

## Australia's Coastcare Program (1995–2002): its Purpose, Components and Outcomes

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### Abstract

Coastcare, Australia's community-based coastal stewardship program, ran in its original form between 1995 and 2002 underpinned by the principles of integrated coastal management. Internationally, there are very few similar enterprises. Coastcare differed in fundamental ways from other Australian natural resource stewardship programs such as Landcare and Bushcare. However, there is very little published information about the program: its activities, characteristics or achievements. The results presented in this paper are based upon analysis of descriptive statistics from two key sources: the data set of the central coordinating agency for Coastcare (the national environment agency of that time), and a questionnaire administered to State level staff of the program. This paper provides a comprehensive overview of the original program including a discussion of its practice, outcomes and limitations in terms of lack of formal evaluation. The paper expands the image of Coastcare beyond that of a grants program by explaining its broader roles in terms of education and partnership development between tiers of government and the community. Coastcare, in its original form, ceased to function in 2003 as a consequence of a remodeling of the funding strategy through the Commonwealth Government's Natural Heritage Trust. It is concluded that there is some urgency in broadcasting Coastcare's past function and fate because a new program has emerged from the old with little application of hindsight to guide better future performance.

**KEY WORDS** *integrated coastal management; coastal policy; Natural Heritage Trust; community participation; Coastcare*

### ACRONYMS

ICM	integrated coastal management
LAL	Landcare Australia Limited
MoU	Memorandum of Understanding
NCAP	National Coastal Action Program
NHT	Natural Heritage Trust
NRM	Natural Resource Management
RAC	Resource Assessment Commission
SAP	State Assessment Panel

### Introduction

Coastcare, Australia's community-based coastal stewardship program, commenced in 1995. It was one outcome of the distinct political and

policy status afforded to the coast by Federal and State governments during the 1990s. In an effort to counter the piecemeal and uncoordinated approach to managing the coast that

had persisted around Australia for the previous two decades, the 1990s has been described as a watershed (Haward, 1995) culminating in a decade of broad coastal reform in Australia (Thom and Harvey, 2000). Between 1995 and 2002, the Australian Commonwealth, in partnership with the States and coastal local governments, made a number of changes to governance, and initiated a new policy in conjunction with a comprehensive suite of programs in the endeavour to arrest coastal degradation and implement more strategic approaches to managing coastal resources. Coastcare was one of the programs to emerge during this period. Coastcare itself is of international significance because it was a unique example of a program that formally linked three tiers of government and the community toward a common purpose. It proved to be a viable model of integrated coastal management.

The coast's independent position in relation to Commonwealth policy making and funding was short-lived, however; by 2000 the coast was fading from the political limelight. In 2003, less than one decade after the release of the Commonwealth coastal policy (Commonwealth of Australia, 1995), the suite of coastal programs was abandoned. The coastal office within the Commonwealth environment agency was closed and Coastcare was amalgamated with other land-based community grant programs to form part of a restructured scheme: the Envirofund (Environment Australia and AFFA, 2002). (Envirofund is an amalgamation of 23 original Natural Heritage Trust programs, consolidated into four – Landcare, Bushcare, Rivercare and Coastcare.) With the consolidation of Coastcare into Envirofund, contracts were terminated for the staff who had co-ordinated and supported the Coastcare program at the local level. Their combined expertise generated over the six years of the program's operation has largely been transferred elsewhere. Under recent policy restructuring (the NHT Extension or NHT 2) (Australian Government, 2002), Coastcare has lost its stand-alone status that included separate Commonwealth administration under one Minister, discrete funding and a set of tripartite agreements, the 'Coast and Clean Seas' Memoranda of Understanding (MoUs) for each State and the Northern Territory, signed by three tiers of government and agreed to only after considerable negotiation (Thom and Harvey, 2000).

Of concern is that Coastcare's new design under NHT 2 was pre-determined with little reference to the broad achievements of the first

six years of the program's performance, and with little consideration of the impact of these changes on the volunteer groups the program was designed to support. Drawing upon the experiences of the first six years of Coastcare's implementation is important in terms of maintaining 'institutional momentum' (Fry and Jones, 2000), enhancing the support and commitment of stakeholders involved in Coastcare, and informing the new program on the basis of past lessons.

This paper explores the original Coastcare program, a contemporary policy initiative, and considers the importance of developing appropriate performance measures, suitable for future schemes relying on volunteer support.

### Methods

Descriptive statistics used to generate the national overview of Coastcare described in this paper were derived from two sources. The first source was the data set of routinely-collected information relating to funded Coastcare projects, collated by the national environment agency of that time (Environment Australia). Information about each project had been recorded and centrally stored by Environment Australia since the commencement of Coastcare in 1995. Upon request data were made available to the author on a Microsoft Excel spreadsheet. Arranged State-by-State, a record was created for each Coastcare project, detailing: a description; location; name and type of group undertaking the work (for example, community group, educational institution), and funding awarded. Prior to this study, no comprehensive content analysis of Coastcare statistics had been undertaken.

The national data set, while essential for tracking and auditing the progress of individual projects, lacked several critical elements necessary for providing an overview of the achievements of the program. For example, it was not possible to determine the following:

1. the number of applications received compared with the projects funded in a given funding round;
2. the number of projects completed;
3. the number of groups receiving more than one grant, as project numbers were assigned with each new funding round with no link to past activity;
4. the groups that were not in receipt of funds but were still participating in Coastcare in a given year;

5. the number of local councils engaging Coastcare by jointly signing grant applications with community groups, and
6. other Coastcare activities running alongside the grant scheme (such as educational workshops, summer activities programs, convening of conferences).

To address these gaps the author collaborated with the Environment Australia Coastcare managers and designed a questionnaire: 'Coastcare General Data Collection, Compiling Statistics Nationally'. State Coastcare coordinators had responsibility for administering and annually compiling their individual State Coastcare statistics. Accordingly, the seven State coordinators were asked to complete the questionnaire in 2000. On the basis of the completed questionnaires a second data set was constructed by the author. The analysis of the combined data sets is presented in the following discussion.

