

Coalition Against Duck Shooting

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Facebook: Coalition Against Duck Shooting

Considerations for the 2022 Victorian recreational duck shooting season

No recreational duck shooting must take place in 2022 and the activity must be abolished.

The Game Management Authority (GMA) and Arthur Rylah Institute (ARI) are both failing Australia's native waterbirds.

Top ornithologist undermined

With climate change and waterbird numbers across eastern Australia down by some 90 per cent since 1983, it is easy to understand the Game Management Authority's urgent need to undermine the important scientific aerial surveys carried out by Professor Richard Kingsford, in order for the GMA to continue to falsely assert that duck shooting is sustainable.

The Kingsford annual surveys are the most valuable and comprehensible study of native waterbird numbers across eastern Australia. But because the dwindling number of Victorian duck shooters are threatened by Kingsford's reports, which highlight the severe downtrend in native waterbird numbers, instead the GMA and ARI have introduced Victorian helicopter surveys so they can control the numbers of birds reported.

The GMA has effectively side-lined the government's own experts on environmental conditions including climate change impacts and Australia's leading scientist on waterbirds and wetlands.

In 2021, the GMA brought forward the flawed, unscientific results of the preliminary "trial" survey of game birds in Victoria to allegedly justify changes to restrictions that it previously deemed necessary.

Now the GMA and ARI can come up with any figures that will suit their purpose to call a duck shooting season, and there is no one to question them.

By making this change, the GMA and ARI will always be able to call a duck shooting season because they will always supposedly detect millions of waterbirds on Victorian waterways.

2021 Victorian Fauna & Flora Guarantee Act

Under the Fauna & Flora Guarantee Act 2021 both the Australasian Shoveler and the Hardhead are listed as vulnerable. Yet both of these species are still categorized as 'game'. Why hasn't the ARI called to have these two 'vulnerable' native species permanently removed from the duck shooters' 'game' list? Or does the ARI always comply with the wishes of the GMA?

DELWP's Victorian Framework for Conserving Threatened Species states:

“The FFG Act places importance on prevention to ensure that more species do not become threatened in the future. The Act emphasises the importance of cooperative approaches to biodiversity conservation and recognises that all government agencies and the community need to participate in the conservation effort.

The Act's objectives aim to conserve all of Victoria's native plants and animals.”

If DELWP seriously want to avoid more species becoming threatened in the future, then it is imperative that recreational duck shooting is banned in Victoria. CADS' rescuers continue to recover illegally shot endangered and vulnerable Freckled, Blue-billed and Musk Ducks (yet the Waterfowl Identification Test was introduced by the Kirner government in 1990 in an attempt to prevent these birds from being illegally shot).

All native duck species numbers are currently in serious decline so why would the GMA continue to allow their destruction by duck shooters? Surely, for compassionate and sustainable reasons there must be some point where the GMA draws the line and puts the welfare and survival of native waterbirds above the shooters' desires.

We don't expect the GMA to look after the interests of native waterbirds, but we would expect the ARI to do that very important job.

GMA fails wounded birds – no empathy

It is believed that following the 2016 duck shooting season, a senior GMA board member, put a stop to the RSPCA taking its high-tech mobile veterinary clinic to the wetlands to treat wounded native waterbirds. We have it on good authority that the RSPCA was told they shouldn't be seen taking wounded birds from rescuers who were in the water illegally before 10am, because it was not a 'good look' for the anti-cruelty organisation to be accepting wounded birds from law breakers. Yet these wounded and suffering sentient native birds include illegally shot species and wounded game birds that have not been retrieved by any shooters or the GMA. (See footage of cruelty compilation: <https://youtu.be/aSQae7heehg> a wounded Pink-eared Duck: <https://youtu.be/92lbdVI9eCE> Lake Lonsdale cruelty 2021: <https://youtu.be/CAa1-7awR4Y>)

Volunteer rescuers and veterinarians have provided the only help for suffering wounded birds for 35 years and will continue to do so until duck shooting is banned. In Victoria today, there are only about 8,000 active duck shooters, compared to around 100,000 duck shooters on the wetlands in 1986 when the campaign to protect Australia's native waterbirds began.

The RSPCA was removed from its primary role as regulator with power to investigate and prosecute duck shooters for alleged aggravated cruelty offences and was replaced by the GMA as the new regulator.

So now, the promoter of duck shooting that services its clients, the duck shooters, has become the sole regulator.

Given this alleged conflict of interest, it is no wonder that the GMA has failed to prosecute a single duck shooter for alleged cruelty offences, even when video evidence is provided.

Protected NSW and Queensland duck species must also be protected when flying to Victoria

When native duck species, which are fully protected in NSW and Queensland, fly interstate, they must remain fully protected. They should not be placed on the game hit-list when they fly to Victoria. This situation should be fully addressed when considering the 2022 duck shooting season, especially by

the Federal Minister for the Environment and we believe that intervention is needed on this matter under the federal EPBC Act.

This year, Professor Kingsford's aerial survey found: *Four major indices for waterbirds (total abundance, breeding index, number of species breeding and wetland area index, Fig. 1) continue to show significant declines since 1983. If 1983 and 1984 peak years are omitted, then 3 of the 4 major indices still show significant decline (OLS regression at $p=0.05$; variables 4th root or log transformed where appropriate; Table 1). Long term trends are more informative for predicting population status than year to year fluctuations.*

Total waterbird abundance in 2021 ($n=95,306$) decreased from 2020 and remains well below average: the 3rd lowest in 39 years. Waterbirds were most abundant in bands 3 and 5 (Figs 2 & 5).

Species functional response groups (feeding guilds) all showed significant long term declines (OLS regression at $p=0.05$; variables 4th root or log transformed where appropriate. Fig. 3; Table 2). Long term changes were also observed in decadal averages of total abundance, wetland area index, breeding index and breeding species' richness (Fig. 4, Table 1).

Wetland area index (150,803 ha) increased slightly from the previous year, but remains well below the long term average (Fig. 1). Some rivers and wetlands in the northern Lake Eyre Basin, including the Diamantina and Georgina rivers, held moderate amounts of water and supported low numbers of waterbirds. Lakes Torquinnie, Mumbleberry and Galilee held some water and moderate numbers of waterbirds; the largest concentrations of waterbirds were located in the Paroo overflow Lakes, the Macquarie Marshes and Lake Moondarra in the north (Fig. 5).

The Macquarie Marshes (Band 5) had moderate levels of water augmented by environmental flows, provided by the NSW Government and Commonwealth managed environmental water and supported considerable numbers and diversity of waterbirds. The Lowbidgee wetlands had moderate inundation (Band 3), and they supported moderate numbers of waterbirds with a breeding colony of straw-necked ibis recorded. Most wetlands in the regulated Menindee Lakes system were full, including outside the survey band to the north - Copi Hollow and Lakes Wetherell, Pamamaroo, Bijiji and Balaka were also full (Band 4). Overall, there were moderate waterbird numbers and breeding activity. The Tallywalka lakes system was dry (Band 4, Fig. 7).

Waterbirds were again widely dispersed (similar to the previous year); only 2 wetlands (Green Lake on the Paroo River (Band 5) and Prosperpine Dam (Band 10)) supported more than 5,000 waterbirds representing 13% of the total abundance. More than 48% of surveyed wetlands supported no waterbirds (includes wetlands that were dry).

Total breeding index (nests + broods) was 2,494 (all species combined), a considerable increase from the previous year (364) but still well below the long term average (Figs. 1 & 6). Breeding species' richness also increased with 9 species recorded breeding, but this is below the long term average and the ninth lowest on record (Fig. 1). Ibis comprised most of the breeding recorded (white ibis: 1071, straw-necked ibis: 1000), 83% of the total.

All game species abundances were well below long term averages, in some cases by an order of magnitude; six out of eight species continue to show significant long term declines (OLS regression at $p=0.05$; variables 4th root or log transformed where appropriate. Table 3). Grey teal ducks declined from the previous year (Fig. 13).

Waterbird indices across river basins had not yet responded to recent rainfall and flooding and generally reflected low levels of available of habitat and drought intensity in the preceding 4 years; 2021 abundance decreased, but wetland area rose in the Murray-Darling Basin compared to the previous year (Fig. 8).

Across Eastern Australia, overall abundance, breeding index and breeding species richness are positively related to available habitat (wetland area index). Conversely, declines in wetland area are likely to result in declines in waterbird abundance, breeding and breeding species richness (Fig. 9).

Selected species distribution and abundances are shown in figures 10-19; freckled ducks and plumed whistling-ducks are included for comparison with game species. Map plots in these figures show 2021 distribution and trend plots show changes in abundance over time (1983- 2021).

Breeding species' richness and breeding abundance increased considerably compared to the previous year; breeding largely occurred in bands 1 and 3 (Fig. 6) and comprised mostly of Australian white ibis and straw-necked ibis.

Conclusion

The 2017 Pegasus Report into the GMA's compliance and enforcement function was scathing of the Authority. The GMA exists to serve the interests of duck shooters, while over the last 35 years, concerned volunteer members of the public do the invaluable job of protecting and caring for Australia's native waterbirds at no cost to the Victorian government. (See ABC 7.30 PG 30 March 2017: <https://youtu.be/Ku-xDXCgW5E> and the ABC 7.30 PG 1 March 2018 Pegasus report: <https://youtu.be/Y7SxDa6MNV8>)

The GMA must factor in the increased threat that climate change poses to Australia's precious native waterbirds, including the impacts of more frequent and severe drought.

With climate change and waterbirds at dangerously low levels, a Victorian duck shooting season must not go ahead in 2022; otherwise the Game Management Authority will be exposed as just another climate change denier.

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Attached: Pegasus Report 2017



2017

Assessment of the GMA's compliance and enforcement function

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Pegasus Economics

September 2017



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Pegasus Economics is a boutique economics and public policy consultancy firm that specialises in strategy and policy advice, economic analysis, trade practices, competition policy, regulatory instruments, accounting, financial management and organisation development.

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Executive Summary

The Game Management Authority (GMA) engaged Pegasus Economics (Pegasus) in July 2017 to provide an independent assessment for the GMA Board. The assessment relates to the effectiveness of the Authority's compliance and enforcement regime, the appropriateness of its operating model and its capacity and capability to deliver its compliance and enforcement obligations. The review does not consider the GMA's other statutory functions, such as game monitoring, research and advice.

The GMA has not been able to effectively fulfil its compliance and enforcement responsibilities. While many hunters are responsible and respect the game hunting laws, non-compliance with the game hunting laws is commonplace and widespread, and the GMA is widely perceived by its external stakeholders and its own staff as unable either to ensure compliance with the game hunting laws, or to effectively sanction offenders when those laws are breached.

The GMA's inability to ensure compliance with the hunting laws has seriously undermined its credibility as an independent and effective regulator and raises questions about the integrity and sustainability of the regulatory regime.

The GMA lacks scale and critical mass, but its resourcing and operating models are not the primary reasons for its lack of effectiveness. The regulatory and institutional frameworks in which the GMA operates are extremely fragmented, and the game hunting laws are widely perceived by internal and external stakeholders to be extremely difficult, if not impossible, to effectively enforce in the field.

As a small statutory body, the GMA is vulnerable to capture by the interests that it is seeking to regulate. There are also tensions and potential conflicts between the GMA's regulatory and other roles that constrains its effectiveness as an enforcement agency. The GMA is not currently perceived by all of its stakeholders as independent or impartial in its administration of the game hunting laws.

The GMA's role as a regulator needs to be clarified and the independence of its licensing, compliance and enforcement functions protected.

The separation of the GMA's regulatory functions from other advisory and promotional activities, and their location in a larger, related regulator, would protect the independence of the GMA's licensing, compliance and enforcement functions and provide access to additional regulatory capabilities and support. In the meantime, the GMA should put in place internal arrangements to further protect the independence of its regulatory functions.

As a publicly funded and accountable regulator, the GMA owes a duty to the community as a whole to ensure the game laws are observed and that minimum standards of responsible and ethical behaviour are maintained. This requires an ability to engage with stakeholders across a wide spectrum of values and interests and to adapt and adjust to changing community attitudes and expectations.

The GMA could more effectively manage the environment in which it operates, including by seeking to have the current licensing arrangements strengthened, working with land managers

to develop more effective methods of controlling access to intensively hunted and sensitive areas, rethinking its approach to regulation and developing more effective strategies for engagement with its stakeholders.

The GMA needs to develop a much more flexible and adaptive form of regulation that is informed by a clearer understanding of the knowledge and compliance postures of the hunters it is seeking to regulate. It also needs much more support and assistance from the hunting organisations in building a more responsible and compliant hunting culture.

Reform will require concerted action by government and non-government stakeholders. While the GMA can and should be a key player in these efforts, the scope of the changes required are beyond the direct authority and capability of the GMA to deliver without the assistance, cooperation and leadership of departments and agencies.

The GMA's current position exposes the Minister and the Board to considerable policy and regulatory risk and if not addressed will contribute to continued non-compliance with the game hunting laws and the erosion of the hunting community's social licence.

Findings

Effectiveness

- The GMA has not been able to effectively deliver its compliance and enforcement responsibilities.
- Non-compliant behaviours and unsanctioned breaches of the game hunting laws are widespread and commonplace.
- The GMA is regarded as perceived by its external stakeholders and its own staff as unable to positively influence hunter behaviour or effectively sanction illegal or irresponsible behaviours.
- The current licensing regime is ineffective in ensuring a minimum acceptable level of awareness and competence amongst hunters.
- The GMA has made significant investments in the production of high-quality educational materials. However, these products are not well-targeted and their effectiveness in securing more compliant hunter behaviour is uncertain.
- While feedback from hunters on their interactions with GMA staff are generally positive, and hunting organisations are supportive of the regulator, the GMA has not succeeded in gaining sufficient cooperation or support from its stakeholders in achieving the culture of compliance, self-regulation and respect that is critical to the future of hunting and the maintenance of its social licence.
- The GMA is not perceived as independent or impartial by animal welfare and community groups.
- The GMA's reporting and complaint handling procedures do not meet the standards expected of a contemporary regulator.

Regulatory governance and approach to regulation

- There are tensions between the roles that have been allocated to the GMA, and the GMA is sometimes perceived as playing, and occasionally slides into, advocacy and promotional roles that conflict with its responsibilities as a regulator.
- The GMA maintains most of the architecture expected of a contemporary regulator, but there are gaps and weaknesses in its internal governance arrangements and approach to regulation.
- The GMA has a cascading set of policies, operational plans and procedures that provide a sense of purpose and direction, but lacks clearly articulated strategies for improving regulatory compliance.
- Contemporary best practice regulation involves a dynamic approach across regulatory strategies and regulatory tools combined with a high level of organisational agility.
- The GMA's current approach to regulation is poorly targeted.
- While the GMA reviews some events, it does not routinely review and evaluate the effectiveness of its compliance and enforcement efforts.

Operating model

- An independent statutory authority is a high cost model for a small regulator, and the GMA lacks the infrastructure to effectively support the associated governance and reporting obligations.
- As a small statutory regulator with relatively narrow sectoral responsibilities, the GMA is vulnerable to capture by the interests it is seeking to regulate.
- The current operating model constrains the GMA's ability to operate independently, but also provides the GMA with capacity and capabilities to which it would not otherwise have access.
- The accountability and governance frameworks that underpin the operating model are inadequate and out-of-date.
- Coordination across the relevant agencies would be improved by the development of a definitive statement of the accountability framework within which the GMA and its partner agencies are expected to work and detailed and up-to-date agreements or Memoranda of Understanding between the individual agencies in relation to the identification of priorities, the allocation of responsibilities, resource sharing and dispute resolution.
- The requirement to work with Victoria Police restricts the GMA's ability to operate independently, but it is not clear that it limits the GMA's effectiveness.

Capacity and capability

- The GMA lacks the scale and critical mass to effectively enforce the existing game hunting laws within the existing policy and compliance framework.
- There is scope for more flexible funding of the GMA's compliance and enforcement functions.
- However, additional funding alone would not necessarily provide better compliance and enforcement outcomes, or prevent a recurrence of the events that have been experience during recent duck seasons and elsewhere.
- While the GMA possesses many of the operational compliance and enforcement capabilities required to deliver on its responsibilities, it lacks the higher-level strategic compliance experience and training required to effectively develop and implement an effective compliance strategy or ensure that the available regulatory tools and capabilities are developed and deployed coherently to solve problems, prevent harm and influence behaviour.
- The GMA requires access to skilled and qualified communication and marketing experts who can engage effectively with a dispersed and diverse stakeholder base across a wide range of channels and communications media.
- There is scope for the GMA to more effectively manage the demands on its resourcing, including by seeking tighter land access arrangements and more selective regulation of some game species, rethinking the approach to regulation and re-allocating resources away from relatively expensive enforcement activities toward more cost-effective activities such as information and education.

Recommendations

Effectiveness

- The GMA should work with land management authorities to develop more flexible arrangements for land access based on permit and ballot systems that are widely deployed in other jurisdictions. Regulatory reform will need to be led by policy agencies.
- Game hunting licences should include more stringent minimum mandatory requirements, including testing for knowledge of the game hunting laws and the obligations and responsibilities of safe and sustainable hunting.
- There should also be a requirement that prospective duck hunters demonstrate their attendance at a Shotgunning Education Program prior to the issue of a duck hunting licence and that similar courses be developed for the holders of other categories of hunting licences.
- Information and educational materials should be made available in languages that are relevant to the hunting community.
- The GMA needs to significantly expand its monitoring and information gathering activities, including by enlisting the support of hunting organisations, animal welfare organisations and land holders in undertaking active and passive monitoring of game numbers and the effectiveness of its compliance and enforcement activities.
- The GMA should review the priority it attaches in its compliance and enforcement activities to protestor management.
- The GMA should seek to engage more constructively with stakeholders across a broader range of interests and values.
- The GMA's stakeholder engagement strategies and programs should be more clearly directed to achieving the active cooperation of its stakeholders in supporting a respectful, responsible and compliant hunting culture.
- The GMA should improve the transparency of its reporting and complaint handling mechanisms, and ensure that arrangements are in place for all complaints to be logged, reviewed by a senior officer and responded to.

Regulatory governance and approach to regulation

- The GMA's role as a regulator should be clarified and the independence of its licensing, compliance and enforcement functions protected.
- The GMA's regulatory functions should be separated from the GMA's advisory and development functions and located in a larger, more broadly-based regulator.
- If this is not possible, the GMA should put in place appropriate governance arrangements, including operational separation, establishment of an Enforcement Committee and appropriate protocols, to provide additional transparency and protect the independence of its licensing, compliance and enforcement functions.
- The GMA should develop a more dynamic approach to compliance and enforcement that is informed by improved information on hunters' understanding of their obligations and better targeted to secure improved compliance outcomes.

- The GMA should develop an annual compliance strategy that sets out specific compliance and enforcement goals, priorities, strategies and performance measures that are to be applied in the upcoming period, and the basis on which those priorities and strategies have been selected and are to be evaluated against.
- The GMA's compliance strategies should be informed by improved measures of the knowledge base and compliance posture of the hunters, game farms and other agents that it is seeking to regulate.
- The GMA's approach to regulation should seek to incorporate a stronger emphasis on compliance based strategies that positively influence hunter behaviours and opportunities for self-regulation and co-regulation where stakeholders can demonstrate their willingness and ability to comply.
- The GMA should regularly review and evaluate the effectiveness of its compliance and enforcement efforts against its intended compliance outcomes, and adjust its strategies as required to achieve better compliance outcomes.
- The compliance strategy should be supported by more transparent processes for tasking and coordination of compliance and enforcement actions and improved reporting on compliance and enforcement outcomes.

Operating model

- The existing operating model should be supported by a clear accountability and governance framework that provides a definitive statement of the accountability framework within which the GMA and its partner agencies are expected to work and detailed agreements between the individual agencies in relation to the identification of priorities, the allocation of responsibilities, resource sharing and dispute resolution.
- The GMA should seek clarification of the Government's intent regarding the requirement that enforcement operations be undertaken with Victoria Police and, if necessary, refine and clarify the GMA's Standard Operating Procedure in which this policy is reflected.
- The GMA should encourage the participation of volunteer resources from hunting organisations, animal welfare groups and community organisations to assist in the collection of information on the effectiveness of its compliance and enforcement efforts and support safe, responsible and sustainable behaviours in the field.

Capacity and capability

- The funding model under which the GMA operates should be reviewed. This should include consideration of better ways of managing the demand for the GMA's services, its approach to regulation, and the balance of resources it allocates to protestor management and enforcement activities relative to persuasive strategies to encourage higher levels of compliance.
- The GMA needs to develop the capacity to develop high-level compliance strategies and to apply appropriate regulatory tools and capabilities to solve problems, prevent harm and influence behaviour.
- The GMA should consider completion of the Australian Government Investigations Standards (AGIS) or demonstration of equivalent qualifications training as a mandatory requirement for staff involved in investigations.

- If the GMA is to continue to perform surveillance operations, it should ensure that staff have received appropriate training in safe and effective surveillance techniques.
- The GMA should engage skilled and qualified communication and marketing experts who can engage effectively with a dispersed and diverse stakeholder base across a wide range of channels and communications media.
- The GMA should seek to more effectively manage the demands on its resourcing, including by seeking tighter land access arrangements, examining the possibility of more selectively regulating some game species, exploring opportunities for co-regulation and by re-allocating resources away from relatively expensive enforcement activities toward more cost-effective activities such as information and education.

1 Introduction

This section outlines the purpose and background to the project.

1.1 Introduction

This document provides an independent assessment of the effectiveness of the Game Management Authority's (GMA's) compliance and enforcement functions, regulatory capacity and operating model.

1.2 Background

In response to the events on the opening weekend of the 2017 duck hunting season, the Board of the GMA indicated to the Minister for Agriculture, the Hon. Jaala Pulford, that it would commission an urgent, independent review of GMA's operating model and resourcing levels (Hine, 2017a).

The GMA engaged Pegasus Economics (Pegasus) in July 2017 on a confidential basis to provide an independent assessment for the GMA Board. The assessment relates to the effectiveness of the Authority's compliance and enforcement regime, the appropriateness of its operating model and its capacity and capability to deliver its compliance and enforcement obligations.

The project was undertaken through August and September 2017.

2 Scope and methodology

This section sets out the scope of the project, the lines of enquiry and methodology and the parties consulted.

2.1 Scope

The focus of this project is on the GMA's legislative and operational approach to compliance and enforcement, its operational regulatory processes, practices, capacity and capability to meet the Authorities legislative obligations.

The GMA sought particular advice on:

- the relevance and appropriateness of GMA's compliance and enforcement policy;
- the effectiveness of GMA's compliance and enforcement regime and activities; and
- a comparative analysis of resource requirements against other Victorian regulatory bodies and other jurisdictions' game management regulators.

This project does not consider the GMA's other research, advisory and land management responsibilities except to the extent that they impinge on its compliance and enforcement functions.

The GMA indicated that the project should assume the current policy for the regulation of game hunting as set out in the *Game Management Authority Act 2014* (Vic) (GMA Act) and other relevant legislation remains unchanged. However, the GMA asked for advice and recommendations on the broader regulatory framework where this appears to constrain the quality of GMA's operational regulation.

2.2 Lines of enquiry

The project considered a number of lines of enquiry in relation to the GMA's capacity and capability.

The lines of enquiry include:

- Whether the GMA's operating model is fit for purpose;
- How the GMA's operating model and resourcing compares with other similar regulators;
- The effectiveness of the GMA's compliance planning processes in setting direction, prioritising actions and allocating resources;

- Whether the GMA appropriately deploys an appropriate range of regulatory tools and how it assesses alternative courses of action;
- Whether the GMA's operational delivery of enforcement actions could be improved;
- The quality and reliability of existing reporting and monitoring arrangements;
- The quality of the GMA's relationship with co-regulators and stakeholders, and how effectively it works with these bodies to achieve its regulatory objectives;
- Whether the GMA has access to the mix of skills, experience and resourcing to meet its legislative and other obligations.

Analysis and findings related to these questions were informed by a range of sources including desktop research and formal and informal interviews, discussions and focus groups.

2.3 Methodology

This project was conducted in close collaboration with the GMA's senior executive team, external stakeholders and staff and was undertaken in four stages that included consultation, testing and refinement at each stage.

The four stages of the project were as follows:

- stage 1 – initiation, definition and scoping, including a review of publicly available documentation and initial discussions with the Deputy Chair in the Chair's absence) and the CEO;
- stage 2 – information collection and analysis, including reviews of internal documentation, relevant academic and grey literature internal consultations and interviews with a range of external stakeholders;
- stage 3 – synthesis and refinement, in which we formed preliminary views on the effectiveness of the GMA's compliance and enforcement regime and the scope to improve the GMA's effectiveness by changes to its operating model or strengthening its capacity and capabilities, and tested those views in informal discussions with the Deputy Chair, CEO and selected staff; and
- stage 4 – reporting and presentation of findings, in which draft and final reports were provided to the GMA.

A detailed bibliography of documents cited in the review is included at the end of this report.

2.4 Consultation

Internal and external stakeholders were consulted in the course of this project.

Executives and staff of the GMA provided information on the current operating model and the GMA's capacity and capability. Several interviews were conducted with the Deputy Chairperson, Director of Game and the Managers of Game Compliance and Policy and Game Services, and their staff. Two workshops were conducted with Senior Game Officers and Game Managers.

External stakeholders offered invaluable insights into the GMA's effectiveness as a regulator and engagement with its external environment. Organisations consulted included Field and Game Australia, Sporting Shooters Association (Vic), Australian Deer Association (Victoria), Animals Australia, the Coalition Against Duck Shooting and the RSPCA. In addition, Regional Victorians Opposed to Duck Shooting contacted the project team and provided useful insights on their experience of the regulator.

Co-regulators and other relevant agencies provided useful information on the overarching regulatory and institutional frameworks within which the GMA operates and the mechanisms and protocols that are in place to support the GMA's compliance and enforcement activities. Interviews were conducted with senior staff of the Victorian Fisheries Authority (VFA), Victoria Police, the Department of Environment, Land, Water and Planning (DELWP) and the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). Parks Victoria did not respond to repeated invitations to be participate.

Feedback on preliminary findings and recommendations were provided on several occasions from late August to the Deputy Chairperson and CEO. A presentation was provided to the Chairperson, Deputy Chairperson and CEO on 13 September.

A draft report was provided for comment on 18 September 2017. A presentation on the findings and recommendations was provided to the Board on 21 September 2017.

3 Game Management Authority

This section describes the legislative framework under which the GMA operates, its roles and responsibilities and its operating model.

3.1 Legislative framework

Hunting in Victoria is governed by a number of different acts and regulations.

The *Wildlife Act 1975* (Vic) and the *Wildlife Regulations 2013* (Vic) provide for the sustainable use, management and conservation of wildlife. The *Wildlife Act 1975* (Vic) provides the head of power to create hunting regulations and contains various offences, including for endangering public safety. The *Wildlife (Game) Regulations 2012* (Vic) regulate the management of game species and game hunting, including by prescribing the hunting season, bag limits and hunting methods.

The *Wildlife Act 1975* (Vic) and its associated legislative instruments (including closure notices) are jointly administered by the Minister for Agriculture and the Minister for Energy, Environment and Climate Change.

The GMA is established under the *Game Management Act 2014* (GMA Act) and its objectives and responsibilities are set out in that Act. The GMA Act provides for the GMA to undertake the regulation of game hunting in Victoria and deliver services and programs to improve and promote sustainable and responsible game hunting in Victoria, including issuing game licences, managing open and closed seasons for game species and enforcing game hunting laws.

The *Prevention of Cruelty to Animals Act 1986* (Vic) establishes a Code of Practice for the Welfare of Animals in Hunting. The Code aims to prevent cruelty and encourage the considerate treatment of animals that are hunted or used for hunting, and sets down minimum standards as well as recommending animal welfare best practice. The GMA also has obligations under the GMA Act to develop operational plans and procedures to address the humane treatment of animals that are hunted or used in hunting.

Public land management in Victoria is regulated through the *National Parks Act 1975* (Vic), the *Crown Land (Reserves) Act 1978* (Vic), the *Conservation, Forests and Lands Act 1987* (Vic) and the *Land Act 1958* (Vic). The *Wildlife (State Game Reserve) Regulations 2014* (Vic) provide for the management of Victoria's state game reserves.

The use of firearms and weapons by hunters are governed by the *Firearms Act 1996* (Vic), the *Firearms Regulations 2008* (Vic), the *Control of Weapons Act 1990* (Vic) and the *Control of Weapons Regulations 2011* (Vic) (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 72).

3.2 Game Management Authority

The GMA was established on 1 July 2014 as an independent statutory authority responsible for the management and regulation of game hunting in Victoria (Game Management Authority, 2015, p. 5).

Under the GMA Act, the GMA has a number of specific regulatory responsibilities, including:

- issuing Game Licences;
- managing open and closed seasons for game species;
- enforcing game hunting laws; and
- educating and informing hunters on how to hunt legally in Victoria.

The GMA Act also confers on the GMA a role in managing natural resources across Victoria, including:

- the sustainable harvest of game species;
- the humane treatment of animals that are hunted and used in game hunting;
- minimising any negative impacts on non-game wildlife, including protected and threatened species; and
- the conservation of wildlife habitats.

In addition, the GMA Act requires the GMA to perform a range of other research, advisory and land management functions, including:

- working with public land managers to improve the management of State Game Reserves and other public land where hunting is permitted;
- monitoring, conducting research and analysing the environmental, social and economic impacts of game hunting and management;
- working closely with partner agencies, such as the DELWP, Victoria Police and Parks Victoria; and
- making recommendations to relevant Ministers about game hunting and game management, the control of pest animals, declaring public land open and closed to game hunting, open and closed seasons and bag limits (Game Management Authority, 2017f, p. 3).

Under the current machinery of government arrangements, the GMA reports to the Minister for Agriculture. Section 8 of the GMA Act provides that the GMA must exercise its powers and perform its functions subject to any written directions given by the Minister.

3.3 Funding

The GMA receives an annual grant of \$4.8 million from the DEDJTR.

