

## A cooperative model for tackling weeds across a regional landscape

Paul Devine<sup>1</sup>, Kirby T. Doak<sup>2</sup>, Matt Hyde<sup>3</sup> and Darlene Irvine<sup>2</sup>

<sup>1</sup>Cardwell Shire Council, PO Box 401, Tully, Queensland 4854, Australia

<sup>2</sup>Far North Queensland Regional Organisation of Councils, PO Box 359, Cairns Queensland 4870, Australia

<sup>3</sup>Eacham Shire Council, PO Box 3, Malanda, Queensland 4885, Australia

Email: k.doak@cairns.qld.gov.au

**Summary** Pest animals and weeds pose a significant threat to Far North Queensland (FNQ) regional assets. This paper describes a model for integration of pest management across the Far North Queensland Regional Organisation of Councils (FNQROC) member council region to minimise this threat. The results are demonstrating successful weed management programs across the regional landscape. Outcomes include local government driven regional strategies and plans, capacity building, regionally shared assets, regional education and awareness resources, knowledge sharing, regional operational programs and a heightened level of regional advocacy and sense of improved partnerships.

**Keywords** Collaboration, coordinated approach, FNQROC, regional integration.

### INTRODUCTION

Far North Queensland's climate, spectacular scenery, biological diversity, cultural values and economic productivity define its distinctive character. However, weeds and pest animals are an increasing threat to the region's assets (FNQ NRM Ltd and Rainforest CRC 2004). This threat is not new to FNQ (Werren 2004) and considerable time, effort and financial resources have been invested in coordinating regional pest management across 193,000 km<sup>2</sup>. This landscape (representing 11.2% of Queensland) encompasses the artificial boundaries of 11 local government areas, catchment groups and other land use agencies and industry (Office of Economic and Statistical Research 2006) in FNQ. Coordinating management of this 'whole of landscape' traditionally has fallen solely in the hands of individuals such as Department of Primary Industries and Fisheries (DPI&F) Biosecurity Queensland Land Protection Officers (LPOs) with varying success. Most recently the regional Natural Resource Management (NRM) groups are assisting with this responsibility. However, FNQ has adopted a model to manage pests across the FNQ regional landscape that is fundamentally unique and is now delivering considerable success. This model relies heavily on the placement of a regional Pest Management Officer within the FNQROC (an organisation

that represents the interests of its 11 member councils), to deliver the actions identified in the FNQ Local Government Regional Pest Management Plan, which is being adopted by individual local governments in FNQ as their pest management plan.

**Reasons for the model** This model evolved as a means to deliver on the FNQ Regional Pest Management Plan, which recognised the need for:

- a. Linkages with and support for: national NRM initiatives, regional NRM plans, sustainable land use, statewide land protection strategies, integrated catchment management strategies and local government strategies;
- b. A better use of resources available within the community and governments;
- c. More comprehensive basis for making pest management resource allocations within a regional context;
- d. More efficient and cost effective meeting of Local Government responsibilities under the *Land Protection (Pest and Stock Route Management) Act 2002*;
- e. Improved community appreciation of local government efforts and increased effectiveness in meeting community needs; and
- f. Evidence of local government accountability at both state and national levels and within the wider community.

The model complements, rather than duplicates, the work already undertaken by LPOs and NRM regional positions delivering on regional pest priority actions.

**The model and resources** The model establishes a dedicated regional pest management officer (RPMO) positioned within FNQROC. The position is associated with the Far North Queensland Local Government Pest Advisory Committee and supported by Terrain (formerly FNQ NRM Ltd) to progress the regional pest management actions that focus on coordination, facilitation and capacity building. The RPMO role is to enhance the abilities of the FNQ councils to manage pest animals and weed impacts, by fostering resource

opportunities and cooperation between councils and advocating on agreed regional positions. The position also works closely with Terrain, state government agencies, community organisations, landholders and other land managers to ensure integrated outcomes are met. The RPMO position has been funded for three years (2005–2008) from National Heritage Trust (NHT) funds secured through Terrain. Terrain also contributes Regional Investment Strategy (RIS) resources to assist in delivery of priority actions and trial initiatives. The RPMO position has assisted the region in securing additional on-ground funds through programs that include, but are not limited to, Defeating the Weed Menace Initiative and Blue Print for the Bush – a pest offensive.

### RESULTS

Significant outcomes from actions identified in the FNQROC Regional Pest Management Plan have been achieved (Table 1). Success can be viewed in the participation rate of regional partners in projects. These partners include but are not limited to: FNQROC 11 member councils, Queensland Parks and Wildlife Services, Wet Tropics Management Authority, Department of Main Roads, DPI&F, Terrain, University of Queensland, CSIRO, CRC for Australian Weed Management, Conservation Volunteers Australia, Queensland Rail, catchment groups and industry, such as Sunwater, Examine Technology, Canegrowers and Powerlink.

Results of the model can be demonstrated by the findings of the Pest Advisory Committee secretary who facilitated a review of the FNQ model and associated RPMO (Far North Queensland Local Government Pest Plan Advisory Committee Meeting Minutes 2006). Nine local governments and the DPI&F Invasive Plants and Animals group were represented.

