



Submission

in response to

**Inquiry into Rural Drainage in Victoria,
Parliament of Victoria, Environment and Natural Resources Committee**

prepared by

Environment Defenders Office (Victoria) Ltd

19 December 2012

For further information on this submission, please contact:

Elizabeth McKinnon, Law Reform and Policy Director, Environment Defenders Office (Victoria) Ltd

T: 03 8341 3100

E: Elizabeth.mckinnon@edo.org.au

Submitted to:

Cc:

19 December 2012

Background

The Environment Defenders Office (**EDO**) is a non-government, not-for-profit environmental law centre practising public interest planning and environment law. We are dedicated to a community that values and protects a healthy environment and support this vision through the provision of information, advocacy and advice.

The EDO has considerable experience dealing with legal and policy issues concerning water, wetlands, biodiversity and catchment management. Our expertise in respect of these matters includes involvement in law reform and in public interest litigation. Recently, for example, the EDO has published a comprehensive report *Protecting Victorian Wetlands (EDO wetlands report)* concerning the legal and policy framework for the protection of wetlands in Victoria.¹ A copy of that publication is attached to this submission. A substantial amount of the material in EDO's wetlands report is also relevant to the Committee's inquiry and we will refer to that below. EDO is also making a submission² to the current Government process to review the *Water Act 1989 (Vic)*.³

Rural drainage schemes are widespread historic modifications to landscapes around Victoria. Various Catchment Management Authorities (**CMAs**) have responsibility for their management, including Melbourne Water.⁴ These schemes were historically developed for the purposes of 'reclamation' of wetlands for agricultural purposes, requiring the construction of extensive networks of drainage channels around and through former wetlands. Ordinarily, those wetlands existed in topographic depressions and were in some instances extensive in size, as for instance the Koo Wee Rup and Carrum Swamps. We understand there are dozens, if not hundreds, of drainage schemes around the State.⁵ The drainage schemes also were established, and continue to operate, for flood mitigation purposes. We note that the Committee's earlier inquiry into flood mitigation in Victoria⁶ discussed and reported on rural drainage schemes in that context.

Context

Rural drainage schemes are one manifestation of the extensively modified landscape that has evolved in Victoria over the last 200 years. Not only have these schemes changed the (surface) hydrology of areas in which they were established but they have also changed the hydrogeology of those areas and their ecology, including the ecology of downstream areas such as Westernport Bay, Lake Corangamite and Lake Colac, and the Yambuk estuary in Western Victoria. That evolution continues and it includes processes of recolonization of waterways by native (and exotic) flora and fauna. The historic impacts and environmental damage presented by drainage schemes, such as destruction or elimination of wetlands, are only one of the (probably) unforeseen consequences of these programs. Other problems have included downstream flooding and sedimentation impacts, erosion, mobilisation of salt within catchment and river systems,⁷ and soil acidification.⁸

The schemes were originally established and governed under stand-alone *Drainage Acts*, which focused on their 'land reclamation' and agricultural purposes. Since the 1990s, the schemes have

¹ Environment Defenders Office *Protecting Victorian Wetlands* (2012), at <http://www.edovic.org.au/protecting-victorian-wetlands>

² EDO submission to this process will soon be available on the EDO website: <http://www.edovic.org.au/law-reform/submissions-and-reports>

³ See <http://www.water.vic.gov.au/governance/water-law-review>.

⁴ *Water Act 1989 (Vic)*, Part 10 Division 3

⁵ The Glenelg Hopkins CMA note more than 40 gazetted and ungazetted schemes in that area alone: *Strategy for Existing Rural Drainage Schemes 2004-2007*

⁶ Victorian Parliament Environment and Natural Resources Committee *Report of Inquiry into Flood Mitigation Infrastructure in Victoria* (2012) (**Flood Inquiry Report**)

⁷ See eg Golbourn Broken Catchment Management Authority *Best Practice Principles and Standards for Drainage in Drylands Catchments* (2002), 3-4

⁸ See eg North East Catchment Management Authority *Regional Rural Drainage Management Strategy 1999*, 7 [2.2]

been regulated under Part 10 Division 3 of the *Water Act 1989* (Vic). These provisions give responsibility for the schemes to CMAs and provide the responsibilities of CMAs in this regard and the ways in which they are to operate. In particular, it is noteworthy that the functional approach to the management of the schemes (eg especially for flood mitigation purposes) is to be balanced with an 'environmentally sound' approach.⁹

As we have noted in our *Wetlands Report*:¹⁰

- A balance of flood management and environmental purposes operates under the Act. In particular, management of in stream uses is to be conducted in an 'environmentally sound way',¹¹ where 'in stream use' can include, for example, diversion of water for flood mitigation purposes or for the benefit of riparian species that might colonise the drainage channels.
- The functional subsumption of drainage scheme governance to catchment management suggests a shift in perspective in the management and operation of these schemes toward their situation in the wider landscape as distinct from the mere movement of surface waters for drainage purposes.¹²
- Further, channels formed by and constituting drainage schemes are 'waterways' for the purposes of the Act¹³ and their governance is directed by the purposes of the Act including *inter alia* 'for the protection and enhancement of the environmental qualities of waterways and their in-stream uses.'¹⁴ We discuss the issue of 'environmentally sound' approaches to management further below.