The GMA also earns a small amount of revenue from interest and earnings from the sale of goods and services.

In 2015-16, the GMA (2016, p. 44) reported total revenue of \$5.0 million.

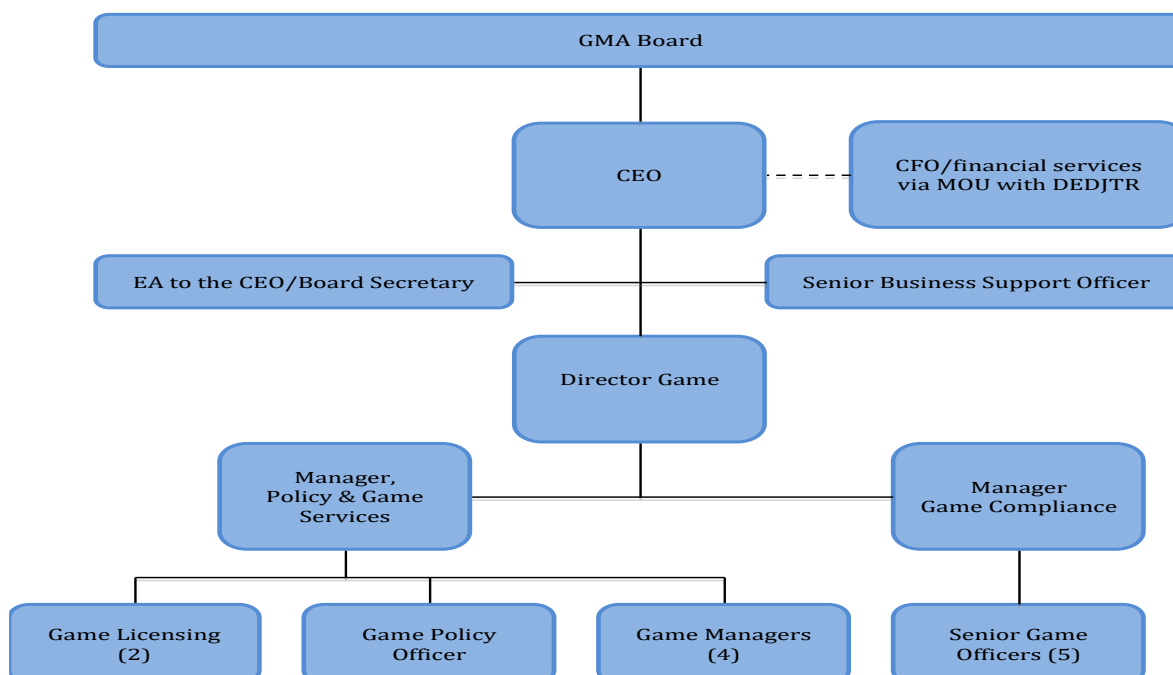
In 2016-17, the Victorian Government also committed \$5.3 million over four years to support safe, responsible and legal hunting through the *Sustainable Hunting Action Plan* (Department of Treasury and Finance, 2016, pp. 37,42,48). It is understood the GMA will have access to around \$1.4 million over four years from this amount.

The funding available to the GMA has been relatively fixed since its establishment in 2014.

3.4 Organisation

The GMA currently consists of a seven member board and 18 staff, though a slightly smaller number of employees were actually available for duty during the period of this review. The GMA Act provides for a Board of up to nine members. The organisational structure is arranged as shown in Figure 1 below.

Figure 1: GMA organisation structure, September 2017



As a public body, the GMA has a range of financial and reporting obligations that include the requirement to produce an annual report to Parliament, the financial, accounting and reporting requirements of the Standing Directions of the Minister for Finance, and the responsibilities and obligations of an employing authority.

Support for these and other corporate functions is generally provided by the DEDJTR under a Memorandum of Understanding.

The GMA's compliance and enforcement responsibilities are primarily delivered by the Game Compliance Unit. In total, the GMA generally employs five full-time Senior Game Officers and one Compliance Manager. (One Senior Game Officer resigned during the course of this project.) Four Game Managers are authorised to assist with some enforcement duties on an ad hoc basis, however, their substantive positions focus on monitoring, research and education.

The GMA's Senior Game Officers are located individually at five separate locations throughout the state (Bairnsdale, Traralgon, Alexandra, Swan Hill and Ballarat).

3.5 Operating model

The GMA employs a partnership model to deliver its statutory responsibilities in cooperation with other regulators

The regulation of game hunting touches on issues, such as wildlife management, animal welfare, land and water management, firearms regulation and the control of feral species, that are the primary responsibility of a range of other government and non-government agencies, including DELWP, Parks Victoria, DEDJTR, RSPCA and Victoria Police.

These responsibilities mesh and overlap in complex ways that require the GMA to work closely with other regulators and policy agencies to deliver on its statutory obligations. Wildlife counts, for example, are managed in association with the DELWP and Parks Victoria, who also have specific responsibilities for land and wildlife management.

Some GMA services are provided through partner agencies. Game Licences and information are available from DELWP and DEDJTR offices, as well as through the GMA's website.

The GMA also relies on its partner regulators for assistance in delivering a range of its statutory responsibilities, including participation in monitoring and analysis of wildfowl numbers, assistance with monitoring and surveillance tasks throughout the year and access to an extended workforce to manage surge events and provide other support in the field. During peak periods of hunting activity, such as the opening weekend of the duck season, the GMA relies on assistance from partner agency enforcement staff to deliver an adequately resourced compliance response. At these times, the GMA's Senior Game Officers are required to assume a coordination role to task, deploy and oversee the operation of surge staff from partner agencies.

In addition, the GMA is required to work in close collaboration with Victoria Police when dealing with armed or potentially armed hunters. The GMA (2017 April, p. 6) has indicated that “[n]atural resource management (NRM) agency’s [occupational health and safety] policies require Police to be present where firearms are involved”. It is understood this policy has its origins in the late 1990s and early-2000s when then Fisheries and Wildlife Officers were disarmed (Emergency Management Consultancy Services, 2015, p. 5). The GMA was unable to provide a copy of the original NRM agency occupational health and safety (OHS) policies that are understood to form the basis of this requirement. However, it has sought to express what it understands to be the intent of that model in a Standard Operating Procedure (Game Management Authority, 2014).

4 Policy and regulatory environment

This section describes the policy and regulatory environment in which the GMA operates and reflects on some of the challenges and constraints that impact on its effectiveness.

4.1 Government policies and priorities

While the GMA has certain advisory and regulatory powers, the Government has retained responsibility for the development of the state-wide strategic policy for game management (Parliament of Victoria, 2013, p. 4672).

The Victorian Government (2016) released a *Sustainable Hunting Action Plan* (the *Plan*) in December 2016. The *Plan* sets out a vision that “Victorians will gain from growing the economic, environmental and social benefits of responsible, sustainable and safe hunting, now and into the future” (Government of Victoria, 2016, p. 4). In a foreword to the *Plan*, the Minister for Agriculture, the Hon. Jaala Pulford, indicates that over the life of the *Plan*, the Government will work with its agencies and the community to:

- promote responsible hunting;
- maximise the economic, environmental and social benefits of hunting to Victoria;
- improve hunting opportunities; and
- ensure that game hunting remains sustainable (Government of Victoria, 2016, p. 2).

The *Plan* sets out a number of objectives and strategies to promote responsible hunting, grow the economic and social benefits of hunting, improve hunting opportunities and ensure sustainable hunting. Many of these objectives involve industry development and promotion. The *Plan* indicates that it will be implemented through a partnership approach involving a number of departments and agencies led by the Game Management Authority” (Government of Victoria, 2016, p. 12).

The Sustainable Hunting Action Plan Implementation Plan (Implementation Plan) outlines a slightly different role of the GMA. In the Implementation Plan, DEDJTR rather than the GMA appears to have been allocated the lead coordinating and reporting role (Government of Victoria, 2017, p. 4). The GMA is allocated a primary responsibility for a number of specific actions in the Plan and a secondary responsibility for others.

The Government’s specific expectations of the GMA are set out in a Statement of Expectations. The most recent Statement of Expectations was issued by the Minister in December 2016 (Pulford J. , 2016). The Statement of Expectations provides a guidance on a number of general

performance improvements that the GMA is expected to pursue and indicates that the GMA will “take a lead role” and work collaboratively with other departments and agencies to implement the *Sustainable Hunting Action Plan*. While the Statement of Expectations provides a summary of GMA objectives and functions as set out in the GMA Act, it does not provide guidance on which elements of the *Plan* the GMA would be expected to take a lead on or how it would be determined when GMA leadership is appropriate. This point is expanded on in the next section of this report.

The Statement of Expectations slightly qualifies the GMA’s role in the *Sustainable Hunting Action Plan*, indicating the GMA will “take a lead role *where appropriate*” (emphasis added) and work collaboratively with other departments and agencies to implement the *Plan* (Pulford J. , 2016).

The Minister’s Statement of Expectations also expresses an expectation that the GMA will pursue a number of other initiatives, which include:

- developing an online game licensing system;
- implementing the Waterfowl Conservation Harvest Model;
- developing a game species research strategy; and
- improving announcement to stakeholders when seasonal variations are required (Pulford J. , 2016).

In addition, the Statement of Expectations sets out a number of specific performance improvements and targets that the GMA is expected to achieve, including:

- a reduction in the small business regulatory burden;
- implementation of risk-based compliance strategies, drawing on DEDJTR’s Regulatory Model Project as a guide;
- strengthened stakeholder consultation and engagement;
- clear and consistent regulatory activities and compliance advice;
- agency collaboration; and
- timeliness, including the enhancement of online services and streamlined collection and processing of information (Pulford J. , 2016).

The Statement of Expectations invites advice from the GMA on how it intends to achieve these initiatives (Pulford J. , 2016). The GMA Chairperson responded to the Statement of Expectations on 9 June 2017 with advice on the targets and activities set out in the Minister’s letter and timeframes for these to be achieved (Hine, 2017b). The dates for the delivery of a number of these objectives have passed.

4.2 Role clarity

The role of the GMA is set out in legislation, and further articulated through various cascading policy and planning documents.

Introducing the Bill to establish the GMA in 2013, the then Minister indicated the “GMA will be – first and foremost – a regulator that would perform all the compliance, investigative and disciplinary functions related to game hunting in Victoria” (Parliament of Victoria, 2013, p. 4671). The Minister also indicated that, consistent with sound regulatory practice, “a good regulator cannot both regulate and promote the industry” (Parliament of Victoria, 2013, p. 4671).

However, the Minister at the same time indicated that the GMA would be expected to promote sustainability and responsibility in game hunting and outlined additional non-regulatory roles that the GMA would be required to perform, including research and advisory functions on “the environmental, social, cultural and economic impacts of game hunting” (Parliament of Victoria, 2013, p. 4672).

There is a fine distinction between the promotion of sustainable hunting and the promotion of hunting. The then Minister acknowledged the potential for conflicts to emerge when he indicated that the GMA had no “explicit role” in promoting the industry in a statement that left open the space for implicit and tacit understandings of the GMA’s role in promoting opportunities for recreational hunting (Parliament of Victoria, 2013, pp. 4671-4672). While the then Minister indicated in the Second Reading Speech that he had ensured the roles of the GMA would not conflict with one another, he did not outline how that would be achieved or refer to specific provisions in the Act that would protect the GMA from role confusion.

Subsequent events have added to the potential for confusion about the GMA’s role. At the establishment of the GMA, the Department appears to have taken the position the GMA would take the lead policy role on all game management matters (personal communication with Department staff). Since that time, the GMA has been allocated roles in the *Sustainable Hunting Action Plan* that are closer to those of an industry development agency rather than a regulator. As set out above, the *Sustainable Hunting Action Plan*, the Implementation Plan and the Minister’s Statement of Expectations provide different formulations of the GMA’s precise role in implementation of these plans, and leaves the GMA with primary carriage for the audit of State Game Reserves to inform management actions for land over which it has no powers and secondary carriage for a range of industry development and promotional activities (Government of Victoria, 2017, pp. 14, 10, 9).

The GMA Board and management have sought to articulate the GMA’s role in a range of internal and external documents. The GMA’s objectives and responsibilities are articulated for stakeholders and staff in a three-year corporate plan and an annual business plan (Hine, 2017b, p. 3). These documents emphasise the GMA’s role as a regulator. The GMA website also stresses the GMA’s regulatory role, indicating that “[t]he Game Management Authority is an independent statutory authority responsible for the regulation of game hunting in Victoria” (Game Management Authority, 2017).

The Chair of the GMA has sought to stress the primacy of the GMA's regulatory role, also indicating that:

A key statutory objective of the GMA is to promote sustainability and responsibility in game hunting in Victoria. The GMA is not to advocate for hunting, but instead facilitates hunting in a way that maximizes the opportunity to achieve safe, sustainable, humane and equitable hunting. (Hine, 2017b, p. 3).

However, the distinction between the promotion of hunting and the promotion and facilitation of sustainable hunting is not always recognised or accepted by external stakeholders. Stakeholders consulted in this review often assumed that the GMA has an explicit or implicit industry development function. Representatives of hunting organisations sometimes criticised the GMA for not being a more effective advocate for their interests while animal welfare bodies questioned the appropriateness of a regulator undertaking industry development activities, but both groups took for granted that the GMA had some sort of industry development function for game hunting.

The GMA's own materials sometime slip between promotion of safe and sustainable hunting and promotion of hunting as a recreational activity. The GMA's website seeks to promote a vision that hunting in Victoria is respected and valued around the world (Game Management Authority, 2017). This sounds uncomfortably like a vision for the promotion of game hunting. The GMA's mission statement on the same website page sets out a role for the GMA as "an authoritative facilitator of sustainable game management and quality hunting opportunities". The GMA's vision and mission statements can easily be interpreted as implying that the GMA has an industry promotion and development role.

These statements cascade into other public and internal documents. In a section of the GMA website encouraging hunters to become involved in conservation, the GMA makes the claim that "[h]unting encourages people to connect with, and to conserve, the natural environment" (Game Management Authority, 2017b). This goes beyond the promotion of sustainable hunting to the promotion of social benefits associated with hunting as a recreational pastime.

The GMA's *Compliance Strategy and Enforcement Guidelines for the 2017 Duck Hunting Season*, asserts that the role of the GMA is to "facilitate the hunting...of prescribed game species of duck" (Game Management Authority, 2017a, p. 10). In that document, the GMA's objective of facilitating sustainable hunting has slipped to a broader objective of facilitating hunting that leaves the GMA open to a perception of apprehended bias. The objective of facilitating hunting is used in the document to explain the GMA's involvement in disputes between hunters exercising "the legal right to hunt" and "the activities of animal welfare protesters [which] are, in many cases, designed to disrupt hunting." The same passage refers to "the possession of game and protected wildlife" by hunters without noting that the destruction or possession of protected wildlife would itself constitute an offence under the game laws that the GMA is obliged to enforce.

The GMA has an obligation under section 6(h) of the GMA Act to "monitor, conduct research and analyse the environmental, social and economic impacts of...hunting." It would be expected that an independent regulator charged with research into the economic and social impacts of hunting

would seek to explore a range of perspectives on the issues in a way that informed a balanced approach to regulation and added to public understanding.

However, the GMA's general power to conduct research appears to have been applied to promote one side of a complex debate about the economic and social benefits of game hunting. The GMA regularly draws in its public and internal documentation to an assessment of the economic benefits of game hunting prepared by the former Department of Environment and Primary Industries (DEPI) (2014) and provides a copy of the report on its website. The *Hunting Manual*, for example, claims that hunting generates hundreds of millions of dollars of direct and indirect economic activity (Game Management Authority, 2017, p. 4). An internal review of the 2017 opening of the duck season opening included a statement under the heading "Goals" that "duck hunting continues to contribute to the social, economic and environmental wellbeing of the state" (Game Management Authority, 2017g). The report to the Minister on the opening weekend of the duck hunting season also claims that "regulating hunters and hunting activity contributes to sustainable recreational, social, environmental and economic benefits" (Game Management Authority, 2017f, p. 3).

The findings of the DEPI study have been challenged by other research bodies (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 91). The GMA materials that have been cited do not acknowledge the criticisms that have been made of this study or provide references to studies that present other conclusions. It is reasonable, given the nature of GMA Act, for the GMA to promote safe and sustainable hunting, but to assert that duck hunting contributes to the social, economic and environmental well-being of the state, and to seek to achieve this as a stated goal of regulation, seems to move the GMA beyond its primary role as a regulator into an advocacy and promotional role for the game hunting activity that it is charged with regulating.

The then Minister indicated in the Second Reading Speech for the GMA Bill 2013 that the GMA would be first and foremost a regulator. This is as it should be. However, the then Minister at the same time also went on to articulate other roles for the GMA. Tensions in the GMA's are embedded in the organisation's DNA. However, the GMA appears to have exacerbated these tensions and is sometimes perceived as playing, and occasionally slides into, advocacy and promotional roles.

The GMA Amendment Bill 2017 recently introduced into the Victorian Parliament proposes additional functions for the GMA, including explicit objectives to optimise the social, cultural and economic benefits of game hunting and support the development of recreational and commercial game hunting, that would add further tension to the GMA's role as a regulator.

There is a fine distinction between promotion of sustainable hunting and promotion of hunting as a recreational pursuit that brings benefits to the State. There is scope to clarify the role of the GMA and insert protections into the governance and operating models to ensure the GMA is seen by stakeholders as independent and impartial. Once clarified, the GMA needs to be careful to maintain role clarity to protect its reputation as an independent and impartial game manager and regulator.

4.3 Regulatory and institutional environment

The GMA operates within a complex, fragmented and sometimes contradictory institutional environment.

At least five agencies have a role in managing game hunting:

- DEDJTR is responsible for game hunting and animal welfare policy and coordinating the preparation of legal instruments to regulate game hunting;
- DELWP is responsible for broader wildlife policy, land management and status policy, waterbird monitoring and managing non-parks and reserves public land;
- Parks Victoria is responsible for managing activities on the parks and reserves estate, including State Game Reserves;
- Victoria Police is responsible for firearm licensing, possession, use and ownership, and is responsible for maintaining public order, including leading protestor management; and
- the GMA is the operational regulator responsible for advising Ministers on wetland closures and other matters, research, including harvest monitoring and bird and wetland monitoring and compliance and enforcement activities, including education, information and enforcement.

Relevant parts of the *Wildlife Act 1975* (Vic) and associated regulations are enforced principally by Authorised Officers from DELWP. Authorised Officers from DELWP, Parks Victoria and members of Victoria Police also assist in the enforcement of game laws.

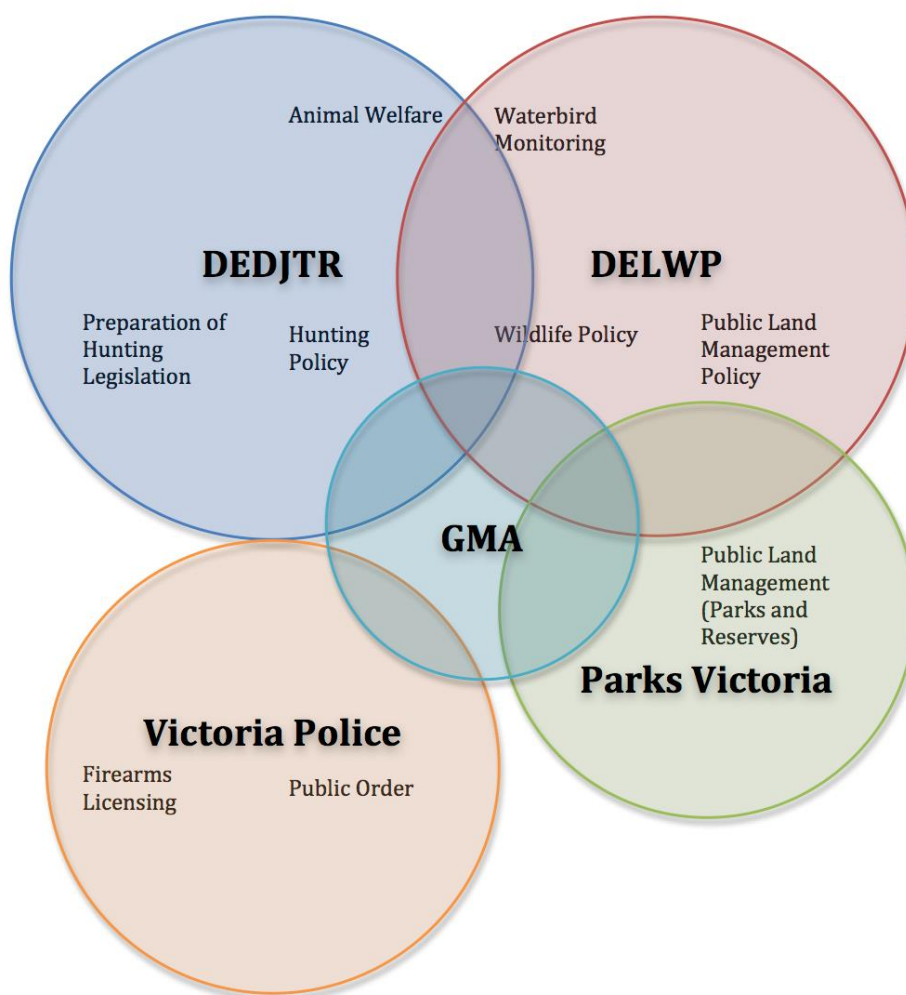
These agencies operate out of three portfolios and report to separate Ministers. Their powers and responsibilities in relation to game management overlap and intersect with one another and with the powers of the GMA, and in a policy sense are sometimes contradictory. The recent Victorian Parliamentary inquiry into the control of invasive animals on Crown land pointed to tensions between existing game management arrangements, the management of public lands and the control of invasive animals (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 230).

The overlapping responsibilities of different agencies, and the GMA's reliance on information and support from its partner agencies, can create difficulties for the GMA in delivering on its regulatory responsibilities. Wildlife monitoring on public land is the responsibility of at least three separate agencies: DELWP, Parks Victoria and the GMA. The GMA relies on information from its partner agencies to make assessments of the sustainability of game numbers and to advise on the management of upcoming hunting seasons. However, the GMA (2017f, p. 10) has suggested that DELWP and Parks Victoria have under-invested in their game monitoring responsibilities, placing an increasing burden on a very small number of GMA officers to collect field data, despite the much larger capacity of its partner agencies, and exposing the GMA to risks where important issues requiring action are potentially not being identified.

Difficulties of this kind are not unusual between agencies managing complex whole of state operations, and it is important to recognise that GMA's partner agencies have much broader policy and delivery responsibilities than the GMA, even if they are larger and appear better resourced. However, the coordination of the activities of the relevant departments and agencies currently relies on informal arrangements and shared understandings.

An illustration of the fragmented and overlapping responsibilities for game management is provided in Figure 2 below.

Figure 2: Institutional arrangements for delivery of game management regulatory responsibilities



Coordination across the relevant agencies would be improved by the development of a definitive statement of the accountability framework within which the GMA and its partner agencies are expected to work and detailed and up-to-date agreements or Memoranda of Understanding between the individual agencies in relation to the identification of priorities, the allocation of responsibilities, resource sharing and dispute resolution.

It is, however, doubtful that the GMA currently has the capacity or institutional leverage to develop an appropriate set of accountability documents, and until more sustainable arrangements can be developed it will continue to rely on the goodwill of other agencies.

4.4 Community and stakeholder context

The GMA operates in a highly contested regulatory space in which stakeholders across a broad range of values and interests have strongly held and often divergent opinions about the value and rectitude of hunting as a recreational activity.

Game hunting is a cultural tradition that has been undertaken for many centuries. People participate in hunting for a variety of reasons; while the primary interest for some hunters is the taking of game as a source of food, others hunt primarily for companionship or to pursue interests that are incidental to hunting. These interests can include the development of shooting skills, training and hunting with dogs, the experiences of camping and the outdoors, learning about the ecology and behaviour of game and other wildlife, and cooking and eating game (Department of Primary Industries, 2012, p. 14).

Proponents of recreational shooting argue the wider community and industry also benefit from game hunting. Industries associated with the manufacture, maintenance, importation and retail sale of firearms, ammunition, and camping, boating and off-road motor vehicle equipment receive an economic benefit from the purchase of goods by recreational shooters. Some hunters also use dogs to assist in hunting which creates a market for the dogs themselves, dog food, training and housing accessories and veterinary care. Rural townships and regional businesses may also benefit from an influx of hunters during hunting seasons, where food, accommodation, hunting accessories and fuel are purchased.

A study commissioned in 2013 by the then Victorian Department of Environment and Primary Industries (DEPI) (2014, p. 24) estimated that hunting generates \$439 million in economic activity each year in Victoria. This includes \$294.7 million on game hunting and \$144.4 million on pest hunting. The study estimated that approximately 40 per cent of expenditure took place in Melbourne and 60 per cent in regional areas.

Some proponents of game hunting also claim that sport hunting can assist in the conservation of the natural environment and the control of invasive animals (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 91). The general community may benefit from the proper conservation and maintenance of game resources and their habitats and from controlled and safe hunting methods. However, this is a complex issue. Hunting organisations have a variety of goals, and some proponents of game hunting argue for the control and management of breeding populations of invasive animals such as deer rather than eradication of the entire stock of animals. Indeed, it could be argued there is an inherent conflict between feral animal control and the objectives of sustainable game hunting, which is directed at ensuring the continued supply of a stock of animals to support future hunting opportunities.

The economic and social benefits of recreational hunting have also been contested. Various organisations have challenged the DEPI study, arguing the methodology was seriously flawed (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 91). The Australia Institute (2012, p. 12) has suggested that if hunting were not permitted, the same money would be spent within the Victorian economy anyway, although on a different range of goods and services. The Australia Institute argued that opportunity costs, such as duck hunting deterring other tourists from visiting those areas, were not factored into the estimate of \$439 million worth of economic benefits.

The potential for recreational game hunting to contribute to the control of feral animals has also been challenged. The Invasive Species Council has argued that recreational hunting is not an effective means of controlling invasive animals (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 224). Sport hunting is a relatively random process and can be selective in its targets (for example, selecting large trophy males rather than the breeding population of females). Where sport hunting is not undertaken as part of a structured program of feral animal control, the impacts are largely incidental to the primary purpose of sport shooting, are not measured in any systematic way and will be unlikely to achieve clear wildlife goals and outcomes.

Submissions to a recent Victorian Parliamentary Inquiry into the control of invasive animals on Crown land, did, however, suggest that, while opportunistic or ad hoc ground shooting is generally not an effective means of invasive animal control, “[a]ccredited volunteer shooters can provide a positive contribution to biodiversity outcomes where this contribution is managed in a strategic, systematic way and is integrated with other management actions” (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 224).

While sport hunting has many supporters, many members of the community object to game hunting in principle and to aspects of the practice of game hunting as it has been expressed in Victoria. Some groups and individuals are opposed to game hunting in Victoria, particularly duck hunting. For example, the RSPCA, Coalition Against Duck Shooting, Animals Australia and Birds Australia all publicly oppose duck hunting and publicise their policies on their websites.

Different groups and individuals have different reasons for opposing hunting, and even those who identify the same issues may prioritise them in a different order. It is, however, possible to identify a number of common objections:

- suffering caused to game animals;
- collateral damage to non-game (including endangered) species;
- risks to other users of public land where hunting occurs; and
- ineffectiveness in controlling pest species populations.

Submissions to the recent Parliamentary inquiry into the control of feral animals raised concerns about irresponsible and illegal hunters trespassing on private property, hunting in areas where

hunting is not permitted, hunting without the required licence, spotlighting on public land and shooting on private land without permission (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 92). Stakeholders consulted in this project pointed to the adverse impacts of hunting on the amenity, safety and comfort of adjoining landholders. Private landholders have a reasonable expectation that the GMA will assist in managing the impacts of game hunting on their property and adjoining public or private land.

Game hunting in Victoria is a legally sanctioned activity that involves the licencing of hunters to enjoy access to Crown land to pursue hunting and harvesting activities. There are inherent conflicts between the rights of hunters to pursue their chosen recreational pursuit and the legitimate rights of others to pursue their own lawful activities in shared public spaces. The continuation of hunters' rights depends on a negotiated and contingent social licence rather than on any permanent or inalienable right to hunt.

Recent events have raised questions about the public perception of the GMA's effectiveness as a regulator and whether the social licence extended to hunters can and should be maintained.

At the Koorangie State Game Reserve (the Marshes, or Koorangie Marshes) on the opening weekend of the 2017 duck season, hunters were observed by the GMA to engage in illegal, unethical and irresponsible behaviour. According to the GMA (2017f, p. 5), illegal behaviour included early shooting, the destruction of protected species, hunting from a moving boat and littering while unethical and irresponsible behaviour included shooting at birds beyond hunters' effective shooting skill distance, which often results in wounding, failure to recover shot birds and the dumping of shot birds. Animal welfare groups have pointed to other alleged breaches of the law and lapses in ethical hunter behaviour. Only one infringement notice was issued to a hunter for shooting before the legal hunting time and four additional infringement notices were subsequently issued to four hunters for failing to retain a wing on a game duck. Eleven banning notices were issued to protestors.

The failure to ensure compliance with the game hunting laws, or to effectively sanction offenders when the game hunting laws are breached, is not a new phenomenon. Prominent hunters have bragged about their illegal hunting behaviours on social media and not been prosecuted. At the Box Flat swamp during the 2013 duck hunting season, some 226 protected birds were illegally slaughtered and 840 game ducks abandoned on one private wetland (Game Management Authority, 2017 April, p. 7). The GMA's predecessor failed to secure any successful prosecutions arising from these incidents.

As the regulator, the GMA has an obligation to ensure that minimum standards of responsible and ethical behaviour will be maintained. Events such as those occurred at Box Flat in 2013 and at the Koorangie State Game Reserve in 2017, and many similar events that have not been as well publicised, cause dismay in the wider community and threaten the public confidence that gives the GMA legitimacy.

