westernport Bay are dependent on the sea for trade and commerce. Economic pressures to use bays and shorelands for development threaten the rich coastal ecosystems of both.

England's system of land planning and development permission and its hierarchy of critical area designations are among the most sophisticated of such devices in the world. Yet both have shortcomings for the protection of critical environmental areas, especially in the face of substantial development pressures. Planning for Amlwch on the Isle of Anglesey provides a case in point. The local

72. *Id.* at 47.
73. CATCHMENT REPORT, note 62 *supra*.
74. ENVIRONMENTAL STUDY, note 7 *supra*.
75. CATCHMENT REPORT, *supra* note 62, at 1.
76. *Id.* at 5.
77. *Id.*, Appendix 2 at 1.

structure plan's proposal of Amlwch as one of the Isle's industrial and population growth centers will probably increase pressures on the adjacent unspoiled coast. In fact, the development plan designates land for industrial use that has previously been designated as a Heritage Coast and Area of Outstanding Natural Beauty—an indication of the "strength" of critical area designations in the British system of development control.

The system's shortcomings for critical area designation have several sources. First, designation of key areas is virtually ineffective unless incorporated into the planning system and controls upon which public land use management policy is based. Second, newer environmental controls are enforced only sporadically, because those charged with enforcement are schooled in physical geographic planning and find their backgrounds inadequate for the complex scientific and economic implications of these controls. Finally, the local councils that are responsible for imposing appropriate conditions on development permission must also consider the economic health of their localities. In a relatively depressed community such as Anglesey, the result is a compromise that favors development, as is exemplified by Shell's oil transfer terminal at Amlwch. Oil pollution is, without question, the most serious ecological threat to Anglesey's northeast coast. Yet by all appearances, England's complicated planning and designation machinery counts not one jot in the face of a determined local government.

Or is it the very strength and resilience of a system that will permit a major industrial facility to be sited if enough of "the people" want it, environmental considerations notwithstanding? The planning process on Anglesey has resulted in a balance between critical area protection and economic growth. Local authorities could not ignore national and regional needs since the Secretary for the Environment could then disapprove their plan upon his review. But for the most part, local residents, through their elected councilors, decided the broad growth policies of Anglesey's future.

Environmental studies can also have considerable impact on the development control process, provided one insists on neither environmental nor developmental purism. In all likelihood, the Westernport Bay Environmental Study will influence decisions on what development is ultimately permitted on Westernport Bay. Because the Study has been incorporated into state planning guidelines, its impact will be heightened.

Developmental interests also stand to gain from designation schemes and environmental studies. These devices provide a means of airing environmentalist concerns but do not necessarily represent a capitulation to their point of view. At the least, they provide balance against forms of intensive environmental activism that threaten to bring all development to a screeching halt.