**Achieving integrated coastal management**

Since the 1992 Rio Earth Summit there has been an escalating, international push for an integrated approach to coastal management. ICM is defined by Harvey (2004, 568) as:

A continuous and dynamic process ... which aims to manage human use of coastal resources in a sustainable manner by adopting a holistic and integrative approach between terrestrial and marine environments; levels and sectors of government; government and community; science and management; and sectors of the economy.

Knecht and Archer (1993) explain ICM as a series of dimensions. These are outlined in Table 1. Jens Sorensen (2000) estimated that by the year 2000, 87 countries worldwide were

engaged in some form of ICM activity, ranging from preparing policy statements to implementing feasibility studies or programs.

*The implementation gap*

Integrated coastal management (ICM) programs that are national, engage the community, have supportive policy, achieve full implementation and receive internal funding are rare in an international context. Two studies, one by Cicin-Sain and Knecht (1998) and the other by Sorensen (1997), examined the extent to which ICM had been applied worldwide by the year 2000. The studies confirm that despite the existence and endorsement of ICM activities there has been a lack of critical analysis of the effectiveness of programs and activities. The ratio of failed or ineffective programs to successful programs is high (Hildebrand and Sorensen, 2001). There are many examples of 'first-generation' local demonstration projects, but it is unclear whether these contribute to solving regional coastal problems or whether they can be scaled up to become nationwide strategies or overarching programs such as national policy frameworks (Cicin-Sain and Knecht, 1998; White and Deguit, 1999; Olsen and Christie, 2000). ICM has been endorsed widely but there remains a challenge of moving from theory to practice – this is referred to as the implementation gap. As Sorensen (1997, 14) noted:

The best indicator [of success] is the number of programs (not 'efforts') which have been adopted and implemented. The implementation phase is the acid test of all ICM programs, but it appears that most efforts have not moved into that stage of enforcing plans and policies – of these that have, adequacy of programs is not known.

Table 1 Dimensions of Integrated Coastal Management (*Source: Kenchington and Crawford, 1993*).

Inter-governmental integration	All levels of government are required to be involved in planning and management decisions that will impact upon the coastal environment (otherwise known as vertical integration).
Inter-sectoral integration	Prior to ICM efforts coastal management suffered from fragmentation between sectors of government and the 'tyranny of small decisions' (otherwise known as horizontal integration).
Systems approach	The interconnection between the land-water interface and that an understanding of ecological processes is important.
An interdisciplinary and holistic approach to management	Natural and human systems and their component parts and interrelationships are included in management decisions and are inclusive of traditional, cultural and historical perspectives and input from key stakeholders at the community level.

Coastcare provides an ideal subject for research because it meets the prescribed formula (principles and elements) for ICM:

1. it was an initiative of the Commonwealth that was specifically designed to engage participation of local communities;
2. Coastcare was implemented nationally through a formal program, and operated for seven years with guaranteed Commonwealth/State funding;
3. Coastcare was inclusive of the entire length of the Australian coastline (a team of regional Coastcare facilitators had responsibility for co-ordinating coastal management activities of volunteer groups around the coast); and
4. three tiers of government were committed through a formal partnership agreement ('Coasts and Clean Seas' MoU) that prescribed the duties and obligations, objectives and outcomes expected from the program.

ICM is an iterative process, not a one-off venture and one ICM 'cycle' is estimated to take 5–7 years (Olsen *et al.*, 1999, 8). Coastcare, therefore, was given the chance to complete only one cycle. Theoretically, the original Coastcare program, presented in this paper, was still a fledgling program and its achievements should be considered in this light. Coastcare began as a newly conceived national initiative and its accomplishments in co-operation and co-ordination were built from scratch.

### **Background to Coastcare**

According to Kay and Lester (1997), managing the coastal zone has been a priority but an enduring problem for Australian governments for many years. Intensifying pressure over use, insufficiencies in the ad hoc controls and overlap between jurisdictions ensured that, from as early as the 1970s, coastal environments were continually reported to be in decline around the country (Harvey and Caton, 2003). Existing structures of governance and policy frameworks of the time had failed to deliver sustainable coastal management programs. There was a long lead-time to the establishment of ICM in Australia. It was during the early 1990s that international theory and practice regarding sustainable development and integrated management influenced the Australian approach to natural resource planning and management. In recognition of the need for sustainable, holistic and strategic approaches, coastal management in Australia has undergone considerable change

since 1990 (Thom and Harvey, 2000). The nature of governance of coastal resources in Australia is central to understanding the inertia surrounding the shift for improved management practice.

### *Governance of the coast in Australia*

There is a large number of institutions with responsibility for managing Australia's coast, shared between three tiers of government: the Commonwealth; each of the six States and the Northern Territory; and 760 or so local councils. Australia's Federal Constitution endowed the Commonwealth with very few powers directly related to the environment and consequently the Commonwealth lacks direct legislative control in the coastal zone (O'Connell, 1999). Powers for natural resource management reside with the individual States. There is considerable diversity between the specific legislative instruments and numerous State agencies have responsibility for management of coastal lands within their jurisdiction. Under State direction, local government undertakes many of the maintenance tasks and development control of the coast. In Australia, coastal management within each State is driven by its own unique system (Caton, 2001). Consequently, there has been a history of tension and negotiation between the Commonwealth and the States in relation to cross-jurisdictional matters. The States deliberately repel Commonwealth interest seeking control over State matters. At the same time the Commonwealth encourages the adoption of national standards and strategies, thereby avoiding parochialism and inconsistency (Painter, 1998). Haward's (1995) review of integrated coastal management in Australia in the mid 1990s pointed to the challenge of implementation against this backdrop of 'co-operative federalism', within pre-existing coastal management structures and frameworks.