The environment in which the GMA operates poses unique challenges. Game hunting often occurs in remote and inaccessible areas where illegal behaviours are difficult to observe. It is therefore

easier to find the effects of illegal and irresponsible behaviours than to detect the perpetrators. However, illegal hunting occurs on shared public land and on public land that adjoins or is close to private land, and other users of these spaces have a legitimate expectation that they will not be confronted by the results of illegal and irresponsible hunting behaviours.

Communities are increasingly well informed about public affairs and have high expectations of regulators. They expect regulators to effectively administer the law, and to reflect prevailing community standards. The GMA is in the difficult position of regulating an activity that is very highly regarded by its advocates and practitioners but opposed on moral and ethical grounds by other stakeholders, and it cannot afford to be seen to be indifferent or inactive in enforcing the law.

As a public, statutory regulator, the GMA owes a duty to the community as a whole, not just hunters, to ensure the game laws are observed and that minimum standards of responsible and ethical behaviour are maintained. This requires an ability to engage with stakeholders across a wide spectrum of values and interests and to adapt and adjust to changing community attitudes and expectations.

The GMA (2017f, p. 7) has noted in its review of the opening of the 2017 duck hunting season that a failure to change and respond to community expectations and standards will continue to see the future of duck hunting challenged by those who oppose it and the broader community which reasonably expects sustainable and responsible conduct.

To fulfil its statutory responsibilities and obligations to the community as a whole, the GMA requires a flexible and responsive approach to compliance and enforcement and a capacity to operate across a wide spectrum of values and interests to ensure that it retains the confidence of the community that provides its social licence to operate.

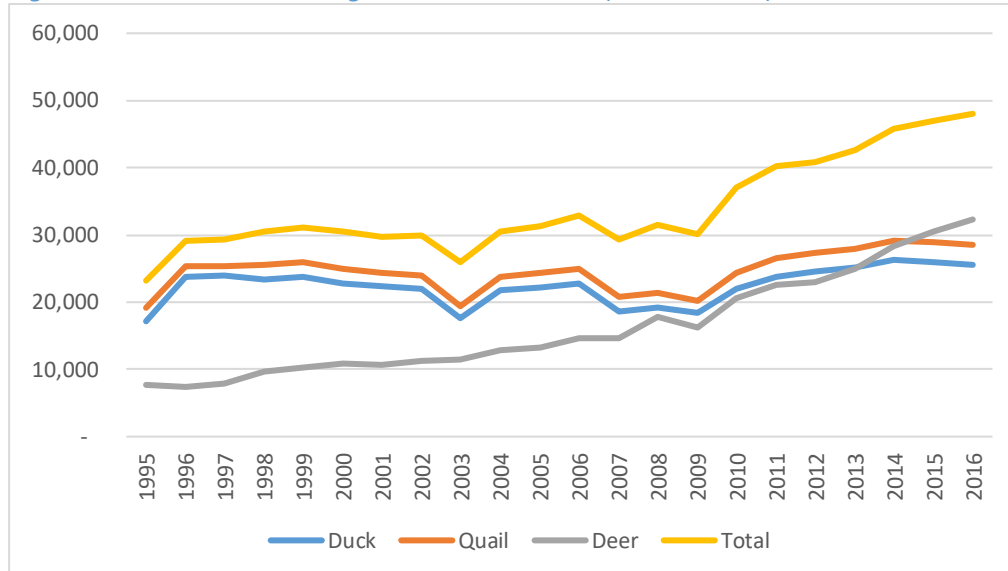
4.5 Long-term demand

The GMA is experiencing significant long-term growth in the demand for its services.

There are approximately 48,000 licenced game hunters in Victoria (Game Management Authority, 2016b, p. 4). As at 30 June 2016, there were 32,306 licenced deer hunters, 25,646 licenced duck hunters and 28,545 licenced quail hunters (Game Management Authority, 2016b, p. 21). A number of these hunters are licenced to hunt more than one species. In 2016 there were 48,023 individual licence holders (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 85).

The total number of licence holders have increased over the past 20 years, as shown in Figure 3 below.

Figure 3: Game licences and game licence holders (as at 30 June)



Source: Game Management Authority, *Game Licence Statistics, Summary Report – 2016*, p.7.

Between 30 June 1996 and 30 June 2016, there has been a 65 per cent increase in game licence numbers. Despite some fluctuation from year-to-year due to the cancellation or reduction in the length of the duck season or the application of lower bag limits, game licences with duck and quail entitlements have increased by 9 per cent and 12 per cent respectively.

However, game licences with a deer entitlement have increased by 336 per cent over the same period, and have been less prone to short-term fluctuations.

On the other hand, funding for the GMA has been approximately static since its establishment in 2014.

5 Approach to compliance and enforcement

This section assesses the effectiveness of the GMA's approach to compliance and enforcement.

5.1 Compliance policies, strategies and planning

The GMA has a well-developed regulatory architecture, but there are gaps in the framework and the GMA's approach to regulation lacks the responsiveness normally expected of a contemporary regulator.

The GMA's approach to compliance and enforcement is set out in the GMA Compliance Policy (Game Management Authority, 2016a). The Compliance Policy describes the general framework on which the GMA bases its compliance activities. It is a very high-level document that is intended to provide guidance to the Victorian public on the compliance approach that will be taken by GMA in undertaking its regulatory activities (Game Management Authority, 2016a, p. 7).

The Compliance Policy articulates the GMA's approach to its compliance obligations. The Chairperson has described the Policy as:

... a risk-based, intelligence-led approach to delivering safe, consistent, effective and efficient compliance services. It recognizes the need for maximizing voluntary compliance through education, support and incentives, monitoring compliance through random inspections, audits, patrols and intelligence gathering, and responding to non-compliance by investigating suspected breaches of the law and enforcing those. (Hine, 2017b, p. 3).

The Compliance Policy indicates that it will be reviewed by the GMA Board on an annual basis or more frequently to reflect changes in the compliance and operational focus of the GMA. The document on the GMA website was last revised in August 2016 and was due for revision on 1 July 2017.

The Compliance Policy is supported by a cascading set of planning and operational documents. These include compliance and operational plans for major events and sensitive compliance and enforcement actions. A detailed *Compliance Strategy and Enforcement Guidelines for the 2017 Duck Hunting Season* was prepared in advance of the 2017 duck hunting season (Game Management Authority, 2017a). This document sets out the compliance objectives and strategies and enforcement guidelines intended to be applied across the state.

The Guidelines are underpinned by more specific operational plans for the various regions covered by the GMA. Other compliance plans are prepared for specific compliance activities, such as the management of hog deer hunting on Snake Island (Game Management Authority, n.d.). These

documents provide more detailed advice and guidance for staff on the specific purpose and execution of these operations, roles and responsibilities, advice on administration and logistics and guidance on the range of penalties that may be applied for specific offences and penalty procedures for specified offences.

The GMA also maintains a Manual of Procedures and a suite of Standard Operating Procedures (SOPs), which set out procedures, instructions and guidelines for managing a range of compliance issues. SOPs are an important tool in managing risks and ensuring a consistent approach to operational activity. They help to ensure the safety of GMA staff and members of the public. SOPs provide Authorised Officers with detailed guidance to ensure compliance staff operate in a consistent, predictable and professional manner.

A recent independent review of the GMA's risk management for game compliance pointed to gaps and deficiencies in these documents (Emergency Management Consultancy Services, 2015, p. 10). That review found the SOPs were dated and inaccurate in a number of respects. Feedback from staff also suggested that while the SOPs were useful documents, they were dated and could not always be relied upon. Staff were aware of the SOP on managing interactions with armed hunters but agreed that they interpreted the SOP and applied it in the field in different ways.

The independent review indicated that a Game Officer review of the SOPs should be undertaken "without delay" (Emergency Management Consultancy Services, 2015, p. 10). The GMA indicated the SOPs were reviewed on a rolling program over three-year cycles. However, that program appears to have slipped, as some SOPs provided for the purposes of this project have not been updated since 2014.

The GMA has indicated that it takes a risk-based and intelligence-driven approach to its compliance and enforcement activities (Hine, 2017b, p. 3). In describing its approach to compliance and enforcement, the GMA (2015, p. 18) says that it considers the likelihood of non-compliances occurring and the consequences of the actions, establishes priorities, assigns tasks, and plans and delivers operations.

There is no doubt the GMA sets compliance and enforcement priorities and that it plans its enforcement operations very thoroughly. The Compliance Policy, for example, establishes a hierarchy of compliance priorities that emphasise public safety and sustainability (Game Management Authority, 2016a, p. 12), and these priorities are reflected in the more detailed instructions (Game Management Authority, 2017a, p. 16) and operational plans (Game Management Authority, 2017e, p. 6).

However, the strategies that underpin the GMA's operations and the basis on which it establishes priorities are less certain. It is not clear, for example, why the GMA consistently prioritises actions against protestors over competing compliance priorities in relation to hunters, or how the GMA decides to allocate its available funds between education and information, or between monitoring and enforcement. The GMA (2017f, p. 13) acknowledges the importance of hunter behaviour in determining the overall effectiveness of the GMA's regulatory regime, indicating that "compliance is an individual choice", and seeks to influence hunter behaviour in various ways, but it does not

have clearly articulated processes for choosing one compliance and enforcement strategy over another or for determining the relative allocation of resources to alternative compliance and enforcement activities. Nor is there evidence of any considered assessment of the potential to adopt elements of alternative co-regulatory or self-regulatory strategies.

In contemporary regulatory models, informed monitoring for non-compliance is used to determine whether the regulatory design is having its desired effect on the target population (Parker, 2000, p. 537). While the GMA Chairperson refers in his letter to the Minister on the Statement of Expectations to “a risk-based, intelligence-driven” Compliance Policy (Hine, 2017b), the GMA has very limited data on which to base its compliance and enforcement strategies and there is little evidence that its current strategies have been informed by any systematic analysis of the willingness or ability of its regulated stakeholders to comply with their lawful obligations, or the impact of its existing regulatory activities. Indeed, the GMA’s compliance priorities appear to have remained relatively stable over time. GMA’s approach to regulation relies on a limited number of educational and informational products and a relatively strong emphasis on deterrence-based enforcement activities.¹

A capable, contemporary regulator pursues compliance strategies across a spectrum of activities from information and awareness through education to enforcement, which take the form of advice, warnings, notices or sanctions, and which are informed by knowledge of the compliance postures and behaviours of regulated entities. These activities are often described in terms of a pyramid of enforcement strategies, and example of which is provided below in Figure 44.

Figure 4: Compliance strategy model



Source: WA Department of Mines, Industry Regulation and Safety (2017)

¹ Deterrence can be regarded as the effect of a sanction or the threat of its imposition in inhibiting the behaviour of the sanctioned person or of others who would commit like behaviour (Blumstein, Cohen, & Nagin, 1978, p. 16). A deterrence-based model of enforcement assumes that most regulated entities are rational economic actors that act to maximise their utility (Rechtschaffen, 1998, p. 1186).

The GMA has limited access to strategic intelligence and does not routinely report on or evaluate the effectiveness of its compliance and enforcement strategies. The GMA is aware of the need to make better use of intelligence data to inform its enforcement approach and has taken steps to part-fund an analyst in the Victorian Fisheries Authority's Strategic Intelligence Unit. However, the GMA needs to extend this approach to inform its activities across a broader range of the compliance spectrum and engage in a broader range of compliance strategies, including the consideration of the potential effectiveness of co-regulation and self-regulation strategies.

The GMA's effectiveness as a regulator would be enhanced by the development of a compliance strategy that sets out the specific compliance and enforcement goals, priorities, strategies or performance measures that are to be applied in the upcoming period, and the basis on which those priorities and strategies have been selected and are to be evaluated against.

A contemporary regulator would also consider a range of potential regulatory strategies and interventions, including self-regulation, co-regulation, and a stronger emphasis on compliance based strategies that positively influence hunter behaviours (Ayers & Braithwaite, 1992, p. 39). These suggestions are developed in more detail in section 8.4 of this report.

5.2 Licensing

The GMA (2015, p. 15) administers both recreational and commercial licences under the *Wildlife Act 1975* (Vic). This section of the report deals only with recreational game licences.

In Victoria, hunters are required to purchase a game licence to hunt game species on public land.

To hunt game birds, including ducks, hunters must pass the waterfowl identification test. This test involves a series of multiple-choice questions based on video footage of waterfowl in flight. This requirement is intended to ensure that only hunters that are able to demonstrate adequate identification skills are able to hunt ducks. The effectiveness of the current test has been questioned by external stakeholders and by Game Managers and Senior Game Officers.

To hunt sambar deer with the aid of hounds, hunters must pass the hound-hunting test. This requirement is designed to ensure hunters using hounds are aware of the legal, ethical and safety obligations when hunting. The test includes multiple-choice questions on licencing requirements, hunting seasons, legal hunting methods, safe firearm handling practices, ethical responsibilities and other information relevant to hound hunting.

In addition to standard game licences, special licence categories are available for juniors (12 to 17 year-olds), game-bird farm hunting and international visitors who reside outside Australia. To hunt non-game species, such as pest animals (including European rabbits and hares, foxes and feral or wild goats, pigs, dogs and dingoes), a hunter only requires a firearm licence (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 71).

Outside of the open season for hunting hog deer, balloted hunting periods are also managed by the Blond Bay Hog Deer Advisory Group (Parliament of Victoria Environment, Natural Resources

and Regional Development Committee, 2017, pp. 75-76). The ballot is used to select hunters to hunt for free-ranging hog deer on Blond Bay State Game Reserve, on sections of the Boole Poole Peninsula and on Snake Island.

Licencing provides one of the means by which a regulator may manage the potential risks, or harms, that it is seeking to regulate.

Licencing systems generally describe a set of regulations that limit an activity to individuals or entities who meet state-established criteria (Svorny, 1999, p. 296). People may be denied access to an activity if they do not meet established criteria or if legal limits on supply have been met. Where the activity itself is regulated, as in the case of game hunting, licencing may be used to maintain compliant behaviour through the suspension or revocation of licences where licence holders are found to be acting outside the prescribed set of permissible activities. Outcome assessments can also be used to discipline errant individuals, as occurs with licence point demerit systems.

The GMA's licencing arrangements should ensure that prospective game hunting licence holders have a clear understanding of the basis on which hunting will be conducted and provide a means of encouraging and reinforcing more compliant hunting behaviours. However, with the exception of duck hunter identification skills and hound hunter knowledge skills, applicants currently seeking a licence to hunt game are not required to prove any knowledge of the law, demonstrate even a basic understanding of safe and responsible hunting practices or possess any hunting competence.

By contrast, the GMA (2017 June, pp. 2-3) has recognised that international standard practice involves requiring hunters to acquire a basic level of knowledge and/or skill through a licencing regime that includes some form of basic training and/or testing.

Under the current arrangements, the GMA is providing education and awareness programs to hunters only after they have acquired a licence to hunt, which does not provide any strong incentive for hunters to participate, and field officers are forced to respond to incidents that may arise from simple ignorance of the hunting laws and rules of ethical hunting that could have been tested prior to licencees entering the field. The current arrangements are analogous to VicRoads providing driver education only after a licence has been allocated to drive on a public highway.

This leaves the GMA vulnerable to criticism that it has not done enough to mitigate the risks that are attached to game hunting on shared land, and places additional pressure on other compliance and enforcement measures to influence the behaviour of hunters after they have been issued with licences.

Animals Australia and the Coalition Against Duck Shooting have argued for mandatory target shooting accuracy tests and an annual waterfowl identification test to reduce the number of birds left injured or dying. Hunters are currently required to pass a waterfowl identification test once to get their licence, but their shooting accuracy is never tested (Wahlquist, 2017). Empirical evidence suggests that duck wounding is related to the proficiency of the hunter and can be reduced with appropriate training. Information collected in the development of the Shotgun Education

Program indicated that experienced shooters involved in a 'train the trainer' trial caused an average of 29.4 per cent wounding before the training and that was reduced after a week of intensive training to 5.1 per cent (Animal Welfare Advisory Committee, 2008). While it is unlikely that a practical level of mandatory training for hunters would achieve these results, the evidence suggests that it would contribute in a positive way to the GMA's compliance objectives.

In relation to the proficiency of recreational hunters, the Parliament of Victoria Environment, Natural Resources and Regional Development Committee (2017, p. 148) has recently observed that:

Recreational hunters range from beginners to the very experienced. Mr Bob Gough, who has designed accreditation programs for shooters, noted that not all recreational hunters practice enough. As a result, he indicated, only 33 per cent of recreational hunters seeking to be part of the Parks Victoria program pass the required accreditation test for that program.

The RSPCA also informed the Parliament of Victoria Environment, Natural Resources and Regional Development Committee (2017, p. 148) that:

... [recreational] hunters have highly variable skill levels and there is no shooting competency test required to acquire a hunting licence. In a survey of hunters carried out by the University of Queensland in 2012, 58% of 6,892 hunters said they had not done any accredited hunter training.

The current licensing arrangements are ineffective in ensuring a minimum acceptable level of awareness and competence amongst hunters, and leaves the GMA exposed to criticism that it is not fulfilling its statutory obligation to promote the sustainability and responsibility of game hunting in Victoria.

There are also issues surrounding the adequacy and robustness of the current licensing database, which is not fully supported and has limited scope for additional functionality. We understand the GMA is currently developing a process to renew the Game Licensing System and the intention is that adequate functionality will be built into any new system to facilitate broad testing requirements.

Options for improving the current licensing arrangements are canvassed in sections 8.5 and 8.6 of this report.

5.3 Surveillance, monitoring and information gathering

Monitoring and reporting on compliance with the game laws and investigating non-compliance are core roles for a regulator.

The GMA recognises the importance of these functions. The Compliance Policy states that:

A core function of the GMA is to determine and report on levels of compliance with current standards and laws, and maintain a credible deterrent for non-compliance. Monitoring compliance and investigating non-compliance is therefore a key role for the GMA. (Game Management Authority, 2016a, p. 12)

However, the Compliance Policy provides little additional information on the relative priority to be attached to this function, or how monitoring and information is to be carried out.

The GMA (2016, p. 22) has indicated that it regularly monitors intensively hunted areas and wetlands that have been closed, re-opened or had significant threatened waterbird species. Monitoring is undertaken principally by GMA staff with some assistance from DELWP and DEDJTR staff.

The GMA also has access to systematic hunter bag survey data provided by the Arthur Rylah Institute for Environmental Research. These reports are based on interviews with hunters in the field. The reports provide information on harvest rates, and are therefore relevant to the GMA's responsibilities for sustainable game management, but they also provide information on compliance with hunter bag limits and evidence of the destruction of protected and threatened species and unrecovered and illegally shot birds.

A single shoreline survey was carried out in 2014 on Loddon Weir, North West Region, with a single shot and unretrieved duck reported (Arthur Rylah Institute for Environmental Research, 2015, p. 17). Three shoreline surveys were carried out in 2015 recording a total of 24 shot and unretrieved ducks: Lake Connemara in Barwon South West Region where 20 ducks were recorded as being shot and not retrieved by hunters, Toolondoo Reservoir in the Grampians with three ducks and Lake Murphy in Loddon Mallee with one duck (Arthur Rylah Institute for Environmental Research, 2015, p. 7). However, the report also noted that shoreline surveys were only carried out at these three wetlands. The 2016 report indicated that reports of wounded and unretrieved ducks came from Parolas, Reedy Lake and Toolondo Reservoir, involving a total of 38 ducks (Arthur Rylah Institute for Environmental Research, 2016). Staff also collected 122 unretrieved, dead ducks from Lake Buffalo and Parolas. In addition, four wounded Banded Stilts were seen by Gippsland staff near Hollands Landing (Arthur Rylah Institute for Environmental Research, 2016, p. 13).

The original conception of the Hunter's Bag Survey was that it would be conducted widely across Victoria to provide an adequate sample to allow defensible estimates of the opening weekend take (Arthur Rylah Institute for Environmental Research, 2016, p. 20). For example, in 1992 Hunter's Bag Surveys were conducted at a total of 110 wetlands. This is in stark contrast to the effort expended on Hunter's Bag Surveys in recent years; 14 wetlands surveyed in 2014, 21 in 2015 and 20 in 2016.

The Arthur Rylah Institute has noted that the limited data collected in recent years severely reduces the value of the Hunter's Bag Survey in assessing the impact of duck hunting on waterbird populations. Nevertheless, it points to concerning levels of non-compliance with the game hunting laws and the ethics of responsible hunting behaviour.

There is a good case for a more systematic and inclusive approach to monitoring and information gathering. The 2015 report from the Arthur Rylah Institute (2015, p. 17) indicated that a much larger sample of shoreline surveys is required, along with better quantification of search efforts, to ensure that shoreline surveys provide useful information for monitoring compliance with the game hunting laws and animal welfare issues. The 2016 report on the Hunters' Bag Survey recommended that a statistical power analysis be conducted on the accumulated data to derive estimates of the sample sizes required to achieve a scientifically robust estimate of opening weekend harvest (Arthur Rylah Institute for Environmental Research, 2016, p. 20).

The GMA has argued that it has limited resources and needs to be selective in its surveillance and monitoring activities. The GMA's report to the Minister on the 2017 opening of the duck hunting season indicated that "given the current resource constraints and higher priority duties for staff conducting game enforcement, there are currently no plans [to] divert resources into searching wetlands for unrecovered game or illegally shot non-game wildlife" (Game Management Authority, 2017f, p. 12). The GMA makes the point there is no legal requirement to recover shot birds nor is it illegal to discard harvested game ducks and that the recovery of illegally shot protected wildlife after the fact provides very little in the way of forensic evidence to prosecute an offender.

This is certainly the case. However, the GMA (2017d, p. 3) has expressed a management objective of facilitating responsible and sustainable hunting of game duck throughout Victoria and providing advice for the education of hunters, focussing on responsible hunting and firearm safety. The GMA also has an obligation under the GMA Act to develop plans and procedures to address the humane treatment of animals that are hunted or used in hunting. The value in collecting unrecovered birds may be minimal to successful prosecutions, but shoreline recovery can provide invaluable information on the extent of wounding of ducks and the incidence of illegally shot protected wildlife, and thereby inform future compliance activities.

The GMA's reluctance to allocate resources because of the poor return on prosecutions suggests a preference for enforcement activity over information and awareness activities. However, as the GMA does not have a clearly articulated process for determining the relative priority of different compliance and enforcement activities, or for allocating resources across competing demands, it is difficult to assess the basis upon which it has been decided to attach a lower priority to the collection or counting of unrecovered birds.

Senior Game Officers are responsible for monitoring hunter behaviour and compliance through surveillance and monitoring of hunter behaviour, either in the field or through other means (e.g. monitoring social media). The GMA (2017f, p. 9) has argued that the capacity of its Senior Game Officers to undertake enforcement-related surveillance activities is constrained by the operating model that requires them to work closely with Victoria Police. The GMA has pointed out that combined operations can take weeks or months to organise and often Police are called away or are unable to attend at the last moment due to the need to respond to other incidents which are of greater operational priority for them. This results in frustration for committed and hard-working staff and represents a waste of scarce resources for all of the agencies involved.

Senior Game Officers and Game Mangers indicated that they therefore generally carry out surveillance operations to gather intelligence before contacting Victoria Police to develop an enforcement operation. However, those activities appear to be undertaken on the basis of a largely opportunistic basis driven by local knowledge and the leads and information collected by the Senior Game Officers through their extended local networks. This is a relatively unsystematic approach to surveillance and by its nature is not closely controlled or monitored. While a tasking and coordination committee was established by the GMA and operated for some time, it has not met for some time and now appears to be defunct. It is unclear whether there has been a sufficient return on these activities to justify the resources that have been allocated.

An independent assessment of the risk management of GMA's compliance activities in 2015 indicated that "no formal training had ever been delivered on effective surveillance techniques" (Emergency Management Consultancy Services, p. 17). A detailed record of training records provided by the GMA indicates that surveillance training has still not been provided.

The GMA has some access to intelligence databases maintained by other agencies. GMA has access to a Victorian Fisheries Authority (VFA) intelligence database during normal office hours under a Service Level Agreement (SLA) developed with the VFA's predecessor organisation Fisheries Victoria. GMA management value this arrangement, but have questioned whether access would continue on the current terms given the GMA and VFA have now both been established as independent statutory bodies. In addition, DELWP also has an intelligence database for game related information reports, but GMA does not have formal access to this. There is some sharing of intelligence between VFA and DELWP but there is no formal arrangement in place. Senior Game Officers also have access to third party information through VicRoads for vehicle registration details and telecommunications providers for phone records through VFA, but this access is restricted to during office hours only.

The GMA also has access to the police law enforcement database (LEAP) through the VFA. Access to LEAP is considered to be a critical success factor in the intelligence gathering and operational planning strategy for enforcement operations (Emergency Management Consultancy Services, 2015, p. 24). It is understood that discussions with Victoria Police regarding an MOU to document how the agencies work together in accessing and using this information are continuing.

While the GMA has access to these databases, the value that it obtains is limited by its lack of any developed analytical capability. The GMA does not currently have access to a dedicated compliance investigator to identify, plan and lead targeted investigations into criminal activity or a dedicated crime data analyst to interpret officer information reports, game crime statistics and reports from the public (Game Management Authority, 2017 April, p. 8). Without this capability, it is difficult to see how the GMA could hope to maintain a risk-based and intelligence-led compliance and enforcement framework.

The GMA recognises the gap and has entered into an arrangement with the VFA and the biosecurity function of DEDJTR to both part-fund a shared intelligence analyst to be located in the VFA Strategic Intelligence Unit.

The GMA needs to significantly expand its monitoring and information gathering activities, including by enlisting the support of hunting organisations, animal welfare organisations and land holders in undertaking active and passive monitoring of the effectiveness of its compliance and enforcement activities. Further discussion of options to engage more effectively with hunting and community stakeholders is provided in section 8.7.

5.4 Awareness, information and education

The GMA recognises the importance of awareness, information and education in influencing the compliance behaviour of hunters.

The Compliance Policy says that “the GMA plays a major role in educating hunters about the relevant legislation and regulations to ensure responsible, safe, sustainable and humane game hunting” and asserts that “education and awareness are the most effective ways of promoting compliance and are central to the GMA’s responsibility to enforce the law” (Game Management Authority, 2016a, pp. 10-11).

The GMA has placed considerable emphasis on developing awareness, information and education products and services.

The products include:

- the *Game Hunting in Victoria (Hunting Manual)*, which outlines the current laws, firearms safety, hunting methods and equipment, ethics, survival skills and provides improved education and training for game hunters;
- a Duck Wise DVD which aims to improve understanding and identification of waterbird species, minimise non-game species being taken and how to be a more humane, effective and efficient hunter along with information on firearms safety;
- a Game Hunting App, on which hunters can check when, where and how they can legally hunt game;
- the RESPECT: *Hunt Responsibly* program, which is aimed at achieving appropriate behaviours by hunters;
- Fact Sheets on the GMA website, media releases and promotional stickers; and
- attendance by Game Managers and Senior Game Officers at local events, including local shows, hunting group meetings, Landcare meetings and community meetings.

Some of these programs predate the GMA’s existence. The RESPECT program was originally developed by the former Department of Environment and Primary Industries in response to events on Box Flat Swamp in 2013, where almost 1,000 game and non-game birds were illegally killed, and inherited by the GMA (2015, p. 16) on its establishment in 2014. Various strands of the RESPECT: *Hunt Responsibly* program have included the distribution of fact sheets, stickers, the

placement of signs at duck hunting wetlands during duck hunting seasons, the issuing of badges to hunters who were observed acting in a responsible manner and the screening of an advertisement during the television hunting program *Beyond the Divide* (Game Management Authority, 2015, p. 17; 2016, p. 16). The GMA delivers the program with the assistance of other government and non-government bodies.

Box Flat

On the opening of the 2013 duck-hunting season on Saturday, 11 May, a large number of birds were shot by hunters at the Box Flat private wetland, near Boort. The Age reported that over 800 duck carcasses were left at the site, 147 of which belonged to a single endangered species (Editorial, 2013). The GMA has subsequently reported that almost 1,000 game and non-game birds were illegally destroyed (2015, p. 16). Besides the ducks, a number of other birds were also shot, including whistling kites and black swans. According to The Weekly Times, there were three locations where carcasses were deliberately hidden, but the majority of the bodies were simply left in the water (McLennan C. , 2015).

It was widely reported in the aftermath of the 2013 events that a similar event had occurred the previous year, but had never been made public. Moreover, the Department of Sustainability and Environment had received an anonymous tip-off the previous Wednesday, advising that Box Flat should be watched on the opening weekend of the season (Fyfe, 2013). The GMA was aware of this notification, but chose to concentrate attention and resources on potential protester activity at Woolshed Swamp (Fyfe, 2013). GMA compliance officers did arrive at Box Flat later in the morning, but according to a local landowner, most of the birds had already been shot by then. The Age also reported that the compliance officers, although present, had made no shoreline inspections on the Saturday, only identifying the first carcass of an endangered species on the morning of the following Sunday.

The number of illegally shot and unrecovered birds prompted a strong response from the hunting community, as well as conservationists and animal welfare activists: Field and Game Australia's police director, Rod Drew, said, "It's terrible. It's absolutely disgraceful". Rod Drew, however, also suggested that protestors could have shot the ducks themselves, "to bring the shooters into disrepute", and said that they should be investigated (Fyfe, 2013). An investigation was subsequently conducted in an attempt to identify those responsible, but no names were ever released to the public, nor were any prosecutions ever undertaken (Milman, 2014).

The GMA's predecessor organisation (Game Victoria) also developed a Shotgunning Education Program (SEP) designed to address waterfowl wounding and animal welfare concerns by improving the proficiency of gamebird hunters. Game Victoria engaged the world's leading expert ballisticsian to assist in the development of a comprehensive and complete program of education, capacity building and delivery. A standardised training program and manual was developed in 2012-13 with the intention that field workshops would be delivered by more than 20 expertly

trained volunteers from Field and Game Australia and the Sporting Shooters' Association of Australia (Department of Environment and Primary Industries, 2013, p. 34).