The local governments agreed: The RPMO position provided timely support that previously had not been readily received; had improved on ground operations; assisted liaisons between local governments and enabled a dedicated person to assist moving actions forward where officers would not normally get these activities delivered. The model demonstrated a value for unit input from local governments; enabled local government directives and ideas to be supported; enabled a central source of knowledge; and information and advice became accessible. The LPOs agreed the model provided a central contact point for regional planning and operations.

Results from the FNQ model and subsequent RPMO position can also be measured by regional attendance at Pest Advisory Committee and Pest Advisory Forum quarterly meetings. Between 2005 and 2007 attendance at each regional meeting exceeded 27 people. In addition the provision of information from local government officers and the collective use of resources and information provided by the RPMO demonstrate positive results.

**Table 1.** Regional action and outcomes (2005–2008).

Action	Outcome
Improve monitoring and evaluation	Mapping hardware and software training for Local Government Pest Management and Information Technology Officers. Regional trial mapping programs
Share resources	GIS hardware and software, spray unit with dosage pump, ARGO All Terrain Vehicle, portable clean down facilities, FNQROC and member council resource sharing arrangements
Improve partnerships	Regional working groups including: pond apple, hymenachne and weed spread prevention
Increase community awareness	FNQ Local Council Weedeck 2006, FNQ Local Council Priority Weeds Identification CD 2007, Engaging Schools in Pest Management Education Guide 2006, FNQROC website 2006 and regional media liaison.
Build capacity	Weed prevention Codes of Practice, Training – photographic weed identification, mapping and knowledge sharing
Review priority actions	Regional Pest Management Plan and actions reviewed annually in conjunction with review of Terrain effort alignment activities in 2007.
Coordinate regional projects	Pond apple, hymenachne, weed spread prevention and pest rabbit and feral deer management projects
Regional advocacy	Presentation of regional issues to DPI&F Minister, Terrain, FNQROC and Land Protection Boards

## DISCUSSION

DPI&F Biosecurity Queensland place LPOs within regions to help local government, industry and catchment groups to improve their capacity to deal with plant and animal pests in the region. They are employed to provide technical advice and assist with the development and review of Local Government Area Pest Management Plans (Jones 2005). These positions do provide positive outcomes, such as delivering updates on state and federal policy, legislation, research, extension and education programs (Natural Resources and Mines 2002). However, often these positions have struggled with operational accountability, regional local government directives, enormity of workloads, and ability to coordinate cross regional partnered programs.

Terrain supports a Local Government Engagement Officer who coordinates support for pest animal and weed activities within their organisation. This officer ensures catchment coordinators and other project officers are informed and, where appropriate, involved in regional local government activities. However, this position is unable to prioritise pest management to the extent required for capacity building, or coordinating activities of the region's land managers. Consequently it would traditionally rely upon the LPOs to coordinate cross partner collaboration, particularly within local government.

The FNQROC regional model has filled the gaps in the state and regional NRM positions. However, the positive results of this model can further be attributed to local governments having ownership and mentoring of the regional position. Its placement within FNQROC ensures there is accountability of the RPMO position (reports every three months to the Pest Advisory Committee). This in turn provides confidence for the local governments to contribute significant resources, both financial and in-kind, to address the regional issues. In addition, this model is achieving outcomes where others have struggled because local governments have direct on ground relationships with all land managers, ensuring stronger partnership participation in cross regional programs.

Government agencies with an interest in land management and funding bodies are now receiving a consistent message over a greater area and with regional agreement on how funds and additional support should be prioritised and accessed for pest management. Furthermore, the model ensures that

Local Government Pest Management Officers alleviate the replication of resources and training and promote a greater sharing of knowledge and skills between the regional local governments. The 11 FNQROC member councils had predominantly conducted activities individually, in small groups or not at all.

## CONCLUSION

The FNQ model has enhanced collaboration to improve organisational capacity across the FNQROC member council region, so that the impact of weeds and pest animals on the natural environment, agriculture and general amenity is being reduced. The extent to which outcomes are achieved is reliant on continued partnerships, predominantly between LPOs and Terrain.

## ACKNOWLEDGMENTS

The authors thank the FNQ Local Government Pest Advisory Committee and DPI&F Biosecurity Queensland LPOs for the honest feedback on the FNQ Model and/or Regional Pest Management Officer. We are grateful to all the regional partners that we believe have enabled this model to be successful.

## REFERENCES

- Far North Queensland Local Government Pest Plan Advisory Committee Meeting Minutes (2006). Cardwell Shire Council, Tully, Commencing at 1.35 pm 11th August.
- FNQ NRM Ltd and Rainforest CRC (2004). *Sustaining the Wet Tropics: a regional plan for natural resource management 2004–2008*. (FNQNRM Ltd, Innisfail).
- Jones, G. (2005). 'New Land Protection Staff for the West'. *Central West News*, December 2005. Cited from [www.dpi.qld.gov.au/](http://www.dpi.qld.gov.au/)
- Natural Resources and Mines (2002). *Queensland Weed Strategy 2002–2006*. Compiled by Land Protection, Queensland Department of Natural Resources and Mines, Brisbane.
- Office of Economic and Statistical Research (2006). *Local government area profile for FNQROC region*. Queensland Office of the Government Statistician.
- Werren, G. (2004). *FNQLGPPAC Regional Pest Management Plan Integration Stage 4 – Regional Pest Management Plan: the strategies*. ACTRF/School of Tropical Biology, James Cook University, Cairns.