Evidence from EDO wetlands report

The EDO report *Protecting Victorian Wetlands* considers the issue of threats to wetlands and waterways across the State. Included in the material informing this *Report* are responses from surveys of CMAs on the question of threats to wetlands within their catchment.¹⁵ Significantly, among the most common responses on this issue were removal of wetlands for agriculture, the continued drainage of wetland areas for agriculture, and the conversion (including drainage) of wetlands for industrial and urban development purposes.

What these responses indicate is that drainage practices are continuing in rural and regional areas and that these practices constitute (and are perceived by catchment managers as constituting) significant threats to wetlands. This is to say, wetland areas continue to be lost to drainage of wetlands and it is reasonably likely that environmental harm continues to arise from these practices.

The EDO wetlands report makes recommendations about legislative, administrative and practical changes that should be adopted to provide better protection to wetlands. Various of the Report's recommendations are relevant to the Committee's considerations in the present inquiry.

Having regard to the Inquiry's Term of Reference 4, we submit that continuing practices of drainage need to be subject to improved legislative and regulatory controls, especially to protect critical habitat, including amending planning schemes to prohibit the conversion or destruction of

⁹ *Water Act 1989*, subs 199(2)

¹⁰ Environment Defenders Office *Protecting Victorian Wetlands*, 23

¹¹ *Water Act 1989*, subs 199(2)

¹² Cf *Drainage Act 1958* (Vic) (repealed), subs 4(3): 'A drainage area shall be contained as far as may be within boundaries which accord with the natural features of the country suitable and in fixing such boundaries regard shall be had to the general contour of the country and the facilities offered thereby for the drainage of water therefrom.'

¹³ *Water Act 1989*, s 3

¹⁴ *Water Act 1989*, sub 1(j)

¹⁵ See in particular Environment Defenders Office *Protecting Victorian Wetlands*, 15

important wetlands and requirements for landowners to taken action consistent with a duty of care to protect wetlands (including from continuing drainage).

More directly related to existing drainage schemes, the EDO also recommends that better resourced and structured support be given to landholders to protect wetlands and their environmental values. This principle should extend financial and other support mechanisms to protection of values drainage schemes may have acquired over time as environmental assets in modified landscapes.

Management in an 'environmentally sound way' (relevant to TOR 3, 4, 5)

As noted, a CMA must '... perform its [drainage scheme management] functions in an environmentally sound way.'¹⁶ The Act provides no guidance as to what 'environmentally sound way' requires or what should be taken into consideration when acting in that manner.

The term 'environmentally sound' tends to indicate the management or control of an environmentally hazardous action in a manner that will not produce, or at least not aggravate, environmental harms associated with it.¹⁷

We suggest in the present context the term refers to the need for management of drainage schemes to have regard to protection of environmental assets and processes and to avoid unnecessary environmental harm or adverse effects. Given the common approach which it for environmental impacts to include indirect, downstream or cumulative impacts,¹⁸ the notion of environmental impact should be give a wide ambit.

We recommend that detailed guidance should be provided as to what 'environmentally sound' means and what factors CMAs should take into account when performing their statutory functions in relation to drainage schemes.

In general that guidance will be significantly informed by the application of environmental law to these particular circumstances. This includes the operation of environmental protection provisions contained in Victorian law (eg Victorian Planning Provisions, *Catchment and Land Protection Act*), as well as the impact of Federal environmental law (ie Environment Protection and Biodiversity conservation Act 1999), where Matters of National Environmental Significance are at issue. It is foreseeable that MNES could be affected by both the management of drainage areas (eg clearing or in-stream works, downstream impacts) and continued drainage or loss of wetlands. Development of specific guidance applicable to rural drainage schemes would facilitate dealing with issues, problems, questions and considerations that would likely arise in the application of relevant legal and policy frameworks.