The content of the GMA's information and educational products is of very high quality. The *Hunting Manual* was received very positively by recipients who provided feedback to the GMA and has been praised by external stakeholders consulted during this review. Hunters who have taken part in the SEP have been almost unanimously enthusiastic about their experience (Andrews Group, 2017, p. 11). These products and services represent a very large investment by a small regulator with limited resources. The GMA has advised the *Hunting Manual* cost in the order of \$300,000 to produce and distribute and the SEP cost the GMA's predecessor in the order of \$250,000.

Despite the large investments made, and the wide distribution of the products, it is difficult to ascertain their effectiveness in influencing hunter behaviour and compliance with the game laws. While the GMA maintains data on the number of products distributed, hits on the website, and so on, there is no evidence of the GMA having any systematic evaluation of the effectiveness of these products in positively influencing hunter behaviour.

The GMA's Game Managers and Senior Game Officers also provide practical and constructive advice in the field on how to comply with the law as a routine part of their duties and undertake a considerable amount of outreach activity. The GMA provided stands at the 2016 Seymour field day and the Wild Deer Hunting, Guiding and Fishing Expo located in Bendigo. The GMA also maintained stands at the Victorian Hound Hunters hound registration day in Tallarook and attended numerous other game and community events. This work represents a significant effort by Game Managers and Senior Game Officers who are often obliged to undertake considerable out of hours travel to attend these events.

In addition to regular events, Game Managers seek to communicate the GMA's messages through gun clubs, gun shops and community groups. Attendance at public events such as shows and field days provides opportunities to reach a wider audience, and is a very effective way of increasing the visibility of the GMA. However, the balance of events attended by the GMA is heavily directed toward existing, well-organised hunting organisations. In 2016, the GMA (2016, p. 16) reported that it attended 66 hunting organisation meetings, but only 14 community groups meetings, 10 animal welfare group meetings and 1 conservation group meeting. Engagement with non-English speaking community groups was minimal.

The meetings with hunting organisations included a number of Field and Game Association "Duck Fever" nights. These meetings can involve up to 4000 hunting association members over a number of evenings across Victoria prior to duck season. They provide a forum, which GMA has capitalised on, to increase hunter education and raise product awareness of the GMA enforcement role, thereby reducing potential non-compliance (Emergency Management Consultancy Services, 2015, p. 19). Hunting associations indicated that GMA attendance at these events is highly valued, and they would welcome additional sessions. However, the effectiveness of GMA attendance at these meetings has not been formally evaluated and there is scope for the GMA to reflect on the

perception that its involvement in meetings described as “duck fever” nights might have on external perceptions of its regulatory independence.

There is scope for the GMA to improve the targeting and delivery of its flagship educational products. SEP field days are conducted as hands-on, one-day workshops in regional locations across Victoria. The field days are coordinated and delivered by Field & Game Australia (FGA) and the Sporting Shooters’ Association Australia (SSAA) at their shooting range facilities throughout the state. The take-up of the program since being handed over to the hunting organisations has been disappointing. While the SEP had a reasonable number of enrolments in its first year, numbers decreased steadily to about 60 in 2016, causing many sessions to be cancelled (Andrews Group, 2017). The GMA commissioned a report in 2017 from the Andrews Group on the attitudes and perceptions that game hunters have towards shotgun education programs, and the SEP field day in particular.

The Andrews Group (2017) found that past participants felt that the SEP was not effectively marketed by FGA and the SSAA, despite many being members. While the Andrews Group was not asked to report on the effectiveness of the program in changing hunter behaviours, they did report that participants agreed that the workshop was very useful for the development of shotgun skills and safety techniques and promoting safe, ethical, responsible and efficient hunting practices.

While the experience of workshop participants was overwhelmingly positive, there are questions about the levels of participation and targeting of the program. It is doubtful the participation of 60 hunters in the program in 2016 represents good value for money for the taxpayer investment in the program or that it could have had a significant influence on the behaviour of the in excess of 20,000 licenced and unlicenced duck hunters who did not participate in the program. The targeting of the program has also been poor. The Andrews Group (Andrews Group, 2017, p. 11) found that all past participants of the workshops who attended the focus group were very experienced hunters, finding that “typically, they had been hunting for decades and/or since they were children”. The program may have been more effective if it had been targeted at inexperienced hunters, or hunters whose skills or knowledge of shotgun technique had been identified, perhaps through compliance activities, as requiring improvement.

The targeting of the *Hunting Manual* could also be improved. The *Hunting Manual* was published in an English language version only, and was distributed in hard-copy to all licence holders. While the GMA has received unsolicited comments on the *Manual*, to date the GMA has not surveyed recipients of the *Manual* to solicit feedback from recipients or sought to review the effectiveness of the document in improving compliance with the game hunting laws. One stakeholder consulted during this review complimented the GMA on the quality of the document, but suggested that it was probably studied most carefully by hunters who were already knowledgeable and generally compliant with the game laws.

The GMA is likely to gain a better return on its investment by focusing its educational materials on hunters who are willing to improve their knowledge. The *Manual* is a high-quality product and deserves to be studied carefully by experienced and inexperienced hunters alike, but

inexperienced hunters and hunters requiring additional knowledge would benefit more from the *Manual* than their more experienced and knowledgeable peers. At present, hunters who do not respond well to written materials or do not have strong English language skills would have limited access to the information presented in the *Hunting Manual*.

Hard copy distribution of the *Manual* to all licensed hunters was a relatively high cost distribution option. An electronic version of the *Manual* has now been posted on the GMA website. However, there is a question of whether the GMA could have achieved a better return on its investment if it had only published the document in electronic form. There is also scope for the GMA to increase the return on its investment on the *Manual*, extend its useful life, and reinforce the useful guidance in the document by re-presenting extracts in the form of simple quizzes or information bites on the GMA website or Game Hunting Victoria App.

Hunting organisations indicated they would be prepared to assist the GMA with its awareness, information and education activities. This would assist in extending the limited resources of the GMA by making use of the information channels and networks already established by the hunting organisations. The recent review of the GMA's risk management of its compliance activities also advocated this approach, arguing that "a clear opportunity exists to enhance compliance throughout the hunting community, and therefore an associated reduction in risk to [Game Officers] is through effective publication of educational information" (Emergency Management Consultancy Services, 2015, p. 19).

There is an opportunity for the GMA to work more closely with its stakeholders in raising awareness of the principles of responsible hunting and providing information and education on hunters' obligations. However, the GMA (2017f, p. 13) has indicated that only 50 per cent of game licence holders belong to hunting organisations and that only a portion of those will play an active role and actively access their resources. The GMA also needs to be careful to ensure the information it provides through hunting organisations is respected, and that programs developed at taxpayer expense are responsibly managed and delivered. Hunting organisations consulted in this review acknowledged that they had not promoted or marketed the SEP effectively. Game Managers also pointed to concerns about the misuse of some GMA educational materials within certain gun clubs.

The GMA has broad responsibilities to the Victorian community and cannot rely on hunting organisations to provide information to non-members and unlicensed hunters, who are probably in greater need of the information and education that the GMA can provide. In consulting external stakeholders in the course of this review, many stakeholders demonstrated a sophisticated understanding of the game laws and the GMA's roles and responsibilities as a regulator. However, this was not always the case, and there is a role for the GMA in ensuring that its stakeholders better understand its purpose and functions. The GMA should actively seek out and engage with a broader range of stakeholders to ensure there is a good understanding of the game laws and the GMA's role and responsibilities as a regulator.

At present, the GMA's awareness, information and education programs are only provided in English language versions. It is difficult to judge the impact of this on the effectiveness of its

materials as the GMA has limited information on the demographics of hunting licence holders. However, it is unlikely that non-English speakers, or hunters with limited English language skills, would have any effective access to these materials.

The GMA has virtually no presence on social media. While it maintains an App it does not have Facebook, Twitter, Instagram or Snapchat accounts.

There is scope to use the GMA's existing information and education products more strategically to support other regulatory tools. For example, the *Hunting Manual* and other products could be drawn to support on-line testing materials and could be linked to licensing. The SEP could also be employed as an element of a mandatory testing regime for some licence categories or for access to some wetlands.

The GMA has limited information on the effectiveness of its awareness, information and educational materials. However, the poor targeting of the materials, widespread non-compliance with the game hunting laws and the close similarities between the events at Box Flat in 2013 that prompted the development of the RESPECT program and the events at the Koorangie Marshes in 2017 implies the GMA's information and educational products have not been as effective as they might have been.

The GMA (2017f, p. 13) has stated that creating a culture of compliance, self-regulation and respect is critical to the future of hunting and the maintenance of its social licence. However, while the GMA provides high quality class education and training materials, it is currently unable to measure the impact of these materials on hunters' understanding of the laws or their behaviours in the field. This will need to be addressed if the GMA is to be a more effective regulator of the hunting laws.

5.5 Enforcement

GMA's *Compliance Policy* states the GMA addresses non-compliance by objectively and assertively securing conformity with the law, where enforcement refers to the use of influence, authority and statutory methods to compel compliance with the law (Game Management Authority, 2016a, p. 12).

Enforcement activities are generally provided by the GMA's Senior Game Officers, supplemented by suitably authorised Game Managers and volunteers from other agencies in peak events, accompanied where appropriate by Victoria Police.

Where non-compliance is found, GMA seeks to achieve compliance using a range of sanctions, such as official warnings, infringement notices and licence suspensions and cancellations. The GMA's operational plans provide guidance for Authorised Officers in the application of sanctions and penalties in relation to specific offences. These include written warnings, notices of infringements or prosecution. Any sanctions imposed as an outcome of court proceedings are, of course, at the discretion of the courts.

Commonly detected offences include the unauthorised entry to wetlands by protestors, failure to retain a wing on a game duck, failure to hold a game licence, the illegal spotlighting of deer and the illegal use of toxic shot (Game Management Authority, 2015, p. 18).

Table 1 below provides key enforcement outputs by the GMA for 2014-15 and 2015-16.

Table 1: Summary of GMA's enforcement outputs for 2014-15 and 2015-16, as at 30 June

Activity	2014-15	2015-16
Total licences issued	47,007	48,023
Written warnings issued	7	27
Infringement notices issued	61	17
Banning notices issues	7	1
Exclusion orders (issued by courts)	1	0
Game licences suspended	1	4
Game licences cancelled	1	4
Authorisations/permits suspended	0	0
Authorisations/permits cancelled	0	1
Court proceedings	21	26

Sources: GMA (2016, p. 18; 2016b, p. 21)

As the recent Victorian Parliamentary Inquiry into the Control of Invasive Animals on Crown Land observed, these figures indicate that very small numbers of recreational hunters have been found by the GMA to have not complied with the rules (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 93). However, this is not the same as saying the numbers indicate the actual number of infringements of the hunting laws are small or that the GMA has been effective in its compliance and enforcement actions.

The former Department of Primary Industries (2012, p. 41) observed that as “game hunting is often undertaken in areas that are not easily observed...the number of warnings, infringements and prosecutions could be regarded as a minimum measure of the extent of the problem.”

The low number of successful enforcement outputs reported by the GMA is at odds with the well-documented evidence of large-scale non-compliance with the game laws at peak events such as the opening of the duck season.

Koorangie State Game Reserve

The 2017 duck hunting season opened on Saturday 18 March.

An estimated 2,000 hunters were present at Koorangie State Game Reserve over the opening weekend of the season (Game Management Authority, 2017f, p. 5). Hunters were observed by the GMA engaging in illegal and/or unethical or irresponsible behaviours. The illegal behaviours included early shooting, shooting protected species, hunting from a moving boat and littering. Unethical/irresponsible behaviours included shooting at birds beyond the hunters' effective shooting skills distance (which often results in wounding), failing to recover shot birds and dumping of shot birds.

Members of the public subsequently collected and presented 810 birds recovered mainly from the Koorangie State Game Reserve (Game Management Authority, 2017f, p. 6). This included 635 unrecovered/discarded game ducks and 173 protected wildlife, including 21 threatened Blue-billed Duck and 68 threatened Freckled Duck. The GMA has indicated that departmental staff also collected a small number of unrecovered game and protected species. Several days later, members of the public presented a further 436 dead game and protected birds. These included 44 Freckled Duck, 15 Blue-billed Duck and 28 other non-game birds that were mostly collected from the Koorangie Marshes.

The following week, pits containing the bodies of almost 200 dead ducks were discovered. The ABC program 7.30 reported claims that the pits were proof that hunters were exceeding their bag limit and dumping the bodies (Day, 2017). Bag numbers averaged only 5.9 ducks on the opening day.

Despite the extent of non-compliance with the game laws observed by GMA enforcement staff, Authorised Officers and members of Victoria Police, eleven banning notices were issued to protestors and one infringement notice was issued to a hunter for shooting before the legal hunting time. Infringement notices were subsequently also issued to four hunters for failing to retain a wing on a game duck. The GMA has indicated that while some additional video material will be scrutinised for offences, it is unlikely that a significant number of further offences will be processed (Game Management Authority, 2017f, pp. 5-6).

The events at Koorangie Marshes, and earlier similar events at Box Flat in 2013, represent significant failures of a state regulatory agency to enforce the laws for which it is responsible and have seriously undermined the GMA's credibility as an independent and credible regulator. The GMA's Senior Game Officers and Game Managers have suggested that similar events are likely to have occurred across the state, though perhaps not on the same scale. These failures were not isolated events and they point to systemic deficiencies in the overall regulatory framework and GMA's approach to compliance and enforcement.

There are numerous reasons for the GMA's failure to effectively enforce the game laws at peak events. The GMA (2017f, pp. 8-10) has pointed to its own limited capacity and an operating model that compels it to rely on other regulators and enforcement agencies. The GMA (2017f, p. 7) has argued that it is chronically under-resourced. While the GMA (2017f, p. 11) acknowledges that it received strong support from its partner agencies for the opening of the 2017 duck hunting season, it has suggested that many of the surge staff that it is forced to engage are becoming increasingly inexperienced in the function. Co-regulators also indicated to the review team that their staff are becoming less effective in enforcement of the hunting laws as time goes by. While temporary access to experienced Wildlife Officers was effective while the GMA was a part of the former Department of Environment and Sustainability, with changes in functions and priorities, DELWP staff are increasingly unfamiliar with the conditions under which surge events are managed as more experienced Wildlife Officers retire or move on in their careers.

The GMA (2017f, p. 11) has also suggested that its enforcement efforts on the opening weekend of the duck hunting season were diverted from their core task of regulating hunting by the presence of large numbers of protestors, though management of protestor activity had been identified in planning documents as an objective for the GMA's compliance activity event (Game Management Authority, 2017a, p. 16), so this should not have been unexpected, and it is not otherwise clear why it was necessary to divert "all available game enforcement officers ...to assist Police" in this activity (Game Management Authority, 2017f, p. 11).

The choice to prioritise action against protestors was a management decision reflected in operational planning prior to the event and was not forced upon the GMA (2017d, p. 3). It is difficult to understand why the GMA would attach a higher priority to protestor management than to the enforcement of the hunting laws for which it has the primary responsibility. Senior Game Officers and Game Managers expressed frustration with the priority attached to protestor management and indicated they could be more effective if they were able to focus on hunters. This reinforces the comments of a spokesperson for a hunting organisation, who said after the events at the Koorangie Marshes that "[c]harging the small number of hunters acting illegally and confiscating their firearms on the spot would have a much greater and more immediate effect on protecting non-game species than all the protestors' antics" (Wahlquist, 2017).

Senior Game Officers and co-regulators consulted in this review referred to the difficulties of collecting information and establishing a chain of evidence that would support a prosecution in relation to many of the offences that were observed at Koorangie Marshes. All stakeholders agreed the requirement to work closely with Victoria Police on enforcement actions and the Police's own requirements relating to working on or near water severely limits the GMA's capacity to effectively enforce the game laws in the circumstances that apply on the wetlands during the opening weekend of the duck hunting season.

While the opening of the duck hunting season poses challenges, the GMA's failure to effectively enforce the hunting laws is not restricted to the opening weekend of the duck hunting season. Feedback from hunting organisations, the GMA's co-regulators, animal welfare bodies and

community organisations has suggested that unsanctioned non-compliance with the hunting laws is commonplace and widespread. Senior Game Officers and Game Managers also indicated that they were aware of repeated instances of non-compliance in relation to deer hunting and hunting for deer with hounds that they were unable to pursue as a consequence of the GMA's operational policies and resource constraints.

The GMA's official enforcement statistics appear to understate the extent of non-compliance with the game hunting laws. It is, however, difficult to judge the precise extent of non-compliant behaviour that escapes the GMA's enforcement efforts. The Inquiry into the Control of Invasive Animals on Crown land noted that concerns about irresponsible and illegal hunters were raised during the inquiry (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017). The Committee also reported that a number of hunters acknowledged some of the problems with illegal and irresponsible hunters, but saw them as a minority. The Committee concluded that with no available data on the incidence of illegal and irresponsible hunting, it was difficult to assess the prevalence of the problem (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 93). Issues with the quality of the GMA's information and monitoring capabilities are discussed in more detail in section 5.3 of this report.

GMA staff feel that many hunters hold the organisation in contempt and openly flout the hunting laws. One hunting organisation indicated that hunters disregard the GMA's enforcement officers and will openly engage in illegal behaviour in front of them, in the knowledge that GMA Authorised Officers are not able to approach them in the absence of a Victoria Police officer. He suggested that poor behaviours would continue until the GMA was able to hold illegal and irresponsible hunters to account. He observed that his licence had only been checked by the GMA (and its predecessors) once in his thirty years' of hunting experience. Facebook posts by individual hunters detailing their illegal hunting exploits only reinforce the impression of widespread non-compliance.

One hunting organisation consulted in this review summed up the GMA's enforcement performance as "woefully inadequate." By any standard, the GMA has failed to deliver on its responsibility to enforce the hunting laws.

5.6 Reporting

Measuring and reporting on performance is an essential element of an effective approach to regulation (Australian National Audit Office, 2014, p. 27). Reporting on compliance and enforcement actions and their outcomes contributes to the transparency and accountability of the function and supports performance management and evaluation.

External reporting

Statutory reporting

The GMA Compliance Policy acknowledges the importance of reporting but focuses mostly on the GMA's reporting to Parliament through the Annual Report and responses to the Minister's Statement of Expectations (Game Management Authority, 2016a, p. 21). The GMA has provided an annual report to Parliament each year that has included information on compliance and enforcement activities.

These are informative documents, but they provide a minimum acceptable level of transparency in relation to the GMA's compliance and enforcement activities. The publication entitled *Administering Regulation: Achieving the right balance - Better Practice Guide* produced by the Australian National Audit Office (ANAO) (2014), suggests that in addition to reporting externally on performance through an annual report to the Parliament, regulators may also find benefit in publishing performance information more frequently on their websites.

The ANAO (2014, p. 27) argues that regular monitoring and reporting may assist in managing stakeholders' expectations in relation to the regulatory process and aid management in monitoring and assessing operational performance. At present, the GMA does not routinely publish performance information on its website, though it does publish an annual compendium of Game Licence Statistics.

Complaints handling

Well-defined and independent complaints handling procedures can enhance transparency and accountability in regulatory administration. Arrangements for handling complaints need to reflect the complexity of the regulatory environment and provide an effective avenue for regulated entities or other stakeholders to seamlessly provide feedback and lodge formal complaints (Australian National Audit Office, 2014, p. 23).

A number of external stakeholders suggested to the review that they had made representations to the GMA about the effectiveness of the compliance and enforcement regime that had not been responded to.

In its Compliance Policy, the GMA (2016a) commits to undertake an assessment of all complaints about activities or conduct of the GMA or GMA Authorised Officers, with subsequent investigation and corrective or preventative action taken where necessary. The Compliance Policy indicates that each complaint will be logged and reviewed and, depending on the details, allocated for investigation and action. Information about the progress and results of a complaint will be provided to the complainant, and the outcome will be communicated at the end of the investigation process.

The GMA has advised that it does not have a formal process in place for handling complaints against Authorised Officers. However, the GMA has advised that it is in the process of developing a low-cost process that will allow for central records to be maintained and for external

investigation where this is required. The GMA reports annually on complaints in its Annual Report, but this only relates to formal complaints regarding Authorised Officers. Given the GMA's size, the most cost-effective approach would be to piggy-back off the arrangements already in place within DEDJTR.

At present the GMA does not have a formal process for handling general complaints from the public about the regulatory regime or its regulatory performance.

The GMA is a small agency and does not have the resources of many larger regulators. The question of what constitutes a complaint can also be difficult to ascertain. A contact that the source considers to be a formal complaint may be perceived by the recipient as a complaint, a piece of intelligence about non-compliant activities, a request for assistance or general feedback. Nevertheless, the GMA is a public regulator and has an interest in obtaining as much information as possible from its stakeholders on its performance and the general regulatory context.

Many regulators have a central process in place to deal with general complaints about their performance. Complaints can be a useful source of feedback on the overall regulatory regime, agency performance or just changes in community sentiment. Feedback should be actively monitored and brought to the attention of senior executives and managers so that it can be responded to and inform future decision-making. If there is doubt about the intentions of the source, then they should be contacted so their intentions can be clarified.

The GMA should develop a formal system for recording, monitoring and responding to general complaints from the public about the regulatory regime and the GMA's performance as a regulator.

Internal reporting

Strategic reporting

The Minister's Statement of Expectations refers to the need to report on the performance improvements set out in the letter, including details of specific targets and activities, and a clear timetable for these to be achieved (Pulford J. , 2016). The Statement does not, however, set out any expectations or requirements in relation to internal reporting.

The *Administering Regulation: Achieving the right balance - Better Practice Guide* publication suggests that access to and analysis of key management information, such as workload statistics and costing targets, facilitates day-to-day operational and resource management (Australian National Audit Office, 2014, p. 27). While the ANAO acknowledges that identifying measures of regulatory effectiveness is particularly challenging for many regulators, it argues that it is important that effectiveness and efficiency indicators are defined, measured and reported for internal management and external accountability purposes.

The GMA does not routinely generate internal management reports on the effectiveness of its compliance and enforcement activities. Statistics on the compliance and enforcement activities of

Game Managers and Senior Game Officers are compiled and maintained for publication in the Annual Report and Game Licence Statistics, and may be accessed by senior executives and managers from time to time, but the information is not routinely provided on a monthly or quarterly basis to the CEO or the Board. In the absence of this information, it is difficult to see how the GMA Board and CEO could be fully informed of the outcomes of compliance and enforcement activity overall, or be in a position to adjust compliance and enforcement strategies to better achieve the Authority's compliance objectives.

In a fully effective contemporary regulator, a compliance strategy or compliance plan would set out the specific compliance and enforcement goals, strategies and performance measures that are to be applied in the upcoming period and would then report against the achievement of the goals on a regular periodic basis to allow adjustments to be made to the priorities, strategies or operational methods as feedback is obtained on the success of the agreed compliance strategies. This of course requires time and resources, and Senior Game Officers and Game Managers pointed to the distraction that reporting can involve for officers who are already over-stretched in terms of the geographic areas they are expected to cover.

There is scope, however, to improve the quality of reporting on the effectiveness of the GMA's compliance and enforcement to the CEO and the GMA Board, especially as much of the information is already collected for publication in the Annual Report and the Game Licence Statistics.

Operational Reporting

The GMA's operational reporting is more developed, but has not always worked effectively. At present, operational plans include requirements for updates and reporting from field staff. The South West Operation Plan for the 2017 Duck Season Opening, for example, set out a requirement that situation reports were to be completed by specified times on each of three nominated days (Game Management Authority, 2017e, p. 12).

The GMA acknowledges that these arrangements were not sufficient to ensure the Minister, the GMA Board and senior executives received timely or accurate information on hunter behaviours or the GMA's compliance efforts on the opening weekend of the 2017 duck season. A summary report provided to the Minister at the conclusion of the opening weekend did not report the extent of the unrecovered game ducks or the damage to protected wildlife. The Minister's comments in response to questions in Parliament were therefore at odds with the actual events at the Koorangie Marshes (Game Management Authority, 2017f, p. 12). The GMA (2017c, p. 6) has proposed a series of changes to operational reporting arrangements. However, this work is still in progress.

5.7 Conclusions

The GMA is not effectively delivering its compliance and enforcement responsibilities.

While many hunters are law-abiding and responsible, non-compliance with the game hunting laws is commonplace and widespread.

The GMA does not maintain any clear measure of hunters' understanding of the game hunting laws or the requirements of ethical and responsible hunting, or their willingness to comply.

The GMA has well-developed policies, plan and procedures, but its approach to regulation is relatively static and it lacks well-articulated strategies for improving regulatory compliance. The GMA should develop a more systematic approach to the development, implementation and review of its compliance strategies.

The current licensing arrangements are ineffective in ensuring a minimum acceptable level of awareness and competence amongst hunters. A more effective licensing regime is likely to improve hunters' understanding of their obligations and increase voluntary compliance with the game hunting laws. It would also reduce the pressures on an already over-stretched enforcement function.

Licensing should involve more stringent minimum requirements, including testing for knowledge of the game hunting laws and the obligations and responsibilities of safe and sustainable hunting.

The GMA has made significant investments in the production of high-quality educational materials. However, the delivery of these products has not been efficient or well-targeted. The oversight and management of the SEP has been deficient.

The GMA should do more to review and evaluate its compliance and enforcement efforts.

The GMA under-invests in monitoring and intelligence and should work with stakeholders to improve its access to data on game numbers and the effectiveness of its compliance and enforcement programs.

The GMA also needs to consider ways of better ways of managing the demand for its services, its approach to regulation, and the balance of resources it allocates to locally based and isolated enforcement activities relative to persuasive strategies to encourage higher levels of compliance. A small number of well planned, intelligence informed strategic operations can deliver a strong deterrence message in the context of persuasive strategies.

The GMA also needs to improve the transparency of its reporting mechanisms.

6. Operating model

This section considers the impact of the GMA's operating model on the effectiveness of its compliance and enforcement functions.

6.1 Institutional form

The GMA's institutional form has an impact on the effectiveness of its compliance and enforcement functions.

GMA's 18 staff are currently oversighted by a Board of seven, though for most the GMA's existence as a statutory body the Board has included nine members.

The Board sets the strategic direction and business objectives of the Authority and ensures that these are consistent with the Authority's legislative and regulatory framework (Game Management Authority, 2015, p. 9). The Board maintains an Audit and Risk Committee and until recently a Remuneration Committee.

Board meetings are held regularly throughout the year as necessary for the Board to discharge its obligations. In 2014-15, the Board met eight times, the Audit and Risk Management Committee four times and the Remuneration Committee once (Game Management Authority, 2015, p. 9). In 2015-16, the Board met seven times, the Audit and Risk Committee 6 times and the Remuneration Committee twice (Game Management Authority, 2016, p. 9).

These structures impose a range of direct costs and overheads. GMA staff are required to report to and assist in servicing the meeting needs of the Board and its various committees. The GMA has estimated the corporate overheads associated with its status as an independent statutory regulator represent the equivalent of two to three full time staff. This is not a large number in absolute terms, but for an authority with 18 employees, it represents a significant proportion of the overall workforce that is not available for other activities.

The GMA also incurs other costs not normally borne by a departmental regulator. As noted in section 3.4, these costs include the requirement to produce an annual report to Parliament, the financial, accounting and reporting requirements of the Standing Directions of the Minister for Finance, and the responsibilities and obligations of an employing authority. The GMA has no dedicated in-house resources to support these obligations. Some corporate support is provided by the DEDJTR under a Memorandum of Understanding. However, there is no Service Level Agreement that adequately describes the services the GMA receives, the agreed level and standard of those services and the performance indicators that would enable the GMA to evaluate whether it is receiving value for money or consider other arrangements.

The GMA has indicated the absence of dedicated in-house resources to meet its reporting and financial obligations imposes a burden on the CEO and senior management that distracts them from the direction and oversight of the GMA's compliance and enforcement program. While departmental regulators share some of these responsibilities and may be required to contribute to products such as annual reports, the responsibility for delivery generally rests with a separate corporate group and the costs are spread across a much larger number of staff.

The GMA lacks the size and critical mass to effectively service its corporate model and support its compliance and enforcement functions. The game management and enforcement teams are small and spread across five locations in shared state government offices around the state. The fragmentation of the team limits the scope to develop, or to gain economies, from the more strategic elements of compliance, including intelligence gathering, planning, collaboration, education and communication.

The small size of the compliance and enforcement teams restricts the GMA's capacity to refresh its capabilities through the regular injection of younger, more recently educated staff who could bring new approaches to the way in which the GMA approaches its compliance and enforcement activities. The independent review of the GMA's risk management pointed to some of the training and induction challenges associated with the GMA's lack of scale, and the constraints this imposes on the GMA's recruitment and development options (Emergency Management Consultancy Services, 2015, p. 17).

While the GMA has attempted to co-locate Game Managers and Senior Game Officers where possible, and the staff have access to support from other state government employees, the GMA's compliance and enforcement staff do not have access to the career structures and development opportunities of compliance and enforcement staff in larger regulators. The GMA is also exposed to duty of care issues in relation to employees who are often required to work in the field alone while potentially exposed to hunters with firearms, hounds and/or other weaponry.

Some of these risks could be mitigated by centralising the compliance and enforcement functions in Melbourne or a regional centre. This would facilitate tasking and coordination of compliance and enforcement activities and provide additional support for the Game Managers and Senior Game Officers. However, it would also reduce the GMA's regional footprint across regional Victoria and potentially interrupt GMA's access to local information and intelligence. There is no perfect solution.

The GMA Chairperson has drawn attention to constraints on the GMA's operational flexibility, arguing that "[g]iven the breadth of responsibilities placed on the GMA through the Game Management Authority Act 2014, there is no scope for the Authority to reprioritise to increase its enforcement resources, including staffing levels" (Game Management Authority, 2017f, p. 8). While there can be doubt about the extent to which the GMA is able to reallocate priorities to make better use of the resources available, the Chairperson is right to point to rigidities and inflexibilities attached to the current model.