### *The emergence of Coastcare*

In response to growing concern over coastal degradation in 1992 the Commonwealth initiated a two-year independent Inquiry led by the Resource Assessment Commission (RAC). To combat evident problems of jurisdictional overlap and incremental decision-making, the Final Report of the RAC (1993) called for a national, co-operative approach to coastal management that was both integrated and strategic. The Inquiry recognised the complexity of regulatory systems but urged for agreement upon a set of common principles and objectives that could be met across jurisdictions to provide a national

approach. The need to effect change to achieve sustainable coastal management was a principle recommendation of the Inquiry.

#### *Commonwealth coastal policy*

Based on recommendations from the RAC, the Commonwealth initiated its coastal policy: *Living on the Coast* (Commonwealth of Australia, 1995). The policy set out to achieve specific practical improvements to coastal management on four key 'fronts', one of which was increased community involvement in coastal management. Implementation of the policy's objectives was ensured through funding a suite of programs – the National Coastal Action Program (NCAP). After considerable negotiation between Commonwealth and State governments, a major achievement of the NCAP was the acceptance of a Commonwealth role through an agreed set of MoU with all States, the Northern Territory and representatives of local government (Thom and Harvey, 2000). Coastcare formed part of the implementation package as the vehicle for involving the community in coastal protection. Coastcare survived a change of government (from Keating to Howard) and the roll over from the NCAP into the Commonwealth's newly established Natural Heritage Trust (NHT 1) in 1997.

Adoption by all the States and the Northern Territory of the NCAP, and later the NHT 'Coasts and Clean Seas program', is evidence of a shift towards integration of policy amongst the three levels of government (Commonwealth, State and local) and the community. Nevertheless, there was significant variation in the delivery of programs amongst individual States. Coastcare, for example, in most of the States and the Northern Territory, was delivered as a program of the Commonwealth. However, exceptions to this were the Victorian and Western Australian Coastcare programs which were delivered jointly alongside their respective State community coastal programs, CoastAction in Victoria and CoastWest in Western Australia. These two State counterparts were in operation prior to the establishment of Coastcare nationally, and both Victoria and Western Australia negotiated strongly to maintain the identity of their own initiatives in conjunction with the national program.

#### **The Coastcare program under NHT 1 (1995–2002): its purpose and components**

Coastcare was unique, among other stewardship programs funded through the NHT 1.

Stocker and Frost (1998), comparing Coastcare with Landcare, highlighted three features that differentiated the programs: the nature of partnerships (between government and community); the significant contrast between coastal and inland environmental management issues, and the nature of land tenure. They suggested that Federal-State inter-governmental partnerships were stronger in Landcare due to a high level of co-ordination between agencies around regional environmental issues. Second, environmental issues faced in coastal environments tend to be more diverse than those faced by managers in rural Australia because of the complexity and dynamism of coastal environments. Third, Coastcare projects were typically undertaken on publicly owned or managed coastal terrestrial and marine locations (Commonwealth of Australia, 1998), a direct contrast to Landcare where group members are usually landowners and therefore have an economic motivation for managing their land well. Additional differences included the administration of the program by one Commonwealth Minister, not two; the adoption of a separate coastal MoU; and discrete funding and project selection processes.

Figure 1 shows Coastcare's position within the overall structure of NHT 1 and illustrates that compared with Landcare (which received A\$280 million), Coastcare was allocated a very modest budget (A\$27.3 million).

#### **Coastcare's purpose**

Coastcare was designed specifically to support and encourage local communities to participate in activities designed to protect and enhance the coast (Commonwealth of Australia, 1995). The program was open to anyone who had an interest in coastal environments and particularly encouraged those who might have had an impact upon such places (through economic, social, cultural or recreational activity). The underlying premise was that anyone using coastal resources had a responsibility for managing them (Commonwealth of Australia, 1997). Table 2 shows the objectives and outcomes expected from the original program. Emphasis clearly lies upon increased effort, capacity for management and improved partnerships between community and government.

#### **Components of the Coastcare program**

Coastcare is best known for its on-ground activities funded through a small grants scheme. However, this aspect was but one of three



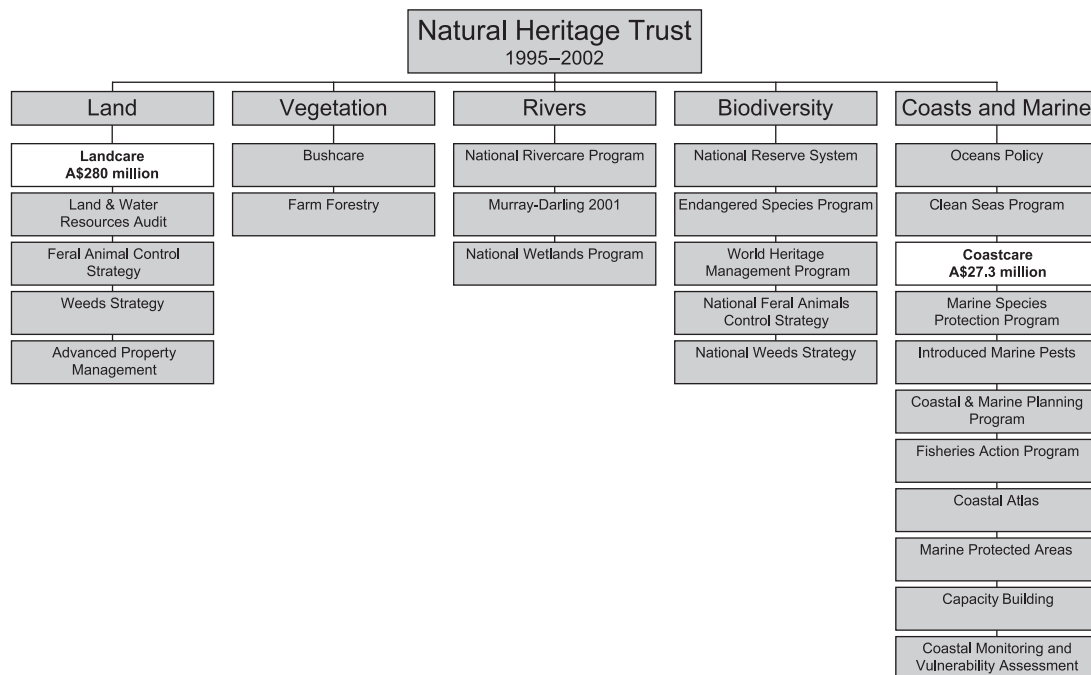


Figure 1 Position of Coastcare within NHT 1 (1997 to 2002) (Source: Clarke, 2003, 26).