Without wishing to limit the scope of what might be appropriate for such guidance and having regard to remarks below, we suggest the following are relevant:

- Application of the avoidance hierarchy as relevant to matters of environmental significance. Those matters might include impacts on ecological assets (eg flora and fauna directly, habitat loss, damage and disturbance, contamination). Application of the hierarchy should ordinarily include consideration of alternatives and/or innovations to works that will avoid and/or minimise adverse impacts. Where higher risk environmental impacts are at issue,

¹⁶ *Water Act 1989*, subs 199(2)

¹⁷ By way of comparison, the term 'environmentally sound management' arises in the *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal*, Article 2(8): "Environmentally sound management of hazardous wastes or other wastes" means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes."

¹⁸ See eg Department of Sustainability, Environment, Water, Population and Communities *Matters of National Environmental Significance: Significant Impact Guidelines* (2009), 3-6

greater and proportionate effort should be required for innovative response.

- Consideration of downstream environmental impacts, including impacts on downstream wetlands, marine or coastal sites, impacts from movements of sediment and/or pollutants.
- Consideration to modifications and/or innovation to the design of drainage channels, bank structure, vegetation communities, and so on, that would allow the schemes to operate in a more riparian fashion, while still taking account of the drainage purposes of channels.
- Management of the scheme from a catchment perspective.
- Periodic review of management strategies.

Concerns with drainage scheme regulation and flood inquiry recommendations (relevant to TOR 1, 2, 3, 6)

We note that in evidence given to the Inquiry into Flood Mitigation Infrastructure concerns were raised about regulatory complexity and uncertainties surrounding governance of drainage schemes. Similar concerns have been raised elsewhere, such as in a report prepared for landholders in the Koo Wee Rup - Longwarry Flood Protection District.¹⁹ In the latter case, landholder concerns related to constraints of drainage of flood waters through the scheme and away from agricultural land. The report argued that environmental controls applicable to the scheme, including regulation of native vegetation clearing and consideration of downstream impacts on the Westernport Ramsar site (enlivening or potentially enlivening application of the EPBC Act), were unreasonable constraints on a scheme originally design to mitigate flood impacts on agricultural land.²⁰

It was noted by CMAs in their submissions to the Flood Mitigation Inquiry that coordinated and systematic management of these schemes was not occurring and there is no clear policy direction in relation to their operation. As the Glenelg Hopkins CMA noted: drainage scheme management has been 'in decline since the [Drainage] Act was repealed to the point where maintenance levies are no longer being collected by councils and coordinated maintenance has generally not been undertaken in most schemes for a decade or more.'²¹ Drainage channels had, the GHCMA remarked, 'become naturalised over time.'²²

In response to such evidence, the Committee recommended in its Flood Inquiry Report that maintenance works on drainage schemes should be exempt from the requirement to obtain permits to remove native vegetation.²³ The Committee also recommended development of clear policy for coordinate management of rural drainage.

Governance and policy directions for drainage areas (relevant to TOR 5, 6)

Drainage schemes function as modified landscapes within wider natural catchments. For this reason we recommend that, from an institutional viewpoint, rural drainage should continue to operate under the authority and direction of CMAs. We do not think it is advisable, for instance, to re-create legislative mechanisms such as the old Drainage Acts and local committees of management. This integrated catchment management approach is also preferable where drainage schemes now serve both hydrological (ie drainage and flood mitigation) functions as well as ecological purposes.

¹⁹ Pat Condina and Associates *Overview of Flood Drainage Capacity of the Dalmore Road Drain with reference to Drains in the Koo Wee Rup Longwarry Flood Protection District: Report prepared for Landowners in the Dalmore locality* (2012) ('Condina Report')

²⁰ Condina Report, 5, 41

²¹ Glenelg Hopkins CMA *Submission to Parliamentary Inquiry into Flood Mitigation Infrastructure in Victoria* (2011), 6

²² Ibid

²³ Parliament of Victoria Environment and Natural Resources Committee *Inquiry into Flood Mitigation Infrastructure in Victoria* (2012), 140 Recommendation 5.9

There is however need for clearer direction, guidance, structure and governance of drainage areas. While CMAs may be generally active in relation to drainage area management, there appears to be limited development of express, stand-alone and/or codified policy and rules at the CMA level on governance and management of these areas. This work is no doubt made more difficult by the fact that CMAs may be dealing with a proliferation of gazetted and ungazetted schemes, across disparate geographic areas, and with limited resources.

With all of the above points in mind, we make the following submissions:

Continued drainage of wetlands

Given evidence of continued threats of drainage and conversion of wetlands across Victoria, as the EDO *Wetlands Report* identifies, we submit to the Committee that CMAs should be required to inquire into and report publicly on the location, scale, precise impacts and response to continued drainage of wetlands for agricultural or other purposes.

We urge the Committee to review the EDO *Wetlands Report* and adopt those of its recommendations as fall within the scope of the Terms of Reference of this Inquiry.