The GMA's small size and independence handicaps the performance of its compliance and enforcement functions. A number of authorities have argued that larger regulators are likely to be more efficient and effective than a smaller regulator. The New Zealand Productivity Commission (2014, p. 251) has argued that larger and broader-based regulatory agencies provide economies of scale and scope and are more efficient than smaller agencies. A survey of British regulators as part of the Hampton Review (2005, pp. 6-7) also found that smaller agencies were more expensive to run, with higher average per-staff and per-inspection costs. Larger organisations may also be better placed to attract, retain and develop capability, apply more sophisticated risk assessment and compliance approaches, and allocate scarce professional resources more effectively (New Zealand Productivity Commission, 2014, p. 251). The Victorian State Services Authority has also suggested that larger, broad-based regulators are also less prone to capture than smaller, more narrowly-focused regulators (State Services Authority, 2009, p. 67).

An independent statutory authority is a high cost model for a small regulator. Inflexibilities inherent in the model limit the GMA's effectiveness as a compliance and enforcement agency.

6.2 Regulatory governance

When the then Minister for Environment and Primary Industries referred in the Second Reading Speech to ensuring that the functions of the GMA do not conflict with one another (Parliament of Victoria, 2013, p. 4671), he did not elaborate on how the independence of those functions was intended to be achieved in the GMA.

The three most common governance structures generally employed for independent regulators are:

- governance board model – the board is primarily responsible for the oversight, strategic guidance and operational policy of the regulator, with regulatory decision-making functions largely delegated by the chief executive officer (CEO) and staff;
- commission model – the board itself makes most substantive regulatory decisions; and
- single member regulator – an individual is appointed as regulator and makes most substantive regulatory decisions and delegates other decisions to its staff (Organisation for Economic Co-operation and Development, 2014, p. 69).

The GMA Board represents something of a hybrid between a governance board and a commission.

As explained at section 3.2, the GMA's compliance and enforcement functions are amongst a number of functions that are vested with the Board. While for practical purposes these functions report through line managers to the CEO (see Figure 1 on page 7), the Board may direct, seek information or terminate any compliance or enforcement matter.

The powers and obligations of the GMA Board impose unusual burdens for Board members and contributes to the potential for role confusion. As Board members appear to be personally responsible for the conduct of compliance and enforcement actions, the current arrangements can also give rise to perceptions that the GMA's compliance and enforcement function lacks

independence. This is an important exposure for a regulator that may include participants in the regulated activity and office holders of organisations in the regulated domain.

Many regulators provide a degree of operational separation for the enforcement function. These arrangements can include:

- the location of a clear accountability for enforcement functions outside the Board;
- clear and explicit compliance and enforcement strategies;
- transparent mechanisms for determining compliance and enforcement priorities and allocating resources, including a Tasking and Coordination Committee and Enforcement Committee with an external representative;
- protocols to maximise the protection of information relating to licensing, investigations enforcement activities; and/or
- operational separation of regulatory responsibilities from other functions.

The GMA has few of these protections. While there is a Manager of Compliance, the responsibilities for compliance and enforcement are in practice split between two Managers, both of whom are responsible through the CEO to the Board. While the GMA has previously maintained both a Tasking and Coordination Committee and an Enforcement Committee, it is understood that both committees have fallen into disuse.

It is understandable that the GMA would want to streamline its processes, and to avoid cumbersome committee structures as far as possible. However, these processes provide additional transparency around the enforcement function and offer some protection for the integrity of enforcement actions and the information associated with these activities.

To improve transparency and protect the independence of the enforcement function, the GMA should ensure that there is a clear separation between the Board and the intelligence gathering, investigations and enforcement functions.

By way of understanding the importance of these protections, it is worth reflecting on the important differences between the establishment of the GMA and the Victorian Fisheries Authority (VFA) in relation to the operational independence of the regulators' compliance and enforcement functions.

Under the *Victorian Fisheries Authority Act 2016* (Vic) (VFAA), a number of protections have been built into the statute to guard against regulatory capture. The VFAA establishes ineligibility criteria for appointments to the VFA Board, as well as conditions on directors exiting office. In this respect, under section 22 of the VFAA directors to the VFA Board cannot be appointed if they are:

- a member of the Fisheries Co-Management Council, Licensing Appeals Tribunal or Commercial Fisheries Licensing Panel; or
- is a holder or associated with a person or entity who is the holder of a current commercial fishery licence or aquaculture licence; or
- a senior or executive officer of a representative body; or

- within the period of 2 years before the appointment, had been the holder of a cancelled, suspended or discontinued commercial fishery licence or aquaculture licence.

Under section 33 of the VFAA, a person who ceases to be a director of the Board must not, at any time during the next 2 years:

- apply for or hold a commercial fishery licence or aquaculture licence; or
- be appointed as a senior officer or executive officer of a representative body.

The prohibition of persons holding an office or possessing a commercial licence within the fishing industry provides some protection for the regulator from the risk of direct industry capture. These protections do not apply in relation to appointments to the GMA Board. In appointing members of the GMA Board, the Minister must ensure that the Board has requisite experience or knowledge relating to game hunting and game and wildlife management, including pest animal management (section 10 of the GMA Act). However, the GMA Act does not specifically preclude office holders or commercial licence holders from appointment to the Board and does not prevent Board members from applying for or holding a commercial game-farm licence or from being appointed as a senior office holder or executive officer of a representative body.

The VFAA also provides for some operational separation between the Board and the VFA's compliance and enforcement functions. Under the VFAA, the VFA board employs a Chief Executive Officer (CEO) in consultation with the Minister. The VFA CEO in turn is the employer of all VFA staff. The role of the CEO includes responsibility for the day-to-day management of the authority, as well as exercising enforcement and compliance powers assigned to them under the *Fisheries Act 1995* (Vic). While this falls short of an absolute separation of the functions, this arrangement provides some operational independence for the VFA's compliance and enforcement activities from its other functions, and seeks to maximise information security associated with these activities, particularly to ensure the safety of officers in the field (Parliament of Victoria, 2016, p. 3595).

The Organisation for Economic Co-operation and Development (OECD) (2014, p. 72) has argued that the governing body of a structurally independent regulator should be insulated from inappropriate stakeholder, ministerial or industry influence. The former State Services Authority (2009, p. 55), the predecessor of the Victorian Public Sector Commission, observed that where stakeholder engagement is required, this should be undertaken through consultation mechanisms rather than through representational membership as part of management structures.²

The State Services Authority (2009, p. 67) recommended that regulators should be sufficiently broad in scope to minimise the risks of duplication, gaps and capture by industry and that they should be structured around broad themes in preference to narrowly scoped industry or sector-specific regulators. According to the Victorian State Services Authority, the consolidation of regulators could be based on:

² The Victorian Public Sector Commission replaced the State Services Authority on 1 April 2014.

- administration of regulation with similar objectives; or
- administration of regulation applying to related activities.

An arrangement that would have met the OECD principles and the requirements of the State Services Authority would have located the GMA's regulatory responsibilities with a statutory office holder, supported by staff employed by a larger, broad-based regulator. Fundamental change of this nature to the GMA's statutory model is arguably out of scope for this review. However, the terms of reference do invite reflection on changes to the operating model and broader institutional arrangements that would improve the effectiveness of the GMA's compliance and enforcement function.

Given the risks to the GMA's regulatory integrity that arise from the potential for role conflict and the potential in the GMA's governance structures for industry capture, the GMA should consider options for strengthening the independence of its compliance and enforcement functions. This could include internal governance arrangements, or structural or operational separation.

6.3 Partnership arrangements

The GMA employs a partnership model to provide its regulatory services.

To some extent, the model has been forced on the GMA by the regulatory and institutional framework in which it is embedded. The regulation of game hunting touches on a broad range of issues that are the primary responsibility of other government and non-government agencies, including DELWP, Parks Victoria, DEDJTR, RSPCA and Victoria Police. These responsibilities mesh and overlap in complex ways that require the GMA to work closely with other regulators and policy agencies to deliver on its statutory obligations.

The GMA would not be able to operate independently, even if it were resourced to do so.

Extended workforce

The GMA relies on its partner regulators for assistance in delivering a range of its statutory responsibilities, including participation in monitoring and analysis of wildfowl numbers, assistance with monitoring and surveillance tasks through the year and access to an extended workforce to manage surge events and provide other support in the field.

The GMA (2017f, p. 10) has indicated that it received strong support from its partner agencies in managing the opening of the duck hunting season in 2016, though this has not always been the case. Co-regulators consulted in this review expressed an understanding of the constraints under which the GMA operates and a strong commitment to supporting the GMA. However, the GMA has noted the commitment to assist is only voluntary and, should staff choose not to assist or the priorities of their own agency prevent them from assisting, capacity will be greatly reduced, limiting the ability to adequately enforce duck hunting regulations at key times. This creates uncertainty and presents a risk of not being able to provide an adequate enforcement response.

The GMA (2017c, p. 5) has also noted that it can only provide limited training and support for officers from other agencies who volunteer to assist at surge events.

The most effective surge staff are those who work in full-time compliance roles, such as DEDJTR Agriculture Victoria biosecurity officers, Fisheries Officers or DELWP Wildlife Officers (Game Management Authority, 2017f, p. 8). However, given their only infrequent exposure to working in game enforcement and the absence of mandatory refresher training, their effectiveness is compromised. Co-regulators indicated to this review that while willing, their most experienced and effective Authorised Officers were retiring and that more recent recruits were less comfortable with the regulation of hunting, and therefore less effective, than the staff they were replacing. One officer indicated that some volunteer staff were visibly distressed by the conditions on some wetlands during the duck hunting season and the agency would need to reflect upon its duty of care and responsibility to its own staff before committing staff to support the GMA in future.

While external agencies seem generally willing to make staff available to assist with surge activities, the GMA has suggested they do not provide adequate support for some other activities. DELWP is notionally responsible for coordinating the Summer Waterfowl Count prior to the start of the duck hunting season to, among other things, locate concentrations of rare or threatened species or breeding waterbirds so as to ensure that appropriate management action can be taken to prevent illegal destruction or disturbance.

However, the GMA claims that it often conducts the majority of counting. As noted in section 5.3, the decline in the number of wetlands being surveyed is also a concern. The GMA (2017f, p. 10) has indicated that currently only about 120 wetlands are counted, compared with a long-term average of approximately 350 and a historic high of 700. The GMA has pointed out that at present Parks Victoria plays no role in pre-season monitoring or in-season monitoring of closures or the need for closures. This creates risks where important issues requiring action are potentially not identified.

Our discussions with stakeholders suggests there is considerable goodwill between the GMA and its partner agencies. However, other agencies also have broader responsibilities and resource constraints and their participation in the GMA's activities rely to a large extent on the informal arrangements and shared understandings developed by officers over many years.

The GMA has indicated that coordination of major surge events such as the opening of the duck season is managed through a working group chaired by the GMA while other formal briefings and meetings with partner agencies also occur at various times throughout the season. Senior Game Officers and Game Managers suggested that other agency participation in GMA activities at other times of the year relies to a large extent on relationships that have built up over many years with their counterparts, often based on their shared experiences as Wildlife Officers. While helpful, these arrangements seem an inadequate long-term solution to the challenges of managing appropriate tasking and coordination of activities in such a complex environment.

Coordination across the relevant agencies would be improved by the development of a definitive statement of the accountability framework within which the GMA and its partner agencies are expected to work and up-to-date agreements or Memoranda of Understanding between the individual agencies in relation to the identification of priorities, the allocation of responsibilities, resource sharing and dispute resolution.

It is doubtful the GMA currently has the capacity or institutional leverage to develop an appropriate set of accountability documents. It is understood that DEDJTR has committed to undertake preparation of an “Accountability framework” to clearly articulate the roles and responsibilities of agencies involved in game management. The GMA should seek the assistance of DEDJTR in accelerating work on this project.

This model provides the GMA with capacity and capabilities to which it would not otherwise have access, but also constrains the GMA’s effectiveness as an enforcement agency as the GMA is relying on resources that it cannot control or fully rely upon. The existing operating model could, however, be made more effective if it were supported by a clearer accountability framework.

Operating with Victoria Police

The GMA is required to work in close collaboration with Victoria Police when dealing with armed or potentially armed hunters. The GMA (2017 April, p. 6) has indicated that “[n]atural resource management (NRM) agency’s [occupational health and safety] policies require Police to be present where firearms are involved”. It is understood this policy has its origins in the late 1990s and early-2000s when then Fisheries and Wildlife Officers were disarmed (Emergency Management Consultancy Services, 2015, p. 5).

The requirement to work with Victoria Police is frequently referred to in discussions with Game Managers, Senior Game Officers and external stakeholders as a constraint on the effectiveness of the GMA’s enforcement activities. The GMA has pointed out that combined operations can take weeks or months to organise and Police are then often called away or are unable to assist at the last moment due to the need to respond to other incidents which are of greater operational priority for them.

The GMA has also indicated that the reliance on Victoria Police leaves the GMA exposed to changes in Victoria Police policies and procedures over which the GMA has little or no control. The GMA has suggested that Victoria Police occupational health and safety requirements do not permit its officers to enter the water unless they are Water Police. The GMA (2017f, p. 9) has also indicated the adoption of a two-up policy by Victoria Police has further restricted the availability of Police to assist with enforcement activities.

The GMA was unable to provide a copy of the original NRM agency occupational health and safety (OHS) policies that form the basis of the requirement to work with Victoria Police. However, it has sought to express what it understands to be the intent of that model in a Standard Operating Procedure (Game Management Authority, 2014). The Standard Operating Procedure employs a risk-based operational response table that provides recommended control options for a range of

activities and scenarios. The approach in the Standard Operating Procedure is sophisticated and proportional.

However, it is evident that the approach is not well understood by some internal and external stakeholders. In workshops, Game Managers and Game Officers offered different interpretations of the policy and applied it differently to similar scenarios. The policy is also expressed differently in official GMA documents:

“any compliance activities targeting armed hunters will require the assistance of VicPol. Education or surveillance activities will be judged on their merits” (Game Management Authority, n.d., p. 5)

“Natural resource management (NRM) agency’s OHS policies require Police to be present where firearms are involved “ (Game Management Authority, 2017 April, p. 6).

Current OHS policy requires Game and other Authorised Officers to be accompanied by armed Victoria Police Officers when dealing with anyone in possession of a firearm or who is likely to be in possession of a firearm. (Game Management Authority, 2017f, p. 9)

The independent review of the GMA’s risk management of its compliance and enforcement function provides yet another slightly different interpretation of the policy: “[i]t is current GMA policy that Game Officers must be partnered with an armed member of Victoria Police whenever they deal with armed or potentially armed hunters” (Emergency Management Consultancy Services, 2015, p. 5).

It is difficult to encapsulate a dynamic risk approach in a single short statement, but the variations in expression of the policy in these statements points to genuine uncertainties in the minds of GMA enforcement staff and their co-regulators and a lack of clarity in the way that the policy is interpreted and applied in the field. This carries obvious operational risks, especially when there are high levels of inter-operability between agencies. It is also likely to have contributed to the reluctance of Game Managers and Game Officers to pursue compliance and enforcement activities in the field.

Some GMA staff argued that the requirement to operate with Victoria Police ought to be removed so that the GMA could operate as an independent enforcement agency. That also seems to be the view of the GMA Chairperson, who has advised the Minister that “the current compliance enforcement operational model that requires one regulator (GMA) to depend upon the presence of another regulator (Victoria Police) to fulfil its regulatory responsibilities is inappropriate and unsustainable” (Hine, 2017a). Other staff argued that the requirement to undertake higher risk enforcement activities with a Victoria Police officer was prudent and that they would be concerned about their exposure to risk if they were not accompanied by Police.

A number of staff suggested the policy was sometimes interpreted too narrowly and was susceptible to cherry-picking. They suggested that their operational enforcement effectiveness could be improved if the policy were clarified and refined rather than removed altogether. The GMA has advised that staff have received recent training on the policy, though that does not seem to appear on the record of training for Authorised Officers provided to this review. The Standard Operating Procedure in which this policy appears does not appear to have been updated since 1 July 2014 (Game Management Authority, 2014).

There appears to be some scope to clarify the Government's intent with regard to the requirement that enforcement operations be undertaken with Victoria Police and to refine and clarify the GMA's Standard Operating Procedure in which this policy is reflected. Appropriate training and support should also be provided for GMA staff and co-regulators on the interpretation and application of this policy.

An independent review of the GMA's management of risks in the compliance and enforcement function in 2015 concluded that access to a firearms would be a reasonable control measure to mitigate the risks faced by a Game Officer in the field (Emergency Management Consultancy Services, 2015, pp. 28,30-31). However, that review noted that this would "create some challenges for the GMA" associated with the development and implementation of Standard Operating Procedures, training, accreditation and re-accreditation, storage and handling of firearms and the associated costs (Emergency Management Consultancy Services, 2015, p. 30). The review also acknowledged that simply providing firearms and removing the need to work with police "does not automatically increase efficiency" (Emergency Management Consultancy Services, 2015, p. 31).

The current operational requirement to work with Victoria Police limits the GMA's ability to operate independently. However, it is not clear that it unreasonably constrains the GMA's effectiveness as an enforcement agency. At present, the requirement to be accompanied by Victoria Police officers only seems to apply to higher risk enforcement activities involving medium to high consequences or multiple offenders deemed to be high risk. It doesn't automatically apply to all enforcement actions.

Routine access to firearms may allow GMA staff to undertake some operations that are currently not able to be undertaken due to the unavailability of Victoria Police. However, firearms would impose additional costs and constraints on the GMA's operational effectiveness. If the GMA were to undertake independent, high-risk enforcement operations, its operational planning would be more complex, staff would require significant additional training and support, and they would likely be required to work two-up, further reducing the number of GMA enforcement teams across the state.

In addition, confrontations with armed offenders on matters involving moderate to high consequences would expose GMA staff to additional risks and raise complex duty of care issues for the Board and senior executives. It is conceivable that faced with these hazards, the GMA

would be more, rather than less, reluctant to engage in hard-edged enforcement actions with potentially aggressive or unstable offenders.

Importantly, senior officers of GMA's partner regulators indicated that they would be less likely to make their staff available for joint operations if GMA Authorised Officers were armed.

In the absence of a change in the current policy regarding operations with Victoria Police, the GMA should re-consider the priority that it currently attaches to deterrent-based enforcement activities and seek to influence hunter behaviours through other more compliance-based approaches.

6.4 Conclusions

An independent statutory authority is a high cost model for a small regulator. Inflexibilities inherent in the model limit the GMA's effectiveness as a compliance and enforcement agency.

As a small statutory regular with relatively narrow sectional interests, the GMA is vulnerable to capture by the interests it is seeking to regulate.

There is a need for more transparency in GMA's governance of its compliance and enforcement functions and for strengthened governance measures to protect its independence.

The current operating model provides the GMA with access to essential capacity and capabilities, but also constrains its effectiveness as an enforcement agency. The model could be supported by a more effective accountability and governance framework. The GMA should seek the assistance of DEDJTR in accelerating work on a more appropriate accountability framework.

The requirement to work with Victoria Police certainly restricts the GMA's ability to operate independently, but it is not clear that it limits the GMA's effectiveness.

There is some uncertainty about the intention and application of this policy, and the GMA should seek clarification of the Government's intent with regard to the requirement that enforcement operations be undertaken with Victoria Police and to refine and clarify the GMA's Standard Operating Procedure in which this policy is reflected. Appropriate training and support should also be provided for GMA staff and co-regulators on the interpretation and application of this policy.

7 Capacity and capability

This section assesses the GMA's capacity and capability to meet its compliance and enforcement obligations.

7.1 Introduction

Capacity and capability are slippery concepts.

A common understanding of capacity might refer to the availability of a resource (physical, human or information) while capability might refer to the nature or quality of that resource. Examples of capabilities could include management abilities, surveillance and monitoring techniques or skills in communication and stakeholder management.

However, in practice the terms are blurred. They can mean different things to different people and are sometimes used interchangeably. In an organisational context, capacity and capability only have meaning and relevance in the context of the capacities and capabilities that are relevant to the organisation's mission and purpose.

The capacity and capability that a regulator requires are not absolutes, but are related to its function, how it interprets its mission, its regulatory philosophy, the business model that it adopts and the environment in which it operates. A regulator managing low risks in an environment where the regulated agents are generally well-informed and generally compliant with the laws can operate a permissive regulatory strategy that requires capacity and capabilities that are very different from a regulator managing high risks in a non-compliant environment.

The assessment of the GMA's capacity and capability that follows is informed by the discussion of the GMA's role, legislative and regulatory environment and operating model outlined in previous sections of this report. If the regulatory environment or operating model were to be changed, there would be flow-on consequences for the capacity and capabilities required by the GMA.

The discussion of capabilities focuses on workforce capabilities, as organisational capabilities, such as policy and planning processes, regulatory architecture, systems and processes are discussed in detail in sections 5 and 6 of this report.

7.2 Financial, staffing resources and other assets

The GMA is a small agency with a core workforce of 18 staff (though several of those staff were not operational through the period of this review).

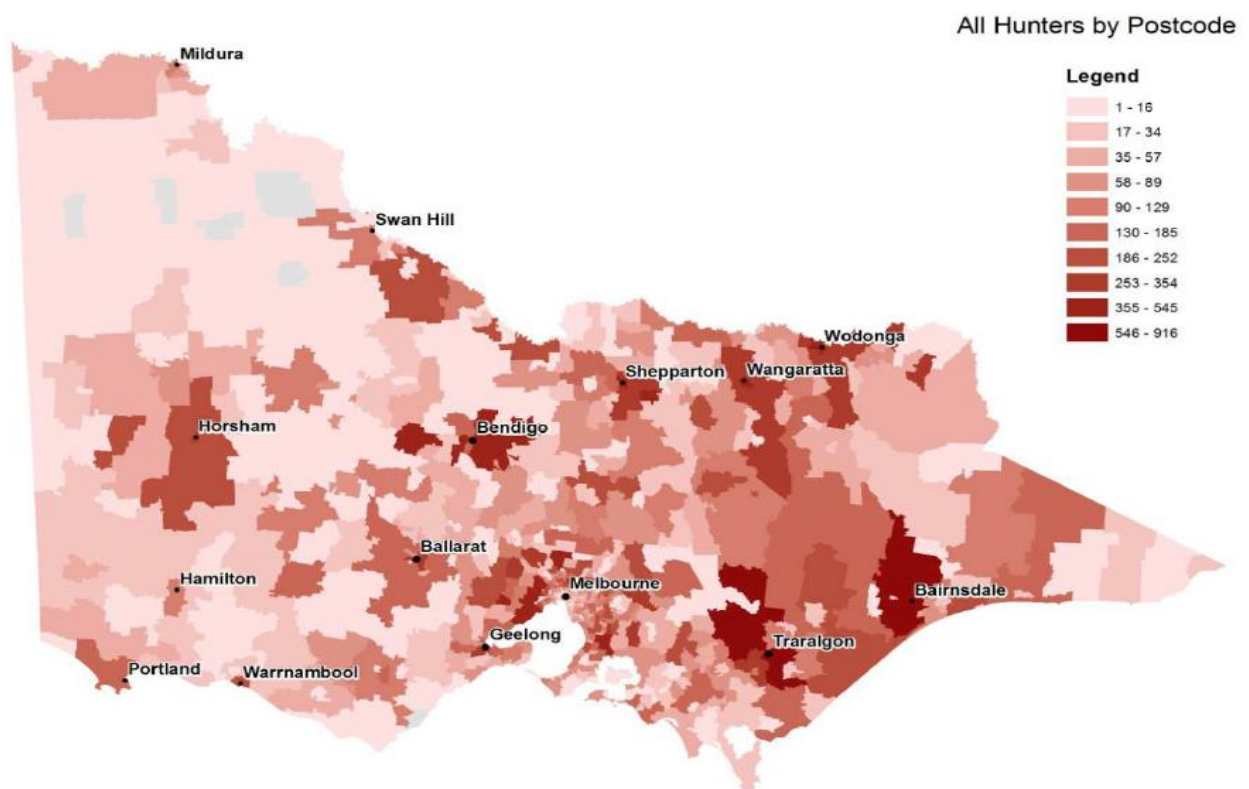
The head office comprising the CEO and senior managers is located in Melbourne and Game Officers and Game Managers are located in five regional locations around the State. Field staff are accommodated in shared offices with other Victorian government agencies.

It is not clear what advantage, if any, the GMA derives from its location in Melbourne. Current costs of rental space for GMA staff in Melbourne are around three times the cost the GMA currently pays for staff located in regional Victoria.

A regional location would be cheaper, and would provide the GMA with greater access to the regional communities and stakeholders that are most directly affected by the activities that it regulates.

This can be seen in Figure 5 below that shows most hunters are located outside of the Melbourne metropolitan area. Hunting areas, of course, are almost exclusively outside Melbourne.

Figure 5: All Victorian resident hunters by postcode as at 30 June 2016



Source: GMA (2016b, p. 14)

One or two regional hubs would provide an improved working environment for staff, who could be co-located with their peers and managers, and would facilitate the management of integrated responses. Compliance and enforcement activities in particular would gain from access to local knowledge and opportunities for engagement with local communities.

As noted in section 3.3, the GMA (2016, p. 44) receives an annual grant of \$4.8 million from DEDJTR. In 2015-16, the GMA reported a total revenue of \$5.0 million.

In 2016-17, the Victorian Government also committed \$5.3 million over four years to support safe, responsible and legal hunting through the *Sustainable Hunting Action Plan* (Department of Treasury and Finance, 2016, pp. 37,42,48). It is understood that, of this amount, around \$1.4 million over four years will be available to the GMA.

At 30 June 2016, the GMA (2016, p. 32) held assets of \$7.0 million, including \$4.9 million in cash and deposits and \$0.4 million in property, plant and equipment. The GMA also held \$1.7 million in accounts receivable. Liabilities were reported as \$3.4 million, leaving a net asset position of \$2.5 million.

Employee expenses in 2015-16 totalled \$2.3 million (Game Management Authority, 2016, p. 31).

7.3 Capacity and scope of responsibilities

The GMA has a very wide remit and a broad range of research, advisory and regulatory responsibilities.

It operates in an extremely complicated legislative and institutional framework in which a number of public agencies retain fragmented and overlapping responsibilities for management of issues related to game management. The partnership arrangements and mechanisms for coordinating actions between these agencies are cumbersome (Game Management Authority, 2016, p. 19) and require attention to support and maintain.

As noted in sections 4.1 and 4.2 of this report, the Government has added to the GMA's general statutory responsibilities a number of policy, research and operational tasks through the *Sustainable Hunting Action Plan* and Ministerial Statements of Expectations. These include a lead responsibility for implementation of the *Plan* and the coordination of other agency inputs. The Minister's Statement of Expectations also expresses an expectation the GMA will pursue a number of initiatives, including the development of an online game licensing system, implementation of a Waterfowl Conservation Harvest Model, development of a game species research strategy and a number of other specific performance improvements and targets (Pulford J. , 2016).

These commitments would stretch a policy agency with greater resources than are available to the GMA. They are additional to the GMA's ongoing obligation to ensure compliance with the game hunting laws across Victoria.

The GMA is required to enforce a population approaching 50,000 licenced game hunters over more than 8 million hectares of public and private land available for game hunting. In addition, the GMA is required to cover private land that may be hunted with the permission of the landowner/manager and enforce illegal hunting that may occur on other areas of the public land estate which are closed to hunting (Game Management Authority, 2017f, p. 7). Private landholders also have a reasonable expectation that the GMA will assist in managing the impacts of game hunting on their land, whether that hunting takes place on their land or on adjoining public or private land.

The GMA's compliance and enforcement capacity is stretched extremely thinly across a vast geographic area that includes remote and inaccessible areas in which hunter behaviours are extremely difficult to observe. Periods of peak hunter activity (like opening weekend of the duck hunting season) place further pressure on the GMA's capacity.

The difficulty of ensuring compliance with the game hunting laws across the state within current resourcing levels may be illustrated by the imbalance of resources available to the GMA on the opening weekend of the 2017 duck hunting season. Opening weekend of the duck season records the highest rate of hunter activity for any period of the hunting season. Surveys suggest that up to 60 per cent of the state's 26,000 licensed hunters are active over this period (Game Management Authority, 2017f, p. 4).

To enforce the hunting laws on the opening weekend of the 2017 duck hunting season, the GMA (2017 April, pp. 4-5) had access to its own staff of 5 Game Officers and 5 Game Managers and around 150 additional staff from the GMA, Victoria Police, Parks Victoria, DEDJTR and DEWLP. While these staff were experienced in their own fields, they were mostly volunteers and were only partially trained in enforcement of the game hunting laws (Game Management Authority, 2017f, p. 10; Game Management Authority, 2017c, p. 5). It is understood that only some of these staff were authorised to undertake enforcement actions.

The GMA ensured that enforcement and survey staff were present at 40 major wetlands across the state. In addition, priority areas of private property were targeted. Approximately 4,900 hunters were present at patrolled wetlands. This constituted 33 percent of the estimated total number of active hunters.

An estimated 2,000 hunters were present at the Koorangie State Game Reserve over the opening weekend of the duck season. Approximately 120 protestors were also present. The GMA was able to deploy 15 Authorised Officers from across the natural resource management agencies, 12 members of Victoria Police, one video camera operator and three bag survey staff. Additional Authorised Officers were deployed throughout the region to Boort (6), Donald (4), Loddon River (2), Mildura (2) and Gunbower (2). All Authorised Officers were accompanied by Victoria Police (Game Management Authority, 2017f, p. 5).

Given the circumstances, it is difficult to argue that the GMA did anything other than deploy the available resources efficiently and effectively across the state to manage its enforcement responsibilities as best it could. However, the resources available were manifestly inadequate to effectively enforce the game laws for which the GMA is responsible within the existing policy and compliance framework (see section 5.5), and in similar circumstances it could be expected that similar outcomes would be achieved.

The GMA's compliance and enforcement capacity is stretched extremely thinly across a vast geographic area that includes remote and inaccessible areas in which hunter behaviours are extremely difficult to observe. A comparison of the GMA's responsibilities and resource levels with other similar organisations is set out in Table 2.

The most similar agency to the GMA in Australia with respect to its role and accountabilities is the New South Wales (NSW) Game Licensing Unit (GLU), within the NSW Department of Primary Industries. The GLU is the successor to the former NSW Council. It has responsibility for game licensing, game enforcement, hunter education, research and advice to government on game hunting matters.