Table 2 Coastcare objectives and desired outcomes (Source: Commonwealth of Australia, 1998).

Objectives for Coastcare	Desired outcomes of Coastcare
To engender in local communities, including local industries, a sense of stewardship for coastal and marine areas	To have increased the level and effectiveness of community involvement in coastal management
To provide opportunities and resources for residents, volunteers, business and interest groups to participate in coastal management	To have increased the capacity of those contributing to coastal management through documentation and dissemination of best practice coastal management information To have increased the level of effective coastal management activity
To support community identification of natural and cultural heritage resources	To have raised awareness of coastal issues – the problems and possible solutions
To facilitate interaction between the community and bodies with responsibility for managing coastal areas	To have increased co-operation in and between all spheres of government and the community

fundamental components of the program, each of which buttressed the endeavour to engage the community in coastal management. Working in conjunction with the grants scheme was the network of support personnel, the regional facilitators. Coastcare also had a considerable educational and promotion component. These three elements: the grant scheme; the contribution of the network, and the educational arm of Coastcare are discussed in turn below.

*The small grants scheme*

To initially attract volunteer effort the small grants scheme provided financial support for community groups to do project work along the coast. Funds of up to A\$30 000 were provided to groups which successfully applied for money through a formal application process. The Commonwealth’s requirement for a jointly signed application between local councils (acting as land manager at the coast) and volunteer groups

culminated in the grant scheme being significant in the establishment of partnerships. To make this grant scheme possible, the Commonwealth, under the NCAP between 1995/1996 and 2000/2001, provided A\$23.4 million to Coastcare for matched funds from the individual States. After being repackaged within the NHT, Coastcare was reallocated A\$27.3 million by the Commonwealth for grants between 1996 and 2001.

Each State was allocated a portion of the Commonwealth's base grant. It was up to the States to match the Commonwealth's offer. Table 3 shows the variation in the Commonwealth's financial allocations to the States and the Northern Territory, the maximum grant available, and an example of the actual amount received for one year (1999–2000). Only two States fully matched, and exceeded, the Commonwealth contribution in that financial year. Various reasons account for some States not reaching the maximum potential grant allocation. Reasons include: an insufficient number of suitable applications; a number of applications accepted by State Assessment Panels (SAPs) later rejected at the Commonwealth level each year; groups sometimes failed to sign their management agreements; and some projects never commenced, with funds subsequently reverting to the Commonwealth's central pool of Coastcare funding.

In addition to the funds contributed formally by Commonwealth and State government agencies, a considerable amount of in-kind support was generated by Coastcare through local government and participants working on projects. Local Government contributed financial or 'in-kind' assistance. In-kind support included volunteer time, or use of equipment or machinery to conduct Coastcare projects. For example, in South Australia, the State spent A\$1.5 million over six years (with Coast Protection Board

funds), and received an additional A\$9.5 million. This sum comprised a combination of Commonwealth and in-kind support; the various contributions are illustrated by Figure 2.

Between 1995/1996 and 2001/2002, Coastcare funded 2323 projects around Australia's coastline. Figure 3 shows that during seven years of operation under NHT 1, the number of projects funded per year hovered between 300 and 400, and funding nationally equated to roughly A\$4 million. It is important to note that with the commencement of the Envirofund in 2002/2003 Coastcare funds and projects declined considerably compared to previous years. The demise of coastal applications encouraged Round 4 of Envirofund to make an explicit call for coastal and marine applicants. These national aggregate figures mask the variation in the distribution of funds and project numbers between the individual States and the Northern Territory.

Figure 4 shows that New South Wales attracted the largest portion of Coastcare funds and undertook most projects. In comparison,

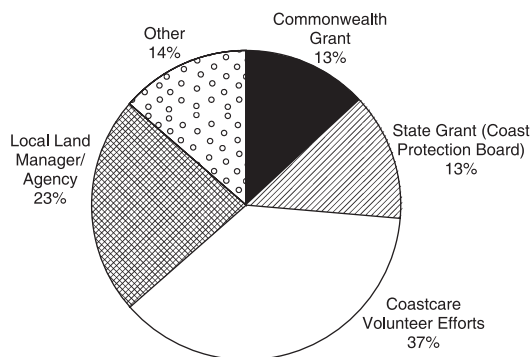


Figure 2 South Australian example of Coastcare funding sources: formally committed and in-kind funds (Source: Clarke, 2003, 79).

Table 3 Comparison of Commonwealth/State funding contributions (\$) (Source: Clarke, 2003, 78).

State/Territory	Commonwealth annual contribution available, 1997/98 to 2000/01	Maximum potential Grant Allocation – Matched Commonwealth and State Contribution	Actual Budget Allocation – Matched Commonwealth and State Contributions 1999/2000
NSW	512 000	1 024 000	965 037
Vic	427 000	854 000	548 080
Qld	439 000	878 000	487 302
WA	549 000	1 098 000	1 210 188
SA	311 000	622 000	537 000
Tas	244 000	488 000	274 479
NT	304 000	608 000	74 365

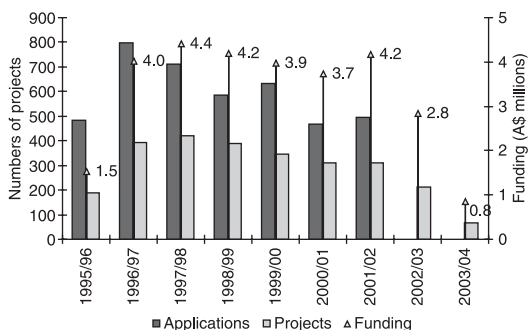


Figure 3 Coastcare: applications, projects and funding by financial years, 1995/1996 to 2000/2001 (NHT 1); 2002/2003 to 2003/2004 (Envirofund) (Source: Clarke, 2003, 74).