In particular, this includes:

- requiring CMAs to identify high value wetlands as may be impacting by ongoing drainage actions,
- developing a wetlands overlay for the planning scheme (or comparable instrument),
- supporting landholders to protect and conserve wetlands and their ecosystem services (see below),
- applying Conservation Orders to wetlands with 'critical habitat',
- requiring CMAs to clarify and provide guidance to landholders on their duty of care to the land as this applies to wetlands.

Preparation of special plan and/or strategy for drainage areas

There is presently scope within the legislative framework operating under the *Water Act* and *Catchment and Land Protection Act* to accommodate improved and clearer governance and administration of drainage areas, having regard to the purposes and functions of the schemes and the statutory functions of CMAs in this regard under *Water Act*, s 199.

Not all CMAs have the same or similar issues in relation to management of drainage areas. Hence some flexibility in response is appropriate. We submit that a useful approach includes:

- In respect of those CMAs with substantial, distinct drainage areas (often currently operated under Flood Protection Districts or similar arrangements), Special Area Plans as provided for under Part 4 Division 2 of the *Catchment and Land Protection Act* should be considered as appropriate mechanisms for their management and administration.
- In respect of those catchment and land protection regions in which drainage areas exist and remain a management issue, scope should be provided for their inclusion as discrete matters to be dealt under Regional Catchment Strategies. The *Catchment and Land Protection Act* may be amended to provide for the category of 'drainage area management' under subs 24(3) of the Act.
- Coextensively, a CMA responsible for the management of drainage schemes should prepare a strategy for drainage areas within its jurisdiction. This document could be a more detailed formulation of matters dealt with under the Authority's RCS. This work has already

been undertaken by certain CMAs.²⁴

- Planning scheme amendments could be prepared by planning authorities (primarily Councils) parallel to the strategic and Special Area Plan work undertaken by CMAs. These might, for instance, take the form of relevant schedules to Farming Zones, provisions within the Local Planning Policy Framework for the municipality, or both.

Application of native vegetation regulation

We do not support to Committee's earlier recommendation of the Flood Inquiry Report that, in effect, a further category of exemption be included under Victorian Planning Provision clause 52.17 applicable to rural drainage areas. The effect of such a blanket exemption would be to allow clearing of native vegetation in drainage areas without a permit for the purposes of facilitating maintenance works.

We submit that such a blanket exemption does not take account of the now complex and overlapping functions of drainage areas. Generally, a more nuanced and sophisticated approach is required and attempts to reimpose a purely engineering and hydrological focus to these schemes is simplistic and fails to take account of historic and natural changes to drainage areas, as well as adverse impacts that have been identified over time. This is to say, there are circumstances in which the clearing of native vegetation along drainage channels will be necessary and will impact on vegetation of low conservation significance. There will be other circumstances where clearing will be detrimental, impact on vegetation of higher conservation significance and would likely cause flow-on problems. Those problems may include exacerbation of flooding, mobilisation of sediment or pollutants or destruction of habitat.

The values to be protected by native vegetation clearing controls are therefore both biodiversity values (eg native vegetation itself and habitat) as well as land protection functions. This broad schema of 'landscape-scale' protection is recognised in the *Native Vegetation Management Framework*.²⁵

In addition to these points, where native vegetation removal would likely have a significant impact on a Matter of National Environmental Significance (eg a listed species or community, a downstream Ramsar site) a specific exemption from the requirement to obtain a permit under Victorian Law would not constrain operation of the Federal *Environmental Protection and Biodiversity Conservation Act 1999* (Cth).

The law as it is provides considerable discretion available to decision-makers (responsible authorities mainly) in the management of native vegetation in drainage areas, including the issuing of permits to clear and on what terms and subject to what conditions clearing should occur. A more strategic approach to management of drainage areas, as indicated above, would also contribute to the clarity and efficiency of decision-making with respect to native vegetation management.

Catchment Management Council guidance

The Victorian Catchment Management Council should, in consultation with affected CMAs, affected landholders, local municipalities, and other relevant interest groups (eg Landcare groups, local environment groups), prepare guidance on the management of drainage areas, having particular regard to the balance to be struck between flood mitigation or hydrological (drainage) purposes and ecological purposes of the schemes.

²⁴ See eg Glenelg Hopkins CMA *Glenelg Hopkins Strategy for Existing Rural Drainage Areas 2004-2007*; North East CMA *Regional Rural Drainage Management Strategy* (1999).

²⁵ *Victoria's Native Vegetation Management: A Framework for Action* (2002), 14-15

Similarly, the Council should prepare guidance on 'environmentally sound' management and operational practices impacting on drainage areas. That guidance should have