The GLU has a total of 33 staff (compared with 18 GMA staff), which includes 14 game officers (compared to GMA's five). Despite the significantly higher level of resourcing, the GLU has only 19,000 licenced hunters (compared to Victoria's 50,000) and hunting is available on 2 million hectares of public land (compared to Victoria's 8 million). Access to land for hunting purposes is also more tightly controlled through a system of permits and balloting arrangements (see section 8.5).

The Tasmanian Game Management Unit oversighted 1,158 duck licences in 2016 (compared with 25,646 duck licences in Victoria), and 15,007 licences overall (compared with 48,023 licences in Victoria) but has 11 staff including six wildlife rangers compared to GMA's 18 staff including five Game Officers.

The GMA has too few staff to effectively enforce the game laws for which it is responsible.

Table 2: Comparison of game and related regulators

REGULATOR	FORM OF REGULATOR	GOVERNANCE ARRANGEMENTS	SCOPE OF POWERS	FUNDING SOURCES	RESOURCES	NUMBER OF LICENCE HOLDERS
Fisheries Victoria	Statutory	Chairperson, Vice chairperson, board of 6 additional Directors (5-8 Directors specified in Act)	Licensing, education of rights and obligations, monitoring and assessment of fisheries for sustainability, administration of fishing-related grants	Funding from the Recreational Fishing Licence (RFL) Trust Account disburses revenue derived from the sale of RFLs. Total disbursements of \$7.45 million in 2015-16. (Department of Economic Development, Jobs, Transport and Resources, 2016).	\$2.24 million provided in 2015-16 to Fisheries Enforcement and Education Branch from the RFL Trust Account (Department of Economic Development, Jobs, Transport and Resources, 2016). 64 full-time field enforcement staff in 2017 (Department of Economic Development, Jobs, Transport and Resources, 2017).	294,051 RFLs sold in 2015-16 (Department of Economic Development, Jobs, Transport and Resources, 2016). Some 800,000 fishers but various exemptions provided (Pulford J. , 2017).
NSW Game Licensing Unit	Departmental (NSW Department of Primary Industry)	Game Licensing Unit (GLU) within the Fisheries Branch of the NSW DPI, subsidiary to Director General, Deputy Director	Game licensing and compliance, education, research and advice to government.	\$6 million in funding per annum, \$4.5 million provided from the NSW Government and \$1.5 million from hunting	GLU has a total of 33 staff including 14 game officers. (Personal correspondence with GLU)	There were 19,124 recreational game hunting licence holders in April 2017 (RMCG, 2017, p. 6).

		General (Fisheries), and Secretary		licence revenue. (Personal correspondence with GLU)		
SA Fauna Permits Unit	Departmental (Department of Environment, Water and Natural Resources	In 2015-16 was part of the Customer and Corporate Services Group.	Issues permits for hunting purposes (general hunting, duck and quail hunting).	Departmental. Not listed separately in Annual Report or Budget documents.	Four offices (based in Adelaide, three regional offices). Staffing unclear, although compliance and enforcement appears to be incidental to other wildlife management functions.	9,145 permits issued for hunting purposes in 2015- 16 (Department of Environment, Water and Natural Resources, 2016)
Tas. Game Management Unit (GMU)	Departmental (Department of Primary Industry, Parks, Water and Environment)	As at July 2017, unit part of the Wildlife Management Branch within Corporate Heritage and Lands division.	Primary contact for all forms, permits, and licences related to Tasmanian fauna.	Departmental. Not listed separately in Annual Reports or Budget documents.	GMU has offices in Hobart and Launceston and has 11 staff in total including 6 wildlife rangers (Department of Primary Industries, Parks, Water and Environment - Wildlife Management Branch, 2017).	7,582 wallaby, 5,114 deer, 1,158 duck, 834 short- tailed shearwater bird, 230 quail, and 89 King Island Pheasant hunting licences in 2016. (Department of Primary Industries, Parks, Water and Environment - Wildlife Management Branch, 2017)

New Zealand Fish and Game Council (Fish and Game New Zealand)	The collective brand name of 12 regional Fish and Game Councils and the New Zealand Fish and Game Council.	Fish and Game Councils are regionally autonomous bodies governed by elected Fish and Game councillors who are elected every three years by adult full season licence-holders across the respective region. The New Zealand Fish and Game Council is made up of one representative from each of the regional councils. Annual report delivered to Minister for Conservation.	Administers sports fishing and game-bird resources in New Zealand. Note that deer hunting on public land is managed separately by the Department of Conservation.	Licence fees and levies, interest, research income, magazine contributions, and guidebook advertising. (New Zealand Fish and Game Council, 2016)	\$3.7 million in revenue in 2016, of which \$3.5 million from levies. Six council staff listed in Annual Report, plus seventeen representatives from regional councils (New Zealand Fish and Game Council, 2016). In addition, 52 warranted staff rangers and 220 warranted honorary rangers operate around the country, with a maximum of 30 in any one of the 12 Fish and Game regions (personal correspondence).	Around 36,000 bird hunting licences sold by Fish and Game New Zealand in 2016 (Cavanagh, 2016). For the 2013/14 fishing season, Fish and Game New Zealand issued the equivalent of 78,440 whole-season fish licences for adults (Statistics New Zealand, 2015).
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7.4 Funding model

The GMA is currently funded by an annual grant from the DEDJTR. The funding provided to the GMA through DEDJTR has been virtually static since its establishment in 2014.

In addition to the fixed grant, some small amounts have been earned by GMA on interest and the sale of services, and supplementation has been provided by the Government for new commitments related to the *Sustainable Hunting Action Plan*.

This current funding model is unusual, as independent statutory authorities are generally funded by direct appropriation from Parliament, or by a mix of parliamentary funding and fees or levies. For 2017-18, funding for the GMA is provided within a DEDJTR program “Sustainably Manage Fish, Game and Forest Resources” of \$89.9 million (The State of Victoria, Department of Treasury and Finance, 2017, pp. 130-131).

The GMA’s resources have remained relatively fixed since 2014, despite significant increases in external demand for its services. As shown in section 4.5, deer licence numbers have increased by over 300 per cent since 1996 and around 10 per cent since the GMA (2016b, p. 7) was created.

DEDJTR officers indicated that by maintaining the GMA’s grant in nominal dollar terms, the department had protected the GMA from funding cuts that had been applied to other agencies of government over the past several years. However, they also acknowledged that the GMA’s funding base had been established at a time when its home department was seeking savings across all of its activities and that the initial level of funding extended to the GMA had not been calculated on a zero base assessment of the resources required to effectively fulfil its functions as a stand-alone agency.

The current funding model for the GMA, in which funding is static and external demand is growing, is not sustainable. Previous sections of this report have also pointed to significant gaps in the GMA’s regulatory capabilities, such as a more effective licensing system and more systematic monitoring and intelligence capabilities, that are currently beyond the GMA’s capacity and will require additional investment.

Some game management agencies in other jurisdictions have traditionally been funded or part-funded from licence fees. As shown in Table 2, the Victorian Fisheries Authority, the NSW Game Licensing Unit and the New Zealand Fish and Game Council all receive a proportion of their revenue from licence fees.

In the GMA’s case, however, at their current levels, licence fees would not provide a sustainable funding source for the GMA. The recent Victorian Parliamentary Inquiry into the Control; of Invasive Animals on Crown Land recently calculated that revenue from game licence fees totalled \$2.50 million in 2015-16 (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 81).

Licence fees could potentially be used to supplement the GMA’s existing revenue base. There is an argument that, as the game licence provides privileged access to a common pool resource that is owned by the Crown, it is reasonable for licencees to pay a fee commensurate with the value of the resource that they are extracting from the common pool.

However, cost recovery arrangements for a regulator need to be approached with caution. The Productivity Commission has argued that cost recovery for regulators can encourage undesirable practices such as regulatory creep, gold plating and cost padding (Productivity Commission, 2001, p. 96). Regulatory creep occurs where additional regulation is imposed without adequate scrutiny. Cost padding refers to the imposition of unnecessary costs on those being regulated instead of, for example, seeking efficiency savings (Productivity Commission, 2001, p. 98). Gold plating involves providing a

higher level of service than is required to meet clients' needs or to satisfy government objectives (Productivity Commission, 2001, p. 97).

There are perverse incentives in funding a regulator from licence fees. If the GMA were funded from licence fees, there would be an incentive for the GMA to maximise its revenue by encouraging the public to take up hunting licences, lowering the standards required to obtain a licence, or resisting the imposition of more stringent testing or proficiency standards before licences are allocated. It is important for the credibility and public acceptance of the regulatory regime that the GMA be seen to be maintaining a position on licence arrangements that best meets its statutory obligations and regulatory objectives. Licensing arrangements should be regarded as a form of regulatory control that supports sustainable game management and responsible hunting behaviour rather than as a source of revenue.

The GMA's unusual funding arrangement places an obligation on DEDJTR to ensure that the grant it provides from its program allocation is, at a minimum, sufficient to meet the GMA's statutory obligations. One option open to the GMA would be to canvass with DEDJTR the potential to develop a funding formula in which the GMA's funding is adjusted in proportion to changes in underlying demand as measured by an agreed driver such as licence fees or wildfowl counts, adjusted as necessary for expected improvements in efficiency over time. Re-calibrations of the funding base could be undertaken on an annual or triennial basis. A triennial basis would reduce workload and provide greater medium-term certainty.

The GMA would need to be aware that funding could be adjusted up or down, as the underlying numbers vary over time.

In the absence of a longer-term solution to its resourcing, the GMA may need to consider measures to reduce external demands on its resources or re-allocating resources away from relatively expensive enforcement activities toward more cost-effective activities such as information and education. These and other options are canvassed in section 8 of this report below.

7.5 Workforce capabilities

One of the core functions of a regulator is to manage its workforce capabilities.

Regulators need to have a clear understanding of their role and function, and the skills and capabilities required to achieve the government's desired policy objectives. This knowledge can guide a regulator's workforce planning, including the training, development and retention of its officers, and the targeted recruitment of persons with the skills required to fill identified gaps (Australian National Audit Office, 2014, p. 23).

The GMA is fortunate in the quality and commitment of staff at the policy and operational levels. Staff consulted in this review were unfailingly professional, constructive and committed to their work. A recent independent review of the GMA's compliance function commented that "interviews with both internal and external stakeholders indicated that the current cadre of Game Officers are extremely capable, well-chosen and well-trained personnel, capable of approaching most situations in a calm and non-antagonistic manner in order to carry out their duties" (Emergency Management Consultancy Services, 2015, p. 14). The experience of this review was that similar comments could be made about Game Managers and Game Officers.

The GMA provided evidence that it takes the recruitment, development and training of its compliance and enforcement very seriously. Game Officers and Game Managers generally have many years' experience in law enforcement or in related regulators. Most of the staff also have relevant advanced

qualifications. The GMA provides regular training and development opportunities for its compliance and enforcement staff. The GMA Annual Report identifies the mandatory training requirements for GMA Authorised Officers and summarises the training undertaken (Game Management Authority, 2016, p. 19). The GMA also maintains a skills and training matrix for its compliance officers that documents the training and development received (Game Management Authority, n.d).

As the GMA does not have a full-time training officer, the provision of training for compliance and enforcement staff generally requires the diversion of at least one officer from the field for a period to develop and coordinate the training. That so much has been achieved is a credit to the managers and staff involved.

There are, however, some gaps, either in the documentation or in the training received. The GMA (2016, p. 19) Annual Report indicates that 6 monthly refresher training in Client Interaction and Defensive Tactics Level is mandatory for all Authorised Officers. However, it is not apparent from the training matrix that this training has been provided for all the Authorised Officers in the past 12 months. Much of the training and development documented in the GMA's skills and training matrix appears to relate to the practical field-craft required of an enforcement officer working in remote locations: 4WD skills, chainsaw proficiency, first aid, radio communications and so on. While these are required skills for GMA Authorised Officers, they do not cover all the capabilities that might be expected of a fully capable regulator.

The review found less evidence that the GMA possesses the higher-level strategic compliance experience and training required to effectively develop and implement an effective compliance strategy or ensure that all of the available regulatory tools and capabilities are developed and deployed coherently to solve problems, prevent harm and influence behaviour.

The ANAO (2014, pp. 23-24) has suggested that while technical proficiency, formal technical qualifications and industry experience are important for regulatory officers, regulators also require skills in a broad range of areas, including:

- risk and quality management—the design and application of the regulator's risk and quality management systems and procedures are enhanced when officers have practical experience in applying the relevant national and international standards;
- stakeholder engagement—stakeholder confidence in a regulator's performance is enhanced when the regulator communicates effectively;
- communication—well-developed communication and inter-personal skills enable officers to establish productive and professional relationships with regulated entities and other stakeholders and develop an engagement approach where there is an ongoing, longer-term relationship;
- team management—skills and experience in leading multi-discipline teams assist in maximising the individual contributions of each discipline and the collective output of the team;
- data analysis and management—quality information is a key component of effective regulatory administration;
- audit and inspection—the quality of a compliance assessment is enhanced when it is conducted by officers who are trained, or have experience, in auditing techniques;
- legal and criminal investigation—officers with appropriate legal and investigative skills help to ensure that regulatory powers are exercised effectively; and
- contract management—officers with experience in handling contracts contribute to effective management of outsourced regulatory activities.

It is not clear at present the GMA's compliance and enforcement staff possess all of these skills, or, if they do, that the GMA can demonstrate through an appropriate competency log or skills matrix that they have received appropriate training and support in the application of these skills and qualifications in their work.

Given the GMA's operating model, the ability to effectively manage across a distributed network of stakeholders is a core capability for the GMA. GMA compliance and enforcement staff have demonstrated a capacity to establish networks with officials in other agencies and to make use of those relationships to enlist support across a range of operational activities. Game Managers and Game Officers have also generally established warm relationships with hunting organisations and with hunters. However, relationships with other stakeholders are not as strong, though some of the GMA's compliance staff have worked assiduously to build better relationships with animal welfare groups and other stakeholders.

The reliance on personal networks is both a strength and potential vulnerability for the GMA. Game Managers and Game Officers are able to draw on these relationships to support their compliance work by accessing resources at relatively short notice. However, access to the resources is informal, often unfunded, and cannot be relied upon. It is also vulnerable to changes in personnel or policies and practices in other agencies. Compliance staff have indicated the management of other agencies have already questioned the current informal arrangements that exist between their officers and the GMA.

The GMA needs to put more emphasis in its recruitment and training on the ability to manage and communicate with influence across a broad spectrum of values and interests. The GMA will also need to work over time to develop more robust accountability frameworks with other agencies. These frameworks will need to be supported by staff with strong communication and contract management skills.

Communications and marketing are a notable gap in the GMA's current workforce capabilities. At present, only one GMA staff member has formal qualifications in communications, and that person is not employed on marketing activities. Section 5.4 of this report commented on the limited number of channels through which the GMA communicates with stakeholders, and its reliance on English language materials. To be effective in its compliance activities, the GMA needs access to skilled and qualified communication and marketing experts who are able to engage effectively with a dispersed and diverse stakeholder base across a wide range of channels and communications media.

The GMA should act quickly on the finding of the external review it commissioned on the risk management of its compliance function that "a dedicated communications officer focused social media and multi-lingual educational material delivery would greatly assist" the GMA's engagement with external stakeholders (Emergency Management Consultancy Services, 2015, p. 1).

In assessing the capabilities of the GMA's enforcement officers, the review had regard to the Australian Government Investigations Standards (AGIS) and, in particular, the sections dealing with investigations management.

Compliance with AGIS is mandatory for all Australian Government agencies involved in investigations (Australian National Audit Office, 2014, p. 24). Australian Government policy requires that investigations be carried out by appropriately qualified and experienced personnel supported by a suitable level of managerial oversight. Officers undertaking such investigations are required to meet the competency requirements set out in the Australian Government Investigations Standards.

The AGIS outlines recommended minimum standards for:

- investigation policy and performance measurement;

- prosecution policy;
- access to legislation;
- investigator qualifications agency relationships;
- ethical standards; and
- media issues.

AGIS required qualifications are:

- Certificate IV in Government (Investigation), to be obtained before an officer is primarily engaged as an investigator; otherwise the officer should be under the supervision of a qualified investigator; and
- Diploma of Government (Investigation), for staff primarily engaged in the coordination and supervision of investigations.

The GMA training matrix recognises the Certificate IV as a development option for compliance and enforcement staff. However, the matrix does not recognise any training received under this heading in the previous year. It is recognised that GMA's enforcement staff may have completed professional development to a similar standard of the AGIS in their previous employment. However, it would nevertheless be useful to recognise this knowledge and provide refresher training as required to keep that knowledge up-to-date.

The GMA should consider completion of the AGIS or demonstration of equivalent training as a mandatory requirement for staff involved in investigations.

Game Officers indicated to this review they routinely carry out surveillance operations to gather intelligence before contacting Victoria Police to develop an enforcement operation. However, the independent review of the GMA's risk management of its compliance functions indicated that no formal training had ever been delivered on effective surveillance techniques (Emergency Management Consultancy Services, 2015, p. 17). There is no indication in the training matrix that this training has been provided since that time, or that any refresher training is offered in surveillance techniques.

As noted in section 5.3, the GMA currently lacks any developed analytical capability to analyse and interpret surveillance and intelligence data. This is a critical capability for an effective, contemporary regulator. Without this capability, it is difficult to see how the GMA could hope to maintain a risk-based and intelligence-led compliance and enforcement framework. The GMA recognises the gap and has entered into an arrangement with the VFA and the biosecurity function of DEDJTR to part-fund the share of an intelligence analyst to be located in the VFA Strategic Intelligence Unit. This is a step in the right direction, but it is probably insufficient to provide the full capability required to support the GMA's compliance and enforcement functions.

If the GMA is to continue to perform surveillance operations, it would be desirable to ensure the staff likely to be involved have received appropriate training in safe and effective surveillance techniques, either from Victoria Police, or the VFA or some other high-quality provider.

7.6 Conclusions

The current funding model is not sustainable. The resources available to the GMA are manifestly inadequate to effectively enforce the game laws for which the GMA is responsible within the existing policy and compliance framework. In addition, there is no provision in the current funding model for adjustments based on changes in external demand for the GMA's services.

There is scope for more flexible funding of the GMA's compliance and enforcement functions. The GMA's unusual funding arrangement places an obligation on DEDJTR to ensure that the grant it provides from its program allocation is, at a minimum, sufficient to meet the GMA's statutory obligations.

However, additional funding alone would not necessarily provide better compliance and enforcement outcomes, or prevent a recurrence of the events that have been experienced during recent duck seasons and elsewhere.

While the GMA possesses many of the operational compliance and enforcement capabilities required to deliver on its responsibilities, it lacks the higher-level strategic compliance experience and training required to effectively develop and implement an effective compliance strategy or ensure that all of the available regulatory tools and capabilities are developed and deployed coherently to solve problems, prevent harm and influence behaviour.

The GMA should consider completion of the Australian Government Investigations Standards (AGIS) or demonstration of equivalent qualifications training as a mandatory requirement for staff involved in investigations.

If the GMA is to continue to perform surveillance operations, it would be desirable to ensure that the staff likely to be involved have received appropriate training in safe and effective surveillance techniques, either from Victoria Police, or the VFA or some other high-quality provider.

To be effective, the GMA needs access to skilled and qualified communication and marketing experts able to engage effectively with a dispersed and diverse stakeholder base across a wide range of channels and communications media.

In the absence of a longer-term solution to its resourcing, the GMA may need to consider measures to reduce external demands on its resources or to undertake a significant rethink of its current approach to regulation, including the re-allocation of resources away from relatively expensive enforcement activities toward more cost-effective activities such as information and education.

8 A more effective regulator

This section sets out some strategies and actions that could improve the effectiveness of the GMA's compliance and enforcement efforts.

8.1 Introduction

There are many strategies and actions that could improve the effectiveness of the GMA's compliance and enforcement functions.

Some of the available approaches would require additional resources. The development of a more effective licensing system would have establishment and ongoing costs the GMA is unlikely to be able to afford given its current asset base and sources of revenue. The development of a more dynamic and adaptive approach to regulation is unlikely to require a large amount of capital, but would require a significant investment of executive and senior management time and attention to develop and maintain. It would, however, allow for more effective targeting of the available resources. Other initiatives simply involve changes to existing documentation and procedures and are unlikely to require any additional funding.

This section sets out a number of possible strategies and actions the GMA could pursue to support its compliance and enforcement functions. The options are not presented as an integrated "take it or leave it" package, but rather provide a menu of strategies that could be pursued either individually or collectively, depending on the GMA's assessment of its authorising environment, its appetite for change and what it considers to be practically achievable given its resources and capabilities.

8.2 Rethinking the case for regulation

There is a threshold question for the GMA to consider regarding the rationale for game regulation and whether there are alternative approaches to game management that would avoid or reduce the need for direct regulation by a government agency.

The growth in deer licences and the consequent increase in demand for GMA regulatory services is placing pressure on the GMA's limited capacity and placing pressure on the GMA's ability to provide effective compliance and enforcement services across all types of game. Deer hunting is difficult to regulate because it takes place in relatively remote and isolated locations, and it carries risks for the GMA's compliance and enforcement officers because of the circumstances in which deer hunting takes place and the nature of the firearms and other weapons employed.

The regulation of game hunting has been justified on the basis that it is a common-pool resource that seeks to overcome the 'tragedy of the commons' (Department of Primary Industries, 2012). A commons refers to any set of resources that a community recognises as being accessible to any member of that community. A common-pool resource typically consists of a core resource which defines the *stock variable*, while providing a limited quantity of extractable fringe units, which defines the *flow variable*. While the core resource is to be protected or managed in order to allow for its continuous exploitation, the fringe units can be harvested or consumed.

Commons are vulnerable to being depleted or extinguished through competition for access to the shared resource. The conflict between private consumption and the common good has been described as the *tragedy of the commons* by Garrett Hardin (1968, p. 1244):

Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons.

Solutions suggested to overcoming the tragedy of the commons include enclosing the commons (or turning it into private property) and government regulation. Another approach is through collective action through the establishment of a common property regime.

Game animals in Victoria are generally managed through government regulation. Typically, game species are common and occur in relatively large numbers, have a high replacement potential, mature quickly and can breed at an early age, have high rates of turnover, are fast escapers, wary in nature and have good table qualities (Department of Primary Industries, 2012, p. 14). In order to manage the stock of native ducks as well as quail (largely the native stubble quail), open seasons for native game birds are timed to coincide with peaks in population levels and avoid periods of vulnerability (e.g. breeding, moulting), stress (e.g. food shortages or extremes in weather) and low populations (Department of Primary Industries, 2012, p. 17).

While native game birds are regarded as a common-pool resource worthy of protection subject to management through government regulation, it is questionable whether deer should be properly considered as a common-pool resource. Deer were introduced to Victoria in the 1860s for recreational hunting purposes and were also released or escaped from deer farms between the 1970s and 1990s (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 20).

An invasive species is a species that spreads through human activities beyond its accepted normal distribution and threatens valued environmental, agricultural or other social resources by the damage it causes (The State of Victoria, Department of Primary Industries, 2010). Invasive animals of concern on Crown land in Victoria include deer (Department of Environment, Land, Water and Planning; Department of Economic Development, Jobs, Transport and Resources; & Parks Victoria, 2016, p. 1).

Deer are known to have significant impacts on native biodiversity and agricultural values (Department of Environment, Land, Water and Planning; Department of Economic Development, Jobs, Transport and Resources; & Parks Victoria, 2016, p. 13). Increases in the impacts of deer on high value environmental assets across Victoria have been observed over the last decade, an example of which is damage to Alpine Sphagnum Bogs and associated ferns, an endangered ecological community listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Vic) and the *Flora and Fauna Guarantee Act 1988* (Vic).

Deer can cause a number of other environmental impacts through browsing and grazing, antler rubbing, trampling, trail creation, and wallowing (Department of Environment, Land, Water and Planning; Department of Economic Development, Jobs, Transport and Resources; & Parks Victoria, 2016, p. 13). Primary production is impacted by deer through loss of crops, damage to farm infrastructure and increased risk of livestock disease including foot and mouth (Parks Victoria, 2013). Deer can also compete with native fauna for food, such as hog deer that compete with kangaroos, wallabies and wombats for food on Wilsons Promontory (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 36).

Seven species of deer (sambar, red, sika, rusa, chital fallow and hog deer) are listed as game and are consequently protected wildlife under the *Wildlife Act 1975* (Vic) (Department of Environment, Land,

Water and Planning; Department of Economic Development, Jobs, Transport and Resources; & Parks Victoria, 2016, p. 13). As such, deer are given the same protection as native animals (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 56).

The reduction in biodiversity of native vegetation by sambar deer is listed as a potentially threatening process under the *Flora and Fauna Guarantee Act 1988* (Vic) (Department of Environment, Land, Water and Planning; Department of Economic Development, Jobs, Transport and Resources; & Parks Victoria, 2016, p. 20). All other species of deer are declared pest animals under the *Catchment and Land Protection Act 1994* (Vic).

In response to community concern about the impact of deer on private land, a Governor in Council Order was made under the *Wildlife Act 1975* (Vic) in 2013 to unprotect deer on all private land. This allows landowners to control deer on their property without the need for a game licence or an Authority to Control Wildlife. However, deer remain protected on public land in Victoria, and there is concern from Crown land managers that the status of deer as protected wildlife is at odds with their mandate to control them as a key threatening process.

The Environment, Natural Resources and Regional Development Committee of the Victorian Parliament (2017, p. 23) has recently found:

The population of deer in Victoria has increased alarmingly in recent decades, causing a number of problems for native ecosystems and agricultural enterprises. While there is some debate about whether or not the population will continue to increase, deer will continue to be a problem, regardless of marginal increases or decreases in the population.

Under section 5 of the GMA Act, GMA has as one of its objectives “to promote sustainability” in game hunting in Victoria. Similarly, section 1A of the *Wildlife Act 1975* (Vic) has as one of its purposes “the sustainable use of and access to wildlife.” It would appear that sustainability in this context refers to ensuring that the population of deer for hunting purposes does not decline. This interpretation is consistent with the 2012 regulation impact statement on the *Wildlife Game Regulations 2012* (Vic) which state the nature of the sustainability problem was to avoid overharvesting (Department of Primary Industries, 2012, p. 27).

However, sustainability is more commonly linked with the concept of Ecologically Sustainable Development (ESD) which has been defined as:

... using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased. (Ecologically Sustainable Development Steering Committee, 1992)

This definition was endorsed by the Council of Australian Governments in December 1992 and encompasses the protection of biological diversity and the maintenance of essential ecological processes.

As noted in section 4.3 of this report, there is a tension between the conservation of game species and the control and management of invasive species. Invasive deer represent a threat to native flora and fauna. Attempts to maintain sustainable deer populations for the purposes of game hunting in turn pose a threat to ecologically sustainable development. In this case, there are questions about the potential conflicts of different state agencies and the value of the role that the GMA currently plays in managing the deer population.

While game animals are generally managed in Victoria by government as common pool resources, it is possible to construct arrangements that would allow deer hunting to be managed by landholders and hunting associations through a “common property regime.” This refers to a social arrangement in which a common-pool resource is managed through the construction of property rights. In common property regimes, the resource is managed by a community of members, often in return for a fee payable for exclusive access to the resource. Thus, in a common property regime, a common-pool resource has the appearance of a private good from the outside and that of a common good from the point of view of an insider. The resource units withdrawn from the system are typically owned individually by the appropriators.

Local co-regulation of game hunting in Switzerland

Nine of the 26 cantons of Switzerland operate a game hunting common property regime known as lease hunting (chasse affermée) (Federal Office for the Environment, 2015). The canton leases the different hunting territories to local associations of hunters for a period of six to eight years, and delegates them responsibility for monitoring and managing the fauna on their territory (Nahrath, 2000, pp. 2-3).

The local association rents a hunting territory (an affermage) from the local community on which the territory is located (Nahrath, 2000, p. 6). Expenses and benefits are shared between all the members of the local association. Admission or exclusion are subject to the approval of all members of the hunting association. At the end of the contract period the contracts are reattributed by the commune (sometimes through the system of selling by auction).

The hunting association is accountable to the canton and the local community for the use and management of the hunting territory as well as of the wildlife living within it (Nahrath, 2000, p. 7). More particularly, the association is responsible for monitoring the resource (statistics, qualitative state), monitoring and management of hunters (behaviour, weapons, quotas, distribution and accomplishment of common tasks), and the territorial protection of wildlife. Enlarged associations exist which are responsible for the management and hunting of the most mobile species.

As an incentive toward effective management of the resource, the hunting association has to bear half the costs of the damage caused by fauna to agriculture (Nahrath, 2000, p. 7).

As the experience in Switzerland demonstrates, there is scope to develop alternative, lower cost approaches to the regulation of game hunting for deer through co-regulatory arrangements with landholders, hunting associations and community groups. There are numerous ways in which these or similar arrangements could be constructed. While the arrangement could be organised entirely between the landholder and a hunting organisation, it would also be possible for the GMA to accredit these arrangements, or to construct the licensing, testing and permits permit regime and accredit stakeholder associations to manage the regime, consistent with government policies and Codes of Practice, and subject to regular auditing of performance.

A focus on the regulation of game for which there is a clearer role for government would remove a significant component of the external growth in demand for the GMA's services and allow the GMA to allocate its limited resources toward compliance and enforcement activities in relation to threatened and endangered species for which there is a clearer role for government.

8.3 Protecting the independence of the GMA's regulatory functions

The small size of the GMA and the costs associated with a staff of 18 servicing a Board of 7 constrains the effectiveness of the GMA as an operational regulator. Previous sections of this report have also pointed to the tensions inherent in the GMA's current functions, responsibilities and the expectations of its stakeholders.

The GMA's regulatory functions are capable of being delivered through other institutional models. Prior to 2013, the GMA operated as a unit within a Department of State; most recently as part of the Fisheries and Game function in what is now DEDJTR, and prior to 2012 as part of a Wildlife and Game function in what is now DELWP.