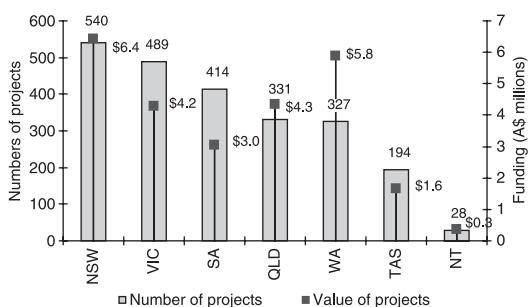


Figure 4 Coastcare funds and numbers of projects by State – total, 1995/1996 to 2000/2001 (Source: Clarke, 2003, 80).

South Australia and Victoria modestly funded large numbers of projects. Tasmania received comparatively less per project. Western Australia, and to a lesser extent Queensland, proved the inverse, as they received relatively generous amounts of funding per project.

While the amount of Coastcare funding and numbers of projects attempted were strikingly varied across the country, the nature of community group activity, the types of initiatives undertaken and the composition of groups were consistent. The Commonwealth's Coasts and Clean Seas Mid-Term Evaluation (Commonwealth of Australia, 1999) categorised Coastcare projects according to whether they were 'on-ground', 'educational', 'planning' or 'monitoring' activities. For uniformity this paper uses the same categories; these are illustrated in Figure 5 which shows the types of activity funded by Coastcare's small grants scheme.

The Commonwealth sustained its commitment to encouraging practical and tangible efforts. Between 1995/1996 and 1999/2000, 71% of all Coastcare projects (1190 projects) comprised on-ground works. The majority of Coastcare

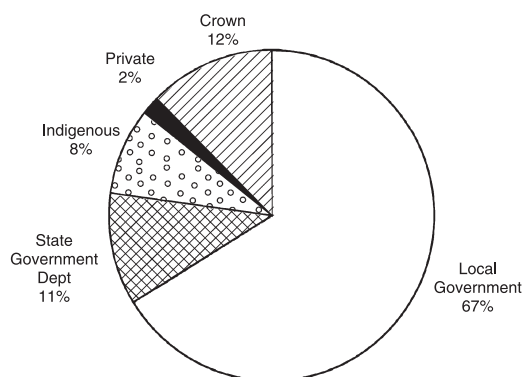


Figure 5 Coastcare principal project types (1995–2002) (Source: Clarke, 2003, 88).

on-ground effort was focused on improving access to beaches and protecting coastal vegetation.

### The Coastcare network

Figure 6 shows the three tiers of staff, Commonwealth, State and local, which worked on the Coastcare program between 1995 and 2002. With the exception of Tasmania, each State provided a co-ordinator position. Commonwealth funding was provided for the bulk of salaries of the Coastcare facilitators – a network of regionally-based staff who sustained the program at the local level. Victoria and New South Wales funded additional positions, boosting coverage in those States.

Each Coastcare facilitator was hosted either by local government or within a State agency. The purpose of the host was to provide the facilitator with administrative support, an office and point of contact. Hosts also provided operating budgets for facilitators and often vehicles and computing facilities. Different States arranged different hosts. Victoria and Queensland negotiated for their facilitators to be hosted by the central agency in their State responsible for coastal management. New South Wales and South Australia negotiated with local councils and regions of councils to host their facilitators. Tasmanian hosting arrangements were shared between regions of councils and the State agency. Western Australia was an exception with one facilitator position hosted by an industry body: the Pilbara Development Commission.

As well as supporting groups through the grants program, many regional Coastcare facilitators were also involved in other activities that promoted best practice coastal management and contributed to strategic planning matters. They



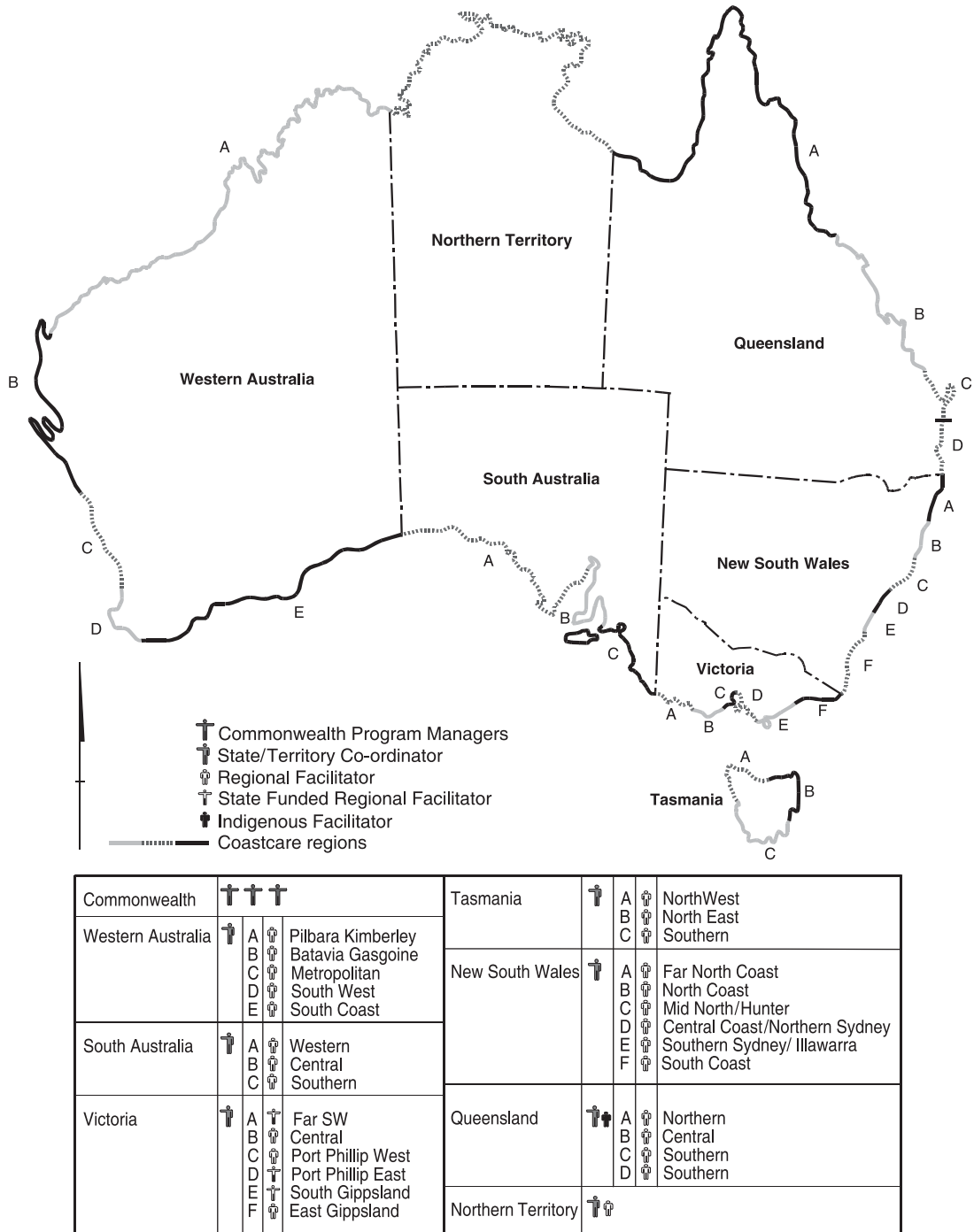


Figure 6 Coastcare: three-tiered staff structure and facilitator regions (Source: Clarke, 2003, 106).

played a critical integrating function by directly exchanging information between the Coastcare community and wider coastal management forums. For example, the majority of Coastcare

facilitators were members or representatives on various management committees including coastal advisory committees, coastal reference groups, steering committees developing coastal

management strategies, catchment management boards, regional environment management committees, State coastal management committees, coastal environment networks and steering committees of numerous marine and coastal programs.

#### *The education arm of Coastcare*

Coastcare funded the development and distribution of promotional and educational materials as an attempt to reach the broader community. Marketing company Landcare Australia Ltd (LAL) was commissioned by the Commonwealth to promote and obtain sponsorship funds to bolster the program. LAL contracted celebrities (tennis player Pat Rafter and business woman Mimi MacPherson, for example) to raise the profile of Coastcare and draw attention to important coastal management issues via television community service announcements. LAL was successful in encouraging some industries to sponsor promotional activities such as Land Rover/Coastcare photographic competitions (Chalkley and Lauder, 2001).

The Commonwealth sponsored promotional campaigns to increase the profile of Coastcare and encourage establishment of new groups. For example, 'Coastcare Week' was run nationally in the first week of summer each year with the purpose of drawing attention to particular coastal management issues. Toward this end each 'Coastcare Week' had a particular theme such as 'Save Our Shorebirds' (2000) and 'Threatened Marine Species' (2002). The initiatives received extensive media exposure.

An additional high profile event identified with Coastcare in some States was the 'Summer Activities' program. Educational coastal activities, largely co-ordinated by the regional facilitators, were designed to engage the general public visiting the coast during the peak holiday season in events such as: interpretation walks; rock pool rambles; and 'best practice' fishing clinics. Unlike Coastcare Week, 'Summer Activities' were largely State-initiated events. Victoria, New South Wales and Western Australia were the only States to fund the initiative.

Facilitators in most States ran short course training programs for community groups and local land managers about best practice coastal management. In Victoria each facilitator received a A\$6000 training budget for Coastcare facilitators to run educational workshops or professional training programs for groups on specific coastal management topics such as identifying

coastal weeds (Michelle Lauder, Victorian State Coastcare Facilitator, personal communication, 2002). Coastcare in Tasmania co-ordinated a State coastal conference in 2001, 'The Cutting Edge – What's the Future for our Coast?' (DPIWE, 2001). The aim of the conference was to bring coastal managers and stakeholders together. The conference was well attended and was envisaged to become an annual event. Individual facilitators in Western Australia and Queensland convened regional conferences.

#### **Discussion**

The anticipated role of the community in managing the coast is not clearly articulated in Coastcare's objectives. The program was to provide opportunities for the broadly defined 'community' to 'participate' in coastal management. The desired outcome from such participation was for an increase in degree and 'effectiveness' of community involvement in coastal management (Commonwealth of Australia, 1998). 'Participation' is an ambiguous concept and measuring the success of participation is a subtle and challenging task (Richardson, 1983; Croft and Beresford, 1996; Ewing, 1996; Day, 1997; Hildebrand, 1997). The key Coastcare objective of 'encouraging stewardship' required more than groups completing one-off, on-ground projects.

Coastcare is lauded by an Australian Government media release for having made a 'huge difference to the Australian coast' (Australian Government, 2004). This success was predicated on the estimated number of kilometres fenced, paths constructed, weeds cleared and seedlings planted based on an internal government, informal evaluation process (Environment Australia, 2001). These measures clearly focus on the program's outputs and bear little relation to the stated objectives and desired outcomes listed in Table 2. A significant failing of the MoUs is the absence of review and performance indicators – originally requested (and signed off on) within the agreements, but never developed. Coastcare has no data upon which to gauge its performance against several of the original objectives. For example, measurement of Coastcare's success should have been based upon changes in people and approaches to management of the coast. Such transformation, however, is not necessarily tangible or easy to demonstrate. It is for this reason that measuring outputs is typical of natural and coastal resource management program evaluations. Measuring

outcomes is more difficult (Olsen *et al.*, 1997; Sorensen, 1997; Chess, 2000; Bellamy *et al.*, 2001).