Regulatory activities can be located with an independent regulator, a Minister or an officer of a Department of State. According to the OECD (2012) *Recommendations of the Council on Regulatory Governance*, independent regulatory agencies should be considered in situations where:

- there is a need for the regulator to be independent to maintain public confidence;
- both government and non-government entities are regulated under the same framework and competitive neutrality is therefore required; or
- the decisions of the regulator can have a significant impact on particular interests and there is a need to protect its impartiality.

Where regulatory integrity is very important and there is likely to be a high level of risk (or perceived risk) to the regulator's integrity, a substantial degree of independence and distance from executive government might generally be warranted.

It is not clear in GMA's case that these conditions apply. As a regulator, the GMA needs to be seen as objective and impartial, but the nature of the GMA's activities do not generally seem to require a separation from the exercise of Ministerial powers in order to maintain public confidence. Indeed, several critical powers that are relevant to the GMA's effectiveness as an operational regulator remain with Ministers, including decisions as to whether to intervene to cancel or restrict a duck hunting season and the land management powers relevant to the declaration of game hunting areas and the closure of lands for hunting purposes. Other enforcement functions have long been, and continue to be, located in the portfolio Department without any apparent concerns about political interference.

As the GMA is not involved in determining the competing claims of government and non-government hunters, the second of the OECD three principles, which relates to the question of competitive neutrality, is not relevant.

The third of the OECD principles relates to the need to ensure the impartiality of the regulator. An arms-length arrangement can provide some assurance the regulator is immune from the political pressures that powerful interest groups can exert on politicians. However, these principles do not address the risk that a small statutory regulator may be unduly influenced or captured by a powerful stakeholder group. Given that the duck hunting season automatically occurs each year unless intervention is made by a Minister, it is even more important that the GMA, as the primary advisory body relied on by the Minister, is not seen to be acting on behalf of particular interests.

While the GMA is tasked with the regulation of sustainable and responsible hunting, the decisions of the GMA can impact on a broad range of interests and values, including conservation, land and water management, and animal welfare. There are risks to perceptions of the regulator's independence and integrity if it appears too closely aligned to one interest to the exclusion of others. Indeed, animal welfare organisations have suggested that previous appointments to the Board, and the public

positions adopted by members of the current Board, raise doubts about the credibility of the GMA as an independent and impartial regulator of the game laws.

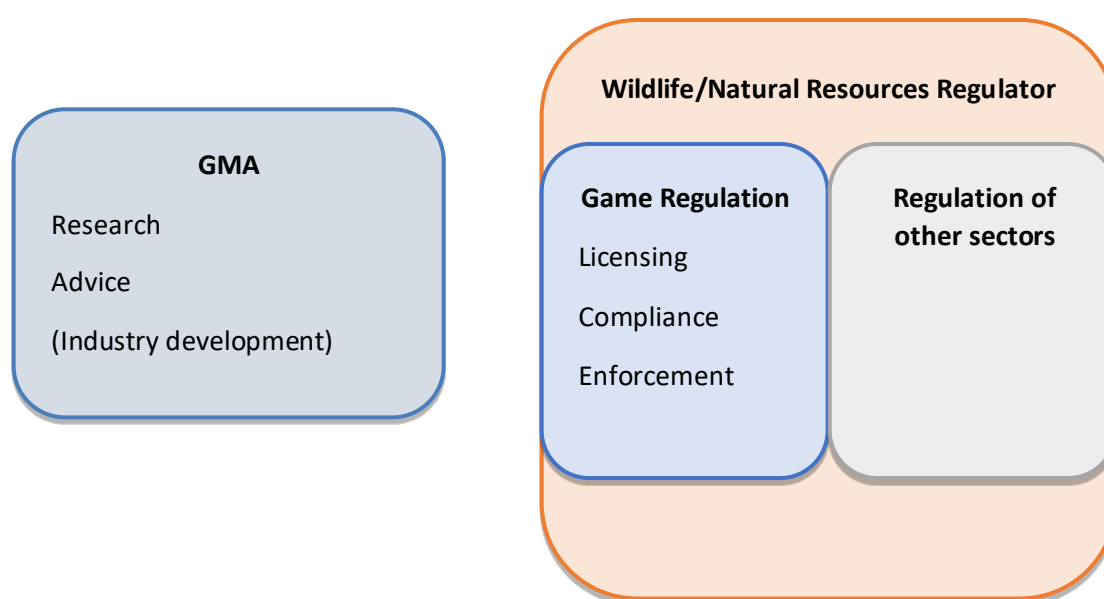
Options for structural separation

There are a number of options for structural separation of the GMA's regulation and compliance functions.

Given the range of competing interests that are touched on by the decisions of the game regulator, the location of the game management function within a Department of State under the general direction of an accountable Minister would provide equal or greater confidence in the impartiality and objectivity of the regulator when compared to the location of those functions in a statutory authority dominated by sectional interests.

Indeed, the Dunn review of the former NSW Game Council concluded that licensing, education and enforcement functions of the *Game and Feral Animal Control Act 2002* (NSW) should be delivered alongside relevant policy and legislation functions by an appropriate Department (IC Independent Consulting, 2013, p. 4).

Figure 6: Protecting the independence of regulatory functions through structural separation



Licensing, education, and enforcement are mainstream service delivery functions that could be more effectively delivered by a Department of State.

The State Services Authority suggested in 2009 that Victorian Government regulatory agencies could be consolidated over the long term into regulatory clusters, including a natural resources regulator (2009, p. xiv). The benefits of incorporating the compliance and enforcement function of the GMA into a larger entity with broad regulatory responsibilities could include:

- greater efficiency, arising from economies of scale and scope (New Zealand Productivity Commission, 2014, p. 251). Larger and broader-based agencies are likely to be more efficient to

run.³ Larger organisations may also be better placed to attract, retain and develop capability, apply more sophisticated risk assessment and compliance approaches, and allocate scarce professional resources more effectively; and

- reduced administrative burdens, inconsistency or complexity for regulated entities (New Zealand Productivity Commission, 2014, p. 251). A reduction in the number of regulatory agencies may create opportunities to streamline processes, share practice across similar regulatory issues and access risk and compliance-related information across related regulatory regimes.

GMA's compliance and enforcement functions could also potentially be subsumed into the VFA.

As a larger regulator, the VFA has access to resources and capabilities that are not available to the GMA. The VFA has a well-developed regulatory architecture and the systems, processes and extended workforce required to support the GMA's licensing, compliance and enforcement requirements. The VFA also has a credible enforcement capability and an enviable reputation as a regulator. The statutory protections built into the *Victorian Fisheries Authority Act 2016* would also help protect the integrity and independence of the GMA's regulatory functions.

The regulation of game hunting shares some common features with the regulation of fishing, as both activities are related to the harvesting of natural resources, and there is some commonality in the stakeholders, as many hunters are also recreational fishers. The regulation of fishing and game were co-located within the Department of Environment and Primary Industries prior to establishment of the GMA. The core skills required for Authorised Officers in game management and recreational fishing remain very similar.

The VFA retains considerable expertise in game management. Victorian Fisheries Officers currently undertake training in relation to game management as part of their induction and the VFA generally provides 20 or so officers each year for game management during the duck season. The VFA also provides intelligence services for the GMA and the GMA's part-funded intelligence analyst will be located within the VFA's Strategic Intelligence Unit.

The seasonality of the compliance and enforcement work of the GMA and the VFA is also complementary. The peak workload for the GMA occurs in early autumn to the end of June during the duck and quail open hunting seasons, which is outside the peak summer fishing season. Integration of the agencies' workforces would provide efficiencies of scale and scope that would benefit both organisations.

Location of the GMA's regulatory functions in a larger, related regulator would protect the independence of the GMA's licensing, compliance and enforcement functions and provide access to the regulatory capabilities and support necessary to ensure their effectiveness.

Operational separation

If the GMA's regulatory functions are to remain in the GMA, the Board should put internal arrangements in place to protect the independence of its licensing, compliance and enforcement functions.

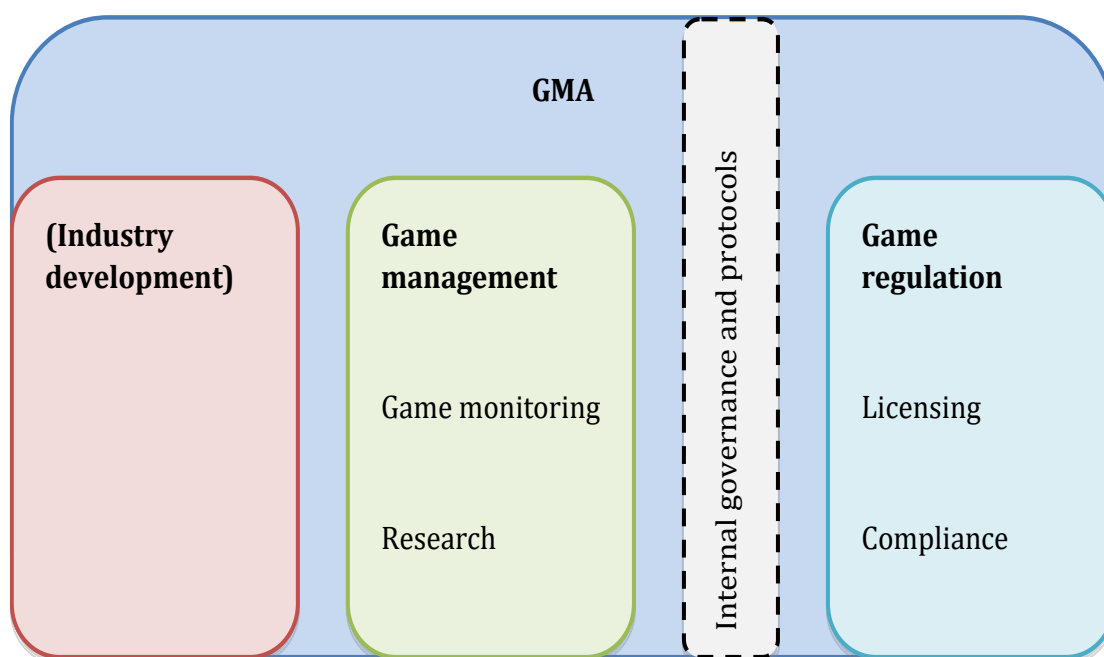
³ See Hampton (2005, pp. 6-7).

At a minimum, the research and advisory functions of Game Managers should be separated from their compliance and enforcement functions and a separate management and reporting line for enforcement functions should be provided direct to the CEO.

These arrangements should be supported by:

- the location of a clear accountability for enforcement functions with the CEO rather than with the Board;
- clear and explicit compliance and enforcement strategies;
- transparent mechanisms for determining compliance and enforcement priorities and allocating resources, including a Tasking and Coordination Committee and Enforcement Committee with an external representative;
- protocols to maximise the protection of information relating to licensing, investigations enforcement activities; and
- operational separation of licensing, compliance and enforcement activities from other advisory and promotional activities.

Figure 7: Protecting the independence of the regulatory function through operational separation



Operational separation supported by strengthened governance arrangements is critical to protecting the independence of the GMA's regulatory functions if these functions are to remain within the GMA. These refinements would become even more critical if the GMA were to be given more explicit responsibilities for industry development.

8.4 Approach to regulation

Contemporary best practice regulation involves a dynamic approach across regulatory strategies and regulatory tools allied with a high level of organisational agility (Black & Baldwin, 2010; Sparrow, 2000; New Zealand Productivity Commission, 2014).

The GMA's current approach to regulation is relatively inflexible and poorly targeted. The current approach relies on a number of broadly applied and relatively expensive flagship educational products and a large investment in on-the-ground enforcement. As discussed in section 5 of this report, these products are not well-targeted and their effectiveness in securing more compliant hunter behaviour is uncertain. While the content of the materials is excellent, the materials do not appear to have been developed or delivered with any clear information on the hunting community's understanding of the game hunting laws or their willingness to comply. The materials are in any case mostly disseminated through the hunting associations and they are not accessible to hunters from non-English speaking backgrounds. The available evidence and anecdotal information suggests that the materials are mostly consumed by responsible hunters who are already largely compliant.

An effective regulatory regime requires effective sanctions for non-compliance (Parker, 2000, p. 541). As outlined in section 5.5 of this report, the GMA's current enforcement efforts have not succeeded in providing effective sanctions against non-compliance or in deterring non-compliant behaviours. This reflects a number of factors, including the resources available to the GMA, the very low level of penalties that are applied to breaches of the game hunting laws (compared, for example, with the penalties for protestors trespassing on declared hunting lands), the GMA's reluctance to prosecute given the difficulties in establishing a chain of evidence and the intrinsic challenges of enforcing activities that often occur in remote and inaccessible locations.

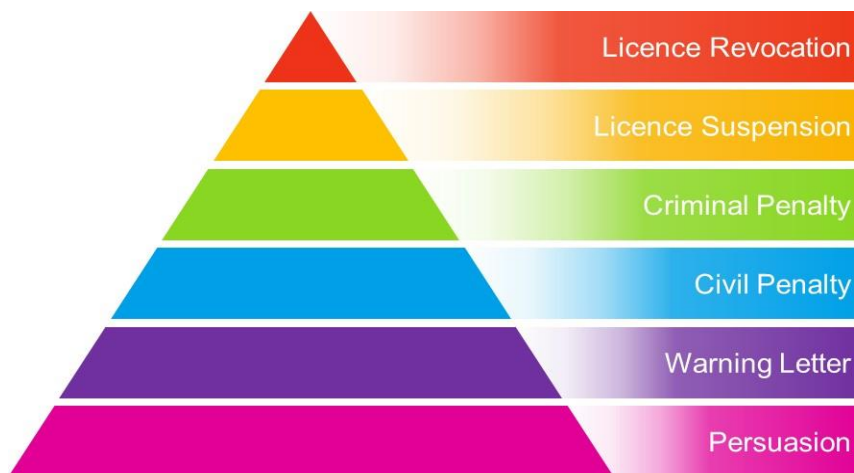
The GMA should consider pursuing a compliance-oriented mode of regulation that is more responsive to the attitudes and understandings of the hunters it is seeking to regulate. A compliance-oriented mode of regulation is aimed at securing compliance rather than punishing non-compliance. This is achieved through the provision of incentive for agents to comply voluntarily, and increasing the ability of private actors and organisations to encourage compliance through self-regulation, internal management systems, and market mechanisms where possible. Though it remains necessary to punish breaches of the rules, this ceases to be the first or primary regulatory tool (Parker, 2000, p. 539).

In regulatory studies, 'compliance' refers to the range of behavioural and attitudinal responses that individuals and firms display in response to regulation (Parker & Lehmann Nielsen, 2017, p. 218). Compliance has been described as a process that bridges the world of the regulated and the world of the regulator (Braithwaite V. , 2017, p. 28). From the perspective of the regulated agent, it incorporates an understanding of what a regulator wants us to do, the purpose behind the regulation, whether or not we agree with it, what we think of its implementation, and what our attitudes and behavioural intentions are with regard to the regulatory request. From the perspective of the regulator, compliance asks what we have done to elicit adherence to the regulation.

Compliance-oriented regulatory approaches are related to the theory of responsive regulation developed by Professor Ian Ayres of Yale Law School and Professor John Braithwaite of the Australian National University (1992) and the pyramid of enforcement strategies. Responsive regulation is a dynamic model in which persuasion and/or capacity building are tried before escalation up the pyramid towards increasingly severe levels of punishment (Braithwaite J. , 2017, p. 118). Responsive regulation rejects a regulatory approach based mostly on persuasion as well as punishment, and takes into account the motivational postures of the actors it is seeking to regulate (Ayres & Braithwaite, 1992, p. 24).

Models of responsive regulation are often thought of in terms of a regulatory pyramid such as the enforcement pyramid set out below in Figure 8.

Figure 8: An example of an enforcement pyramid



Source: Ayres and Braithwaite (1992, p. 35)

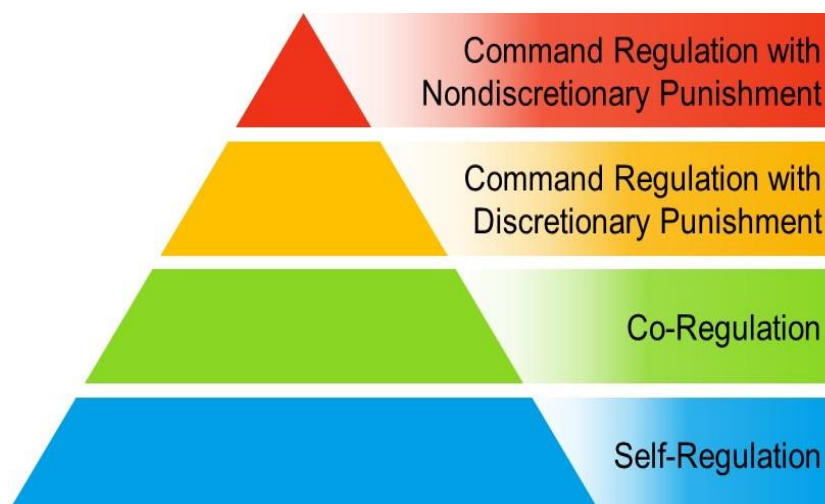
Under a regulatory enforcement pyramid:

Most regulatory action occurs at the base of the pyramid where initially attempts are made to coax compliance by persuasion. The next phase of enforcement escalation is a warning letter; if this fails to secure compliance, civil monetary penalties are imposed; if this fails, criminal prosecution ensues; if this fails, the plant is shut down or a licence to operate is suspended; if this fails, the licence to do business is revoked. (Haines, 1997, pp. 218-219)

The pyramid reflects a presumption that less interventionist remedies at the base of the pyramid are normally the best place to start (Braithwaite J. , 2011, p. 493). Punitive sanctions are thus held in reserve for the minority of cases where persuasion fails. Escalation through progressively more severe penalties will often take the rational calculator up to the point where it will become rational to comply.

The regulatory pyramid can also be thought of as an investment guide to the range of regulatory strategies that can be deployed applied in dynamic and complementary ways to improving the behaviour of the regulated community. An example of a pyramid of regulatory strategies is provided below in Figure 9.

Figure 9: An example of a pyramid of regulatory strategies



Source: Ayres and Braithwaite (1992, p. 39)

The GMA currently employs some of these strategies, but its approach to regulation appears relatively inflexible and its investment choices between different compliance and enforcement priorities and regulatory interventions do not appear to have been based on any informed or transparent understanding of the motivational postures within the hunting community.

A responsive, compliance-oriented approach requires some mapping of the regulatory actors in what Valerie Braithwaite (2017, p. 29) has described as the 'regulatory community'. A regulatory community typically comprises multiple groups with their own values, norms, beliefs and processes. They may undermine regulatory authority, or empower it. They use their networks and alliances to push back and shape the actions of the regulator, while the lead regulator uses its power and authority to attempt to steer the flow of events in the direction it wants. They may seek to capture and control the actions of the regulator.

Valerie Braithwaite (2014) identifies five motivational postures that have been identified domains of different regulatory authorities. These motivational postures have some relevance to hunting communities.

Commitment and *capitulation* are postures that represent willingness to go along with authority, and can be called accommodating postures (Braithwaite V. , 2014). *Commitment* conveys a belief the authority's purpose is sound and that, in principle, the authority and its goals should be valued and supported. Commitment is a posture that enables individuals and groups to go beyond compliance, to do more than an authority expects or asks in the interests of furthering the accomplishment of shared goals. *Capitulation* is the posture of doing what is asked, without necessarily understanding or caring about purpose and goals.

Defiant postures can also be adopted (Braithwaite V. , 2017, p. 34). The most common defiant posture is *resistance*. Resistance is an expression of grievance over the way in which a regulatory authority carries out its duties (Braithwaite V. , 2014). As an expression of dissatisfaction with the means employed by the regulator, rather than the desired objective itself, resistance is a plea to a regulatory authority to be fair and respectful, and can be managed successfully through introducing greater procedural fairness (Braithwaite V. , 2014).

Two other defiant postures are less common, but far more threatening to regulators (Braithwaite V. , 2017, p. 34). They are postures that are adopted by those who refuse to defer to the regulatory authority's rule at all, and are postures of dismissiveness. The first is *disengagement*, in which social distance from the regulatory authority is greatest. Disengagement involves neither attending nor responding to the authority, but rather continuing business as usual. The final dismissive posture, *game playing*, takes place in an adversarial space where the regulator is being watched carefully and the objective is winning against the rules. Game playing involves searching for loopholes and ways around the regulatory authority, undermining the authority's effectiveness and legitimacy. Dealing with disengagement and game-playing seriously challenges a regulatory authority's enforcement capacity (Braithwaite V. , 2017, p. 34).

Informed monitoring for non-compliance is used in compliance-oriented regulation to provide the data on which regulatory interventions are designed and determine whether or not the regulatory design is working (Parker, 2000, p. 537). The GMA is aware of the need to make better use of intelligence data to inform its enforcement approach, and has taken steps to part-fund an analyst in the VFA's Strategic Intelligence Unit. However, the GMA needs to extend this approach to inform its activities across a broader range of the compliance spectrum, including an examination of the underlying compliance postures of its stakeholders.

It would be possible for the GMA to map the motivational postures within the hunting community and develop appropriate regulatory responses. Once the compliance postures of particular groups of hunters have been identified, strategies can then in turn be developed to more effectively deal with them. Examples of possible strategies tailored towards each compliance posture are provided in Table 3.

Table 3: Illustration of potential compliance strategies calibrated to compliance postures

Motivational Compliance Posture	Compliance Strategies
Accommodating (Commitment and Capitulation)	<p>Provision of rewards for law abiding hunters who also join hunting organisations and undertake additional hunting education could include:</p> <ul style="list-style-type: none"> • earlier start date to various restricted hunting seasons; and • privileged access to better resourced game hunting areas.
Resistance	<p>Probably not relevant as actual enforcement is low or negligible. However, strategies could include:</p> <ul style="list-style-type: none"> • greater transparency in regulatory decision-making, for example, in relation to the notification of hunting seasons, start times and land closures; • more consistency in the application of enforcement penalties and sanctions; and • nudge towards compliance through the provision of rewards for adopting accommodating postures.
Disengagement	<p>Encourage engagement and compliance through:</p> <ul style="list-style-type: none"> • more effective licensing requirements such testing applicant's knowledge of hunting laws and ability to differentiate between protected and game animal species; • designing a more effective communications strategy – such as making greater use of social media – designed to reach hunters who are not members of hunting associations and/or come from non-English speaking backgrounds; and • more powerful sanctions, including well-publicised destruction of firearms and other weapons used in illegal hunting activities.
Game Playing	<p>Encourage compliance through:</p> <ul style="list-style-type: none"> • larger penalties for breaches of the hunting laws, at least commensurate with those applied to protestors;

	<ul style="list-style-type: none"> • a wider range of sanctions, including ability close problematic wetlands and to cancel licences for some offences; • name and shame processes such as occurs for those hunters in Tasmania who are convicted of offenses under the hunting laws.
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Hunters who have a compliance posture of disengagement could be more effectively dealt with through a combination of:

- more effective licensing requirements such testing applicant's knowledge of hunting laws and ability to differentiate between protected and game animal species; and
- designing a more effective communications strategy – such as making greater use of social media – designed to reach hunters who are not members of hunting associations and/or come from non-English speaking backgrounds.

More effective licencing requirements will compel those with a compliance posture of disengagement to become more engaged, as a lack of attention to their legal requirements would disqualify them from obtaining a hunting licence.

On the other hand, dealing with hunters who adopt a compliance posture of game playing will be more problematic to deal with. This is because game playing has a more adversarial agenda where the objective is to outsmart the authority and assert independence over the regulatory authority while technically playing within the rules (Braithwaite V. , 2014). The posture of game playing, while paying attention to the letter of law, shows little respect for the spirit of the law. In adopting the posture of game playing, individuals cleverly sidestep deference to the authority. Possible strategies to deal with a compliance posture of game playing could include:

- larger penalties for breaches of the hunting laws, at least commensurate with those applied to protestors;
- a wider range of sanctions, including ability close problematic wetlands and to cancel licences for some offences; and
- name and shame processes such as occurs for those hunters in Tasmania who are convicted of offenses under the hunting laws.

In order to nudge hunters exhibiting a defiant compliance posture towards more accommodating compliance postures, rewards could be provided to hunters who undertake the following:

- join an accredited hunting organisation; and
- undertake additional hunter education programs comparable to the Shotgun Education Program or the hunter accreditation program to qualify for a NSW restricted hunting licence.

Those who display or adopt an accommodating compliance posture could be rewarded in various ways. Rewards could include an earlier start date to various restricted hunting seasons as well as privileged access to better-resourced game hunting areas, and could operate in a similar manner to the restricted hunting licence system in NSW. Such an arrangement also provides scope for co-regulation, whereby hunting organisations could sanction the bad behaviour of their own members by withdrawing their access to the rewards system.

There is scope for the GMA to develop a more dynamic approach to regulation that is better informed by information on hunters' understanding of their obligations and better targeted to secure improved

compliance outcomes. To support this more responsive approach to regulation, the GMA should develop an annual compliance strategy that sets out specific compliance and enforcement goals, priorities, strategies and performance measures that are to be applied in the upcoming period, and the basis on which those priorities and strategies have been selected and are to be evaluated against. This would be consistent with the Minister's 2016 Statement of Expectations, which refers to the development of a compliance plan (Pulford J. , 2016). The GMA Chairperson's response to the Minister commits to the development of "a Compliance Strategy to reinforce its risk-based, intelligence-led approach Compliance Policy" and "an enforcement strategy to complement its existing Compliance Policy and regional compliance plans" by July 2017 (Hine, 2017b, pp. 3-4). It would be desirable for work on a compliance strategy to be completed as soon as possible.

This strategy should be supported by more transparent processes for tasking and coordination of compliance and enforcement actions and improved reporting on compliance and enforcement outcomes.

Consistent with the Chairperson's commitment to an intelligence-led approach, the GMA also needs to collect and analyse information on the compliance posture of its various stakeholder groups. At present, the GMA lacks reliable information in several key competency areas, such as the attitudes and awareness of any particular groups of hunters. It is important that the GMA move quickly to improve its access to an existing intelligence data base and shared analytics resources.

The GMA should adopt a more compliance-oriented mode of regulation. This would require the collection of relevant data about the motivational postures and capabilities of the actors it is seeking to regulate, and the development of regulatory strategies that are calibrated to their compliance postures. These strategies should include the scope for self-regulation and co-regulation where stakeholders can demonstrate the willingness and ability to comply.

8.5 Licensing

The GMA's current licencing arrangements are inadequate in providing an assurance that hunters have even a basic knowledge of the game laws or their obligations as users of shared public space to other members of the community. This leaves the GMA as the licensing authority and the community at large exposed to unnecessary and avoidable risks. It also imposes additional pressure on the compliance and enforcement regime to ensure that basic information and education is provided to hunters after they have obtained their licences.

The evidence suggests that a more stringent approach to licensing would produce better compliance with the hunting laws and improved animal welfare outcomes. As the case studies provided in this section illustrate, it is possible for small game regulators to develop licensing arrangements that support more compliant hunting behaviours and which provide greater assurance about the basis on which hunting will be conducted on public and private land.

Licensing arrangements for hunters in New South Wales

There are three main animal groups hunted in New South Wales (NSW): non-indigenous game animals such as deer and introduced game birds; native game birds (ducks); and non-indigenous animals that are often referred to as feral or pest animals (RMCG, 2017, p. 2).

Native game bird hunting in NSW is for sustainable agricultural management purposes only (RMCG, 2017, p. 3). There is no recreational hunting of native game birds in NSW. Hunting of native game birds (typically ducks) occurs through the NSW Native Game Bird Management Program that is used to protect rice crops during the growing season

(September/October through to March). A NSW game hunting licence is required to hunt game species (deer and ducks) on private land, or to hunt any species on public land (RMCG, 2017, p. ii).

Two different recreational game licences are currently offered for hunting in NSW: a General Class Licence and a Restricted Class Licence (RMCG, 2017, p. 4).

- *A General Class Licence allows the holder to hunt game animals on private land only and does not permit hunting on public lands (RMCG, 2017, p. 4). There are currently five categories of General Class Licence that allow for different hunting purposes:*
- *Standard (G-Standard Licence) – recreational hunting of deer and native game birds on private land.*
- *Hunting guide (G-Guide Licence) – guiding others in their hunt, for fee or reward, on private land.*
- *Professional hunter (G-Professional Licence) – hunting on private land in the course of any paid employment or engagement.*
- *Commercial hunter (G-Commercial Licence) – hunting on private land to sell part/s of the harvested animal.*
- *Visitor's (G-Visitor Licence) – overseas residents hunting recreationally on private land in the company of a full licence holder.*

To hunt on private land, licence holders must seek the permission from the landowner or land manager to do so (NSW Government Department of Primary Industries, 2017b).

A Restricted Class Licence allows the holder to hunt game animals on private land, as well as game animals and pest animals on public land (RMCG, 2017, p. 5). There are currently four categories of Restricted Class Licence that allow for different hunting purposes:

- *Standard (R-Licence) – recreational hunting on public or private land.*
- *Hunting guide (R-Guide Licence) – guiding others in their hunt for fee or reward on public or private land.*
- *Commercial hunter (R-Commercial Licence) – hunting on public or private land to sell part/s of the harvested animal.*
- *Visitor's (R-Visitor Licence) – overseas residents hunting recreationally on public or private land in the company of a full licence holder.*

If one wants to hunt on public land, once a hunter becomes licenced with some type of restricted hunting licence, they are able to gain permission to hunt through the NSW Game Licensing Unit (NSW Government Department of Primary Industries, 2017b). Restricted game hunting licence (R-Licence) holders must abide by conditions when they are granted permission to hunt in a NSW State forest.

To apply for a restricted licence in NSW, a hunter must become accredited and qualify (NSW Government Department of Primary Industries, 2017).

To become accredited for the R-licence categories, one must sit the NSW Government Department of Primary Industries open-book test based on the NSW Hunter Education Handbook (NSW Government Department of Primary Industries, 2017a). One can seek accreditation through a Hunter learning, education and accreditation program (LEAP)

Provider that has been approved by the NSW Game Licensing Unit. Most Hunter LEAP Providers will charge a fee for the Accreditation Course.

There are two requirements that must be met before one can apply for the R-licence (NSW Government Department of Primary Industries, 2017). Applicants must:

- *be a member of an Approved Hunting Organisation, and*
- *become accredited for one or more of the R-licence categories:*
 - *firearms*
 - *bows*
 - *dogs*
 - *blackpowder firearms.*

The NSW Game Licensing Unit has indicated that it observes better compliance rates for hunters hunting under an R-Licence, which includes a mandatory test on hunter safety, behaviour and ethics, than for hunters hunting under a G-Licence, where there is no hunter etiquette test (Game Management Authority, 2017 June, p. 4). The process for hunting on public land in NSW is different from in Victoria and includes a booking process which may positively influence compliance rates. However, the positive impact of licencing requirements on subsequent compliance behaviours would support arguments for more stringent mandatory arrangements.

Hunting organisations consulted in this review indicated that they would oppose more stringent licence testing. At the same time, however, they acknowledged there were compliance issues amongst some hunters and that the current arrangements did not provide any assurance that hunters were aware of their obligations.

More stringent mandatory testing would place considerable strain on the GMA's already limited capacity. In order to test approximately 5,000 new Game Licence applicants each year, the GMA would need to invest in additional systems and human resources. A new licensing database would be required, as the existing data base cannot process, integrate or record test or course completion results. There would also be implications for other agencies, such as DELWP, that currently process some licence applications on the GMA's behalf. The GMA has indicated that mandatory testing for new Game Licence applicants would take approximately two years to fully implement, including regulatory changes, the development of a new Game Licensing System, test development, test delivery functionality and staff training (Game Management Authority, 2017 June, p. 5). The application of more stringent mandatory testing to existing licencees would be a more complex task and require additional resources, although there is scope for some elements of an accreditation regime to be managed by hunting associations.

New Zealand Hunting Permits and Licences

New Zealand Hunting Permits

To hunt on public conservation land in New Zealand, a hunting permit is required (New Zealand Government, 2017). To hunt on any other land, only the permission of the landowner is required.

The New Zealand Department of Conservation (DOC) (2017a) manages 8.6 million hectares of public conservation land, that represents around one third of the country. To hunt animals on public conservation land you are required to obtain a DOC hunting permit (New Zealand Department of Conservation, 2017). Permit conditions require that:

- *each person within a hunting party and intending to hunt must have a separate permit;*
- *permits cannot be transferred to, or be used by, anyone else; and*
- *to get a hunting permit (except for possums) a valid firearms licence is required.*

There are five different types of hunting permits issued by DOC:

- *open area hunting permit;*
- *restricted hunting permit;*
- *small game hunting permit;*
- *game bird hunting permit; and*
- *possum permit (New Zealand Department of Conservation, 2017).*

Open area hunting permits are required to hunt in 'open areas' for ground based, non-commercial hunting of pigs, goats, deer, wallabies, chamois and tahr (New Zealand Department of Conservation, 2017). Open areas are areas that operate under the standard hunting permit conditions. Special conditions may be included in some open area hunting permits (eg. the permit may not be valid during busy times when the area is balloted or blocked, or a separate dog permit may be required).

Restricted hunting permits are issued for areas that are not open hunting areas, for ground based, non-commercial hunting of pigs, goats, deer, wallabies, chamois and tahr (New Zealand Department of Conservation, 2017). They may also be issued for non-standard hunting in open hunting areas (eg for use of muzzleloaders).

Small game hunting permits are required for the recreational hunting of small game on public conservation land (New Zealand Department of Conservation, 2017). Small game includes Canada geese, feral geese, hares and rabbits (which are unprotected game animals).

Game bird hunting permits are required to hunt game birds on public conservation land in addition to the game bird hunting licence issued by the New Zealand Fish and Game Council (outlined below) (New Zealand Department of Conservation, 2017). Game bird permits are for specific areas and time periods.

To hunt possums on public conservation land a person needs to obtain a possum permit (New Zealand Department of Conservation, 2017). Some possum areas are managed on a block system (usually one permit holder per block), which may be available on a balloted or on a first come, first served basis.

Game Bird Licence

Game bird hunters in New Zealand must purchase a game bird licence issued by the New Zealand Fish and Game Council (NZ Council). The NZ Council and the 12 regional Fish and Game Councils were established in 1990 to represent the interests of anglers and hunters, and provide co-ordination of the management, enhancement, and maintenance of sports fish and game (section 26B and 26P of the New Zealand Conservation Act 1987) (New Zealand Fish and Game Council, 2016a). Fish and Game Councils are the statutory managers of sports fish and game bird resources and are responsible for their sustainable recreational use by anglers and hunters New Zealand-wide, except in the lake Taupo

catchment, where the trout fishery is managed by DOC (section 53(3) of the New Zealand Conservation Act), and the Chatham Islands.

A game bird hunting licence is valid for use throughout New Zealand (except in the Chatham Islands) (New Zealand Fish and Game Council, 2017). A licence is a permit to hunt game birds in line with the regulations governing the Fish and Game New Zealand region that the holder intends to hunt in. The hunting regulations are amended each year to suit changing sporting and environmental conditions and each region has its own set of regulations (New Zealand Fish and Game Council, 2017a).

Animal welfare groups have argued that access to a hunting licence should be dependent on mandatory target shooting accuracy tests in order to reduce the incidence of wounded birds and other game. This would increase the cost and complexity of mandatory licence testing, and hunting organisations have raised questions around the capacity of shooting ranges to support such a test. While the cost and complexity of introducing mandatory proficiency testing is acknowledged, the GMA has already invested heavily in a high-quality Shotgunning Education Program that provides some level of assurance that graduates have achieved at least a minimum level of proficiency in the use of this firearm.

There would be value in a requirement that prospective duck hunters demonstrate their attendance at a Shotgunning Education Program prior to the issue of a duck hunting licence and that similar courses be developed for the holders of other categories of hunting licences.

8.6 Permits and ballots

At present, Victoria maintains an open range policy by which hunters generally have the right to shoot on public land provided they hold a current licence.

The current arrangements can leave the GMA in a position where it is unable to effectively enforce the hunting laws on wetlands where the number of hunters massively outnumber the available compliance and enforcement staff. The appearance of unexpectedly large numbers of hunters on more sensitive wetland can also raise issues around the risks for threatened and endangered species.

There is scope for the GMA to more effectively manage the environment in which it operates, by working with land managers to develop more flexible and adaptive methods of controlling access to more intensively hunted and more sensitive areas.

The GMA already employs powers to limit access to certain areas under Section 86 of the *Wildlife Act 1975* (Vic), which allows any area (public or private) to be further regulated or closed to hunting. It is generally recognised as a provision to close areas to duck hunting but it can be used more broadly (Game Management Authority, 2017d, p. 10). Section 86A of the Act provides a more rapid process to further regulate or close an area to hunting when threatened wildlife or significant numbers of protected species other than game birds are under immediate threat of destruction, injury or disturbance from hunting. Wetlands and hunting may be further regulated or closed to hunting with 3 days' notice under s.86 or the day before under s.86A (emergency closures). However, the consultation and administrative processes that currently precede the minimum notice period for processing s.86 and s.86A notices are cumbersome and time-consuming. Land management powers under the *Wildlife Act 1975* (Vic) are generally the responsibility of the Minister of Energy, Environment and Climate Change. However, wetland closures are instigated jointly by the Minister for Agriculture and the Minister of Energy, Environment and Climate Change.

The current powers have been criticised as too restrictive by hunting organisations and as too inflexible by animal welfare and community groups. GMA staff have indicated that the processes around these

powers are bureaucratic and cumbersome and that they do not provide an effective means of managing access to sensitive hunting areas.

Permit and balloting systems offer an additional, more flexible and responsive means of supporting sustainable and responsible hunting.

Balloting is an established approach to allocating hunting access in the face of hunting pressure that is widely accepted in other jurisdictions. It can provide a fair and transparent process for sharing access, managing hunter numbers, concentration and timing. Balloting arrangements can also serve as a mechanism for providing information and education, and for targeting specific conditions that align with the objectives of a regulatory authority. For example, balloting arrangements can be designed to require a valid application that must include certain information and evidence (for example game and firearms licences, Wildlife Identification Test qualification, completion of the Shotgun Education Program and so on) that remind hunters of their obligations and provide a relatively simple set of requirements that can be checked for compliance purposes in the field. The NSW Maragle State Forest Ballot requires applicants to have successfully completed the on-line forest signs and navigation courses and hold an R-licence to gain access to the NSW public lands booking system. A successful ballot applicant can be provided with a specific permit that may include time and location permission/restrictions and conditions that are easily verifiable and can assist with compliance activity.

GMA has some experience with the Blond Bay Hog Deer Advisory Group ballot, in which balloted hunting periods outside of the open season in certain locations are organised by the Blond Bay Hog Deer Advisory Group (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, pp. 75-76). The ballot is used to select hunters to hunt for free-ranging hog deer on Blond Bay State Game Reserve, on sections of the Boole Poole Peninsula and on Snake Island.

There are many other examples of deer hunting ballot approaches in both Australia and New Zealand, particularly during the breeding season when numerous hunters wish to hunt in particular areas. Examples include:

- the Fiordland Wapiti Foundation ballot for access to NZ Department of Conservation managed public lands for the Wapiti deer bugle in March/April each year (numerous hunters/restricted area and managed herd);
- the NSW Game Licensing Unit ballot for Maragle State Forest fallow deer hunting (numerous hunters/restricted area); and
- NZ Department of Conservation monthly ballot for fallow deer hunting in the Blue Mountain RHA (numerous hunters/restricted area).

The New Zealand Fish and Game Council also utilises a system of pegging and tagging maimai's (duck hunting stands) with minimum separation distances. This has the effect of limiting the number of hunters in any area, as well as ensuring safe distances between hunters. Public areas under New Zealand Fish and Game Council control have also used balloting where the hunting area is limited. For example, the New Zealand Central South Island Fish and Game Region held a ballot for hunting stands in public wetland areas it managed for the 2017 season:

- Wainono Reserve;
- Waimate (adjacent to Lake Wainono) up to 6 stands (dependent on water levels);
- All Day Bay (South of Oamaru) up to 3 stands (dependent on water levels);

- Devils Bridge (Oamaru) 3 stands; and
- Ealing Springs (Rangitata) 1 stand for 4 hunters – all 4 hunters must be named on the application.

Duck hunting on public lands in Victoria involves high numbers of hunters, with hunter and protester behaviour incidents occurring primarily on the opening weekend of the season. Balloting may be an approach to improving the hunting experience by reducing the concentration of hunters in any one location at a given time. It may also reduce the potential for conflict between hunters and protesters by diluting the emotions attached to particular events, such as the opening of the duck hunting season, and allow limited enforcement resources to be more effectively targeted. This could be achieved by limiting the number of permits for popular areas; staggering the availability of areas or zones, and staggering the “opening” of the season by hunter or by zone.

The GMA should consider the application of effective permit and balloting systems to better control access to more intensively hunted or more sensitive hunted areas. A more general permit or ballot system would also provide the GMA with advance information on the likely concentrations of hunter numbers and more effectively target compliance and enforcement efforts on higher risk hunting areas.

8.7 Stakeholder and community engagement

The regulation of recreational game hunting touches on a wide spectrum of values and interests.

As a public regulator, the GMA has a duty to engage with stakeholders across the spectrum of values and interests reflected in the community at large. The GMA’s stakeholders therefore include Ministers, the Parliament, other department and agencies, hunting organisations, animal welfare groups, community organisations, public and private landholders, individual hunters and other users of public lands.

The GMA’s mission statement reflects a commitment to work with the community. The GMA’s mission statement says that it will:

... work with the community as an effective, independent regulator and an authoritative facilitator of sustainable game management and quality hunting opportunities. (Game Management Authority, 2017)

However, the mission statement does not make clear what the GMA intends by its reference to community or how it proposes to build appropriate relationships to support its regulatory objectives.

The GMA (2016c) has developed a high-level stakeholder engagement strategy. That document describes the GMA’s major stakeholder groups, assesses their relative interest and influence, and suggests a general approach to engagement with each of the different groups of stakeholders. It is impressive that a small regulator should invest the time and energy in undertaking a formal stakeholder analysis. However, although the document was authorised at Board level, GMA staff did not appear to be aware of this document and were uncertain how it should be applied.

One of the weaknesses of the current stakeholder engagement strategy is that it provides only a very general and high-level indication of the intended approach to stakeholder management. The stakeholder engagement strategy identifies stakeholder groups, but does not consistently identify individual stakeholder organisations. While the strategy indicates broad communication and engagement preferences, it does not provide any detailed guidance on how these preferences are to be

operationalised. It is therefore difficult for staff to know whether they are acting in accordance with the intended strategy.

The GMA's actual consultation with stakeholders does not appear to be consistent with the high-level intentions set out in the stakeholder engagement strategy. While the stakeholder engagement strategy indicates that peak hunting associations, some other departments and agencies and animal/wildlife welfare groups are key stakeholders who ought to be involved in collaborative decision-making (Game Management Authority, 2016c, pp. 5,6,7), representatives of organisations within these stakeholder categories expressed frustration with the GMA's consultative processes and sought greater involvement in decision-making. The short timeframes for input to advice for the Minister on consideration of duck hunting season arrangements, and the absence of feedback on the basis of the advice provided to the Minister, were consistently cited as examples of the GMA's unwillingness to consult effectively. While the GMA is involving these organisations in its decision-making, the process that is followed seems well short of the objective set out in the strategy of partnering with key stakeholders "including [in] the development of alternatives, making decisions and the identification of preferred solutions" (Game Management Authority, 2016c, p. 7).

At present, the stakeholder engagement strategy has a focus on the objectives set out in the GMA's mission statement of facilitating sustainable game management and quality hunting opportunities. The document points to the benefits of improved stakeholder engagement in the development of policies, programs and service delivery. However, in its current form, the stakeholder engagement strategy does not specifically refer to the GMA's compliance and enforcement responsibilities, or take the opportunity to articulate ways in which key stakeholders could be engaged to better secure their support in improving compliance with the game hunting laws.

The GMA enjoys very strong support from shooting associations and hunting organisations. These bodies look to the GMA represent their interests, manage game populations and facilitate hunting opportunities and represent their interests. For its part, the GMA acknowledges hunting organisations as key stakeholders who ought to be closely involved in decision-making (Game Management Authority, 2016c, pp. 5,6). These bodies have been provided with opportunities to be consulted on major projects and were involved in a collaborative review with the GMA of the duck hunting season opening. Individual members of hunting organisations have also provided enthusiastic testimonials of the GMA's concern for their interests and willingness to engage with hunter in a polite, courteous and professional manner.

While hunting organisations are very supportive of the GMA, they are critical of some elements of its engagement. Hunting organisations indicated that while the GMA was willing to consult, the communication tended to be reactive and sometimes defensive, rather than proactive.

Hunting organisations indicated that structured engagements with the Board were symbolic rather than effective. The hunting organisations suggested that there was little opportunity in these meetings to raise complex topics or engage in any depth of discussion. A GMA Board member suggested to this review that meetings between the Board and the hunting organisations had been structured to ensure that the interactions were transparent and arms-length. While this is understandable, it would be useful to communicate this concern to stakeholders, so that they have a better understanding of the constraints under which the GMA needs to operate, and to structure the meetings in ways that allow for a properly documented and substantive discussion of shared issues.

One hunting organisation indicated, however, that formal interactions with the Board and CEO were less important than the relationships developed with officers of the GMA. That organisation indicated that it had direct, weekly contact with officers who understood its needs and could deal effectively with

most issues. While encouraging, this also raises an issue as to whether there is a close alignment within the GMA on its strategies for engaging with hunting organisations. As staff consulted in this review were not aware of the Board's stakeholder engagement strategy, it may be worth taking steps to ensure that interactions with stakeholders at all levels of the organisation are consistent with the strategy agreed by the Board. All the hunting organisations felt that the GMA needed to engage more effectively with their members.

There are questions as to whether the relationship between the GMA and hunting organisations is always fully effective in achieving the compliance of hunting organisation members. There is a perception amongst some external stakeholders that the GMA has been captured by hunting interests. They have suggested that the GMA is a compliant regulator because many of its staff share an active interest in hunting and that the GMA is afraid of the political power of hunting interests. This view was also expressed in workshops by some of the GMA's own staff.

Arrangements between the GMA and the hunting organisations are sometimes too comfortable. The GMA's predecessor organisation effectively handed the taxpayer-funded Shotgun Education Program over to the hunting associations to operate on a user charge basis without sufficient safeguards to ensure that the Program was appropriately maintained or marketed. At a minimum, regular reviews of the program's operation and effectiveness should have been required as a condition of the hunting organisations' continued stewardship. The GMA, to its credit, has co-funded a review of the marketing of the SEP, but it had probably not done enough in its first years of existence to put appropriate arrangements in place to ensure the success of the program. The hunting organisations accept they have under-invested in the maintenance of the Shotgun Education Program and need to do more to market and support this program with their members. However, the responsible government agencies have been deficient in holding the hunting organisations to account for their management of the program.

More generally, GMA staff have pointed to instances where hunting organisations have not provided the support that they might have expected in relation to the compliance of their members. The GMA needs to ensure that it has effective and functionally appropriate relationships with hunting organisations. While this will sometimes require close collaboration and the sharing of information, the GMA also needs to be prepared at times to insist on the support of the hunting organisations in building a more compliant hunting culture. This may involve confronting a hunting organisation and insisting on an appropriate response when its members fail to meet appropriate standards. Where a hunting organisation is engaged as a co-regulator, the GMA needs to ensure that it has appropriate performance standards and conditions in place, and is clear about the sanctions that it is prepared to apply if those conditions are not met.

The GMA also needs to broaden its engagement with other stakeholder groups. Not all hunters are members of hunting organisations. The GMA's formal engagement with hunters who are not members of hunting organisations is extremely limited. The GMA needs to improve its access to non-member hunters, including through greater use of social media and the publication of materials in relevant community languages. To better connect with hunters from non-English speaking backgrounds, the GMA could also work more actively to engage with representatives of community groups that are known to have a cultural tradition of recreational hunting.

The GMA's engagement with other stakeholders and communities is not strong. Animal welfare groups consulted in this review have acknowledged the efforts of the GMA CEO to engage with them. However, animal welfare and community groups generally perceive the GMA as reluctant or grudging in its consultation with them and unwilling to take on board information and feedback. They believe that they are excluded from matters on which they ought to be consulted. Although the GMA's stakeholder

engagement strategy indicates that animal welfare groups and hunting organisations are both “critical players” who the GMA is to “involve/collaborate” with in potential decision-making (Game Management Authority, 2016c, p. 5), there is an asymmetry in the GMA’s engagement with animal welfare and wildlife groups compared with hunting associations. While hunting organisations have been invited to attend the Board prior to its meetings, animal welfare and wildlife bodies have not been provided a similar opportunity. Similarly, hunting organisations were given an opportunity to participate in a round-table review of the opening of the 2017 duck hunting season, but animal welfare organisations were not.

It is in the GMA’s best interest to ensure that it engages effectively with stakeholders across the spectrum of values and interests touched on by its regulatory responsibilities. The GMA’s legitimacy depends on its acceptance by stakeholders as a credible and independent regulator. A number of external stakeholders consulted in this review suggested that the GMA is neither impartial nor independent.

Professor Ian Ayres of Yale Law School and Professor John Braithwaite of the Australian National University (1992, p. 54) have pointed to the risks for regulators of regulatory capture. Regulatory capture occurs when vested interests bias the incentives of regulators and governments to act in their interests rather than the broader public interest (Helm, 2006, p. 174). Capture is an influential concept in debates about why regulatory agencies persistently fail to enforce the law against offenders (Makkai & Braithwaite, 1992, p. 62).

Ayres and Braithwaite suggest that to counter the risk of regulatory capture, regulators should involve public interest groups in the dialogue between regulators and the regulated in what they label as ‘tripartism’ (1992, p. 56). They argue that tripartism fosters the participation of public interest groups in the regulatory process in three ways:

- 1) it grants the public interest group and all its members access to all the information that is available to the regulator;
- 2) it gives the public interest group a seat at the negotiating table with the regulator and the regulated when deals are done; and
- 3) the policy grants the public interest groups the same standing to sue or prosecute under the regulatory statute as the regulator (Ayres & Braithwaite, 1992, pp. 57-58).

While the concept of tripartism has been criticised as limiting the flexibility of a regulator (Seidenfeld, 2000), it is generally accepted that sound governance, transparent decision-making and effective stakeholder engagement across a range of values and interests will assist in managing the risk of regulatory capture.

Following the events at Koorangie State Game Reserve on the opening day of the 2017 duck hunting season, the GMA committed to provide the Minister with recommendations to improve hunter behaviour, create a respectful hunting culture and improve hunter knowledge, skills and ability, “following consultation with hunting organisations” (2017f, p. 14). The GMA should consult with a wider spectrum of stakeholders on this work. This would be consistent with the principle of tripartism. Consultation with a wider group of stakeholders would extend the range of knowledge and expertise available to the GMA, and build confidence in the GMA’s integrity and independence as a regulator.

The GMA has much to gain from working more closely with its stakeholder groups and the wider community.

Hunting organisations indicated that they have offered to support the GMA’s compliance enforcement efforts by making senior and experienced members available to patrol sensitive and intensively hunted

areas on weekends to reinforce the importance of responsible and ethical hunting and to collect intelligence that could support the GMA's enforcement functions.

Other game management organisations have engaged with volunteers to support their regulatory activities.

New Zealand Volunteer Fish and Game Rangers

The New Zealand and Game Council supplements its permanent resources with an extended workforce of volunteer rangers.

Fish and Game Rangers are appointed under Section 26FA of the New Zealand Conservation Act 1987 by the Director of the New Zealand Fish & Game Council (New Zealand Fish and Game Council, 2012, p. 1). Under Section 26FA(1), the Director may appoint "any suitably qualified and trained employees" of Fish & Game Councils to be Fish & Game Rangers and, under Section 26FA(2), may appoint "fit and proper persons who are suitably qualified and trained to be Fish & Game Rangers in an honorary capacity". Under normal circumstances Fish and Game Compliance Officers in the regions will identify "fit and proper persons" who they want in their honorary ranging teams and provide training and qualification tests before recommending them to the Director for appointment.

The Director upon approving a recommended appointee will issue a signed photo ID card under Section 26FA (8) that states "The Director shall give every Fish & Game Ranger a written warrant, signed by or on behalf of the Director, evidencing the appointment; and production of that warrant shall, in absence of proof to the contrary, be conclusive evidence of appointment" (New Zealand Fish and Game Council, 2012, p. 1).

The primary roles of the Rangers are to:

- *assist in the creation of an effective deterrent to non-compliance by sports fishers and game bird hunters;*
- *detect and apprehend non-compliers and contribute to their successful prosecution;*
- *encourage a high level of voluntary compliance through good public relations and establish good rapport with the angling and hunting public; and*
- *gather and report information on other illegal activities and poor environmental practice potentially affecting water quantity and quality (New Zealand Fish & Game Council, 2016).*

The Fish & Game Ranger Guide and Health and Safety Manual (New Zealand Fish & Game Council, n.d., p. 26) suggests that game bird ranging wherever possible should be done in pairs and that Rangers must not be hunting or carrying their own firearms. In relation to game bird ranging following initial conduct and introduction by a Ranger interacting with a hunter, Rangers require hunters to unload their firearms. This serves two purposes: firstly, it enables Rangers to check the ammunition which they have loaded in the gun and magazine for the use of lead shot when not permitted; and secondly, it makes the gun safe, and they can be safely placed out of the way while the Ranger conducts an interview with the hunter.

All warranted Rangers have undergone a screening process, including a police check. Rangers are also required to participate in skills and occupational health and safety training provided by a third-party provider (New Zealand Fish & Game Council, 2016). In-house

training is provided on the powers of Rangers, requirements under the New Zealand Search and Surveillance Act 2012, note taking and record keeping.

After detecting an offence, all Rangers are required to provide a full report to their compliance officer (New Zealand Fish & Game Council, 2016). This report is then reviewed by the compliance officer and regional manager before a decision is made on how the matter will be resolved. Possible outcomes range from “No further action”, “Warning” through to “Court Prosecution”.

Annually, Fish and Game Councils detect and deal with approximately 200- 300 offences (New Zealand Fish & Game Council, 2016). A significant number of these matters are able to be resolved out of court. However, a good proportion of offences (between 70 – 120 annually) progress as Court prosecutions, either due to the seriousness of the offending, or due to the inability to resolve the matter out of Court.

Volunteer fish and game rangers in New Zealand have a range of formal powers and require substantial training. There are clear benefits in an arrangement of this kind, but it might represent a level of complexity that would be difficult for the GMA to support. As an alternative, the GMA could work with hunting organisations to support a less formal arrangement in which the hunting organisations themselves train and support their more experienced members to provide information, advice and counsel to their members in the field. In the event of illegal or irresponsible behaviour of members, it would be open to the hunting organisations to cancel or suspend memberships and provide information to the GMA for follow-up enforcement action. The scope for developing a volunteer warden scheme should be explored with government and stakeholder organisations.

Community groups have also indicated a willingness to support the GMA in a range of relevant activities including:

- research on waterfowl numbers;
- location of protected and endangered species; and
- intelligence collected at scene of shooting to support compliance and enforcement activities.

At the Koorangie State Game Reserve in 2017, the bulk of the birds, including threatened and protected species, recovered from the Marshes and nearby lakes were collected by animal welfare and community members rather than by GMA staff (Game Management Authority, 2017f, p. 6). Community groups can provide invaluable assistance in collecting information and intelligence to supplement GMA’s limited resources. However, community stakeholders have also expressed frustration at the difficulties they have encountered in sharing this information with the GMA.

The GMA should be working more closely with community groups, hunting organisations and other stakeholders on the collection of information and other intelligence related to its compliance and enforcement activities. Clearly, volunteers would be more suited to some functions than others, and there would be some resistance from some stakeholder organisations to the participation of other organisations in some functions. However, it is important to stress that no single interest group owns the GMA’s compliance and enforcement functions or has the right to veto how the regulator exercises its statutory responsibilities.

Cooperative arrangements with community stakeholders have had notable success in other enforcement systems. Neighbourhood Watch and Community Crime Stoppers have been beneficial in building community understanding for the work of Victoria Police and in providing access to an extended intelligence and information network. The recent Victorian Parliamentary Inquiry

recommended “[t]hat Victoria Police and the Game Management Authority work collaboratively to better monitor and educate the community on reporting mechanisms for illegal hunting activity” (Parliament of Victoria Environment, Natural Resources and Regional Development Committee, 2017, p. 394). A GMA sponsored Neighbourhood Watch arrangement for regional landholders and other interested stakeholders would help build confidence in the GMA and provide access to useful intelligence on illegal and irresponsible hunting activities.

The GMA needs to develop strategies for engagement with its stakeholders that build confidence in its integrity and independence as a regulator and more effectively support its compliance and enforcement activities.

8.8 Conclusions

The GMA is constrained by the legislative and regulatory framework in which it is required to operate.

There is scope to improve the GMA’s potential to operate as an effective compliance and enforcement agency by rethinking the appropriate role of government in the regulation of game hunting and the scope of GMA’s compliance and enforcement responsibilities.

There are tensions in the mix of functions currently undertaken by the GMA. The independence and effectiveness of the GMA’s regulatory functions would be strengthened if they were located in a larger, more broadly-based regulator with complementary skills.

If this is not possible, the GMA should develop appropriate governance arrangements and a form of operational separation to protect the independence of its licensing, compliance and enforcement functions.

Existing land management arrangements can leave the GMA in a position where it is unable to effectively enforce the hunting laws in more intensively hunted areas. The GMA should consider more flexible arrangements for land access based on permit and ballot systems that are widely deployed in other jurisdictions.

The GMA’s licensing arrangements are inadequate. More stringent minimum standards and testing would provide some assurance that hunters are aware of their legal responsibilities before they go into the field and would reduce the pressure on the GMA’s limited compliance and enforcement capacity.

The GMA should apply more flexible and adaptive compliance and enforcement strategies that are in line with contemporary approaches to regulation and are informed by data on the actual compliance behaviours of its stakeholders. These strategies should include the scope for self-regulation and co-regulation where stakeholders can demonstrate their willingness and ability to comply.

The GMA needs to develop strategies for stakeholder engagement that build confidence in its integrity and independence as a regulator and more effectively support its compliance and enforcement activities.

9 Conclusion

This section offers some conclusions and suggestions for the GMA regarding next steps.

This report offers an assessment of the GMA's effectiveness in its compliance and enforcement roles.

Though the research, advisory and land management roles of the GMA are acknowledged, they are not the focus of this report.

Many of the observations reflect on the overall policy and regulatory context within which the GMA operates, and, if they are to be pursued, will require careful consideration in conjunction with government and other agencies.

GMA staff are generally skilled and motivated, and they have produced some very high-quality materials and programs. As it stands, however, the GMA is failing to adequately fulfil its statutory obligations. There are no easy fixes, and the scale of the challenges will require major change to the regulatory regime if the GMA is to raise the effectiveness of its compliance and enforcement regimes to an acceptable level.

The GMA needs to work with land managers to develop more effective ways of managing access to sensitive and more intensively hunted areas. It also needs to seek the support of government in strengthening the current licensing regime.

There is some scope for the GMA to take steps within its own power and existing resourcing levels to improve its effectiveness as an operational regulator. The GMA could better protect the independence of its regulatory functions, develop a more sophisticated compliance strategy and target its compliance and enforcement interventions more effectively.

The GMA also needs to improve the quality of its engagement with stakeholders, and enlist their active and participative support in improving the behaviours of hunters.

Reform will require concerted action by government and non-government stakeholders. While the GMA can and should be a key player in these efforts, the scope of the changes required are beyond the direct authority and capability of the GMA to deliver on its own.

The current situation exposes the Minister and the Board to considerable policy and regulatory risk and if not addressed will contribute to the erosion of the hunting community's social licence.

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