Outcome evaluations (that measure performance against original objectives) tend to be time consuming and more complex than output assessments (that measure tangible product); outcome evaluations cost more and are more likely to be politically controversial. However, evaluation outcomes are essential to determine the overall success of a program in reaching its anticipated goals, in this case involving communities in decision-making and improving inter-governmental co-operation. Reflection on past activity is critical in providing solutions and alternative approaches for future efforts (Olsen *et al.*, 1997). The outputs measured for Coastcare are of questionable use. It is unclear how many fences will remain standing, how many weeds will return, how many paths will need regular upgrading and how many seedlings survived over time. Coastcare (1995–2002) did not have a long-term contingency plan for the on-going maintenance requirements of project outputs.

There is a lack of data as to how Coastcare invoked a sense of stewardship for coastal environments among stakeholder groups. The dynamics of groups and the reasons they were motivated to participate in Coastcare are unclear. Exploring the experiences of participants involved in the program has the capacity to provide important insights into the nature of volunteering and ideas for how to offer a more tailored program. No data were systematically collected or centrally organised and analysed about the Coastcare population – who were the people participating, what was the demographic structure of Coastcare participants? The program is estimated to have involved 60 000 people and 2000 groups nationally in undertaking projects (Commonwealth of Australia, 2002). These figures are somewhat rubbery given that no formal systematic data were collected nationally about the composition of volunteer groups. The only data available relating to group structure were those provided on application forms. Only the title of the group in receipt of funds in a given year was collected and such information does not specify group membership or function in enough detail for analysis.

The Commonwealth Government also under-utilised systematically collected documentation related to individual group performance. Every group in receipt of Coastcare funds routinely completed a final project report detailing finan-

cial acquittals and achievements in accordance with stated project goals. Final reports were collected from individual Coastcare groups for the duration of the Coastcare program and comprise a valuable and informative data set. These reports, however, were never adequately collated or assessed. They hold rich qualitative information about group process and other aspects of significance to community involvement; information that could inform program review and policy development. In 2001, the national Coastcare office prepared a very brief quantitative summary of the final report data (of approximately 40% of all funded projects) (Environment Australia, 2001). It would be useful to undertake a more thorough study of the textual information within the Coastcare final reports to more clearly understand obstacles faced by groups. With the dissolution of the national Coastcare office, keeping track of past records is likely to be problematic. Formal documentation such as the grant application and final report proformas in the future could be developed to ask questions more pertinent to group process and integration, as a means of gathering a more complete picture of the volunteer role. Such information would provide a much more detailed account of the individuals who have chosen to participate in the program; for example, demographic and temporal details and reasons for participation.

The tri-partite agreements of the Coasts and Clean Seas MoUs at the local level of management considered only local government as land managers of the coast. Consequently, between the different States/Territory, especially those with remote coasts and concentrated patches of development such as the Northern Territory, South Australia and Western Australia, vast stretches of coastline were theoretically not covered by the MoUs. For example, more than 80% of the Northern Territory coast has Indigenous owners; abutting the coast in Western Australia are vast tracts of pastoral lease land, marine conservation reserves and terrestrial national parks, Indigenous reserves, mining interests and industrial estates. Approximately one third of the Victorian coastline is managed through national and State parks and so Coastcare groups made partnerships with Parks managers, not local councils, when submitting applications.

### Conclusion

The original Natural Heritage Trust (NHT 1) framework (1997–2002) has been radically

overhauled and NHT 2, the Trust Extension, is now in place. Coinciding with the overhaul of the NHT was the release of the Commonwealth Government's major policy initiative, the National Action Plan for Water Quality and Salinity (Australian Government, 2000). These policy changes have considerable consequences for coastal management activity around the country. This article questions whether management of the coast will be jeopardised by new regional models of delivery, and what effects the restructure has had on community groups for whom the programs were designed to assist.

Coastcare provides a good example of a program that facilitated an integrated approach to coastal management in Australia. Coastcare was successful in attracting a large number of people to undertake a considerable amount of activity, caring for their respective patches of coastline. It is important to bear in mind that Coastcare under NHT 1 completed only a single cycle of an ICM process, having concluded its seventh year in 2002. Implementing a national coastal program, within pre-existing jurisdictional structures responsible for managing the coast, was a significant achievement. Coastcare (1995–2002) proved to be an extremely adaptable venture, put into practice among three tiers of government which have shared a history of political tension and protracted negotiation over various aspects of coastal management. Coastcare was successfully adopted among seven State and Territory jurisdictions, each with an idiosyncratic set of coastal management legislative and administrative systems. It was successfully implemented at the local level of government where there is an even greater layer of diversity of management practice, guidance and capacity for managing coasts.

A significant shortcoming of Coastcare, however, was the absence of evaluation at various levels. Appropriate performance indicators were not developed by the national Environment Australia office, which also failed to utilise its national data set and final report data to provide thorough analysis of program achievements and features. The stated desired outcomes within the MoU were never addressed, so factors of community development and stewardship have been neglected. There has also been an absence of attention paid to Coastcare's influence in improving structural arrangements and communication between sectors of coastal management agencies.

Policy makers, remote from volunteer groups, have forged new policy in an information

vacuum. In light of the unfolding position of Coastcare under NHT 2, the opportunity to raise a robust argument for a separate coastal initiative, based on the evidence of its performance, has been foregone. For programs to be truly sustainable in the approach to environmental management and community engagement, more direct attention must be paid to appropriate indicator development and long-term funding commitment guaranteed, to support the important efforts of volunteers on public lands.

Engaging volunteer support and subsequently maintaining motivation for involvement in management activities along the coast has taken concerted past effort. Further investigation is warranted to detail the effects of the transition from NHT 1 to NHT 2 upon local group productivity so that policy makers can be made aware of how their decisions translate at the local level.

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#### REFERENCES

- Australian Government, 2000: Intergovernmental Agreement on a National Action Plan for Salinity and Water Quality. Canberra.
- Australian Government, 2002: Framework for the Extension of the Natural Heritage Trust. Canberra.
- Australian Government, 2004: 2004 Coastcare Week – We Must Protect This Great Southern Land! Coastcare: Don't Destroy What You Came to Enjoy! *Landcare Australia News and Media*. Retrieved 23 July 2004: <http://www.landcareaustralia.com.au/MediaDisplay.asp?ArticleID=107>.
- Bellamy, J., Walker, D., McDonald, G. and Syme, G., 2001: A systems approach to the evaluation of natural resource management initiatives. *Journal of Environmental Management* 63, 407–423.
- Caton, B., 2001: Coast Protection Board: Draft Policy Document, Appendices. Caton Environmental Planning, Adelaide.
- Chalkley, S. and Lauder, M., 2001: Coastcare Education and Action, Hand in Hand. Australian Association for Environmental Education Conference, RMIT University, Melbourne, 15–19 January.
- Chess, C., 2000: Evaluating environmental public participation: methodological questions. *Journal of Environmental Planning and Management* 43, 769–784.
- Cicin-Sain, B. and Knecht, R., 1998: *Integrated Coastal and Ocean Management: Concepts and Practices*. Island Press, Washington DC.
- Clarke, B., 2003: Coastcare, Australia's Community-based Coastal Management Program: an Effective Model of Integrated Coastal Management. Unpublished PhD Thesis, The University of Adelaide.
- Commonwealth of Australia, 1995: *Living on the Coast, The Commonwealth Coastal Policy*. Department of Environment, Sport and Territories (DEST). Canberra.

- Commonwealth of Australia, 1997: Coastcare, Vision and Strategic Plan. Environment Australia, Canberra.
- Commonwealth of Australia, 1998: Memorandum of Understanding 'Coasts and Clean Seas': South Australia. Environment Australia, Canberra.
- Commonwealth of Australia, 1999: Improving Performance in Partnership: Mid Term Evaluation of Coasts and Clean Seas 1997–1999 Final Report. Marine Group, Environment Australia, Canberra.
- Commonwealth of Australia, 2002: Natural Heritage Trust Annual Report, 2000–01. Environment Australia, Canberra.
- Croft, S. and Beresford, P., 1996: The politics of participation. In Taylor, D. (ed.) *Critical Social Policy*. SAGE, London, 175–199.
- Day, D., 1997: Citizen participation in the planning process: an essentially contested concept. *Journal of Planning Literature* 11, 421–434.
- DPIWE (Department of Primary Industries, Water and the Environment), 2001: The Cutting Edge – What's the Future for our Coast? Proceedings of the 2nd Tasmanian Coastcare Conference and Festival 2001, Swansea.
- Environment Australia, 2001: Coastcare Project Outcomes Preliminary Evaluation. Coastcare. Environment Australia, Canberra.
- Environment Australia and AFFA (Agriculture, Forestry and Fisheries Australia), 2002: Framework for the Extension of the Natural Heritage Trust. Environment Australia and Agriculture, Forestry and Fisheries Australia, Canberra.
- Ewing, S., 1996: Whose Landcare? Observations on the role of 'community' in the Australian Landcare Program. *Local Environment* 1, 259–276.
- Fry, V. and Jones, P., 2000: The development of meaningful indicators or estuary management partnerships success. Report from UCL to English Nature under the Estuaries Initiative Review.
- Harvey, N., 2004: Integrated coastal management. In Goudie, A. (ed.) *Routledge Encyclopedia of Geomorphology*. Routledge, London, 568.
- Harvey, N. and Caton, B., 2003: *Coastal Management*. Oxford University Press, Melbourne.
- Haward, M., 1995: Institutional design and policy making 'Down Under': developments in Australia and New Zealand coastal management. *Ocean and Coastal Management* 26, 87–117.
- Hildebrand, L., 1997: Introduction to the special issue on community-based coastal management. *Ocean and Coastal Management* 36, 1–9.
- Hildebrand, L. and Sorensen, J., 2001: Draining the swamp and beating away the alligators: baseline 2000. *Inter-Coast*, 20–21 and 31.
- Kay, R. and Lester, C., 1997: Benchmarking the future direction for coastal management in Australia. *Coastal Management* 25, 265–292.
- Kennington, R. and Crawford, D., 1993: On the meaning of integration in coastal zone management. *Ocean and Coastal Management* 21, 109–127.
- Knecht, R. and Archer, J., 1993: Integration in the US coastal zone management program. *Ocean and Coastal Management* 21, 183–199.
- O'Connell, C., 1999: The role of the Federal Government in funding regional planning and management projects. Planning in the hothouse: RAPI (Royal Australian Planning Institute) 27th National Congress, Darwin.
- Olsen, S. and Christie, P., 2000: What are we learning from tropical coastal management experiences. *Coastal Management* 28, 5–18.
- Olsen, S., Lowry, K. and Tobey, J., 1999: *A Manual for Assessing Progress in Coastal Management*. CRC (Coastal Resources Center), University of Rhode Island, USA.
- Olsen, S., Tobey, J. and Kerr, M., 1997: A common framework for learning from ICM experience. *Ocean and Coastal Management* 37, 155–174.
- Painter, M., 1998: *Collaborative Federalism*. Cambridge University Press, Canberra.
- RAC, 1993: Resource Assessment Commission Coastal Zone Inquiry. Final Report. RAC, Canberra.
- Richardson, A., 1983: *Participation*. Routledge and Kegan Paul, London.
- Sorensen, J., 1997: National and international efforts at integrated coastal management. *Coastal Management* 25, 3–41.
- Sorensen, J., 2000: *Building a Global Database of ICM Efforts*. University of Massachusetts Press, Boston.
- Stocker, L. and Frost, F., 1998: Lessons from Landcare for Coastcare: partnership, process and community science. Coast to Coast: Sharing Responsibility, Australia's National Biennial Coastal Conference, Perth.
- Thom, B. and Harvey, N., 2000: Triggers for reform of Australian coastal management. *Australian Geographical Studies* 38, 275–290.
- White, A.T. and Deguit, E., 1999: Philippine community based coastal management – the challenges. *Out of the Shell* 7, 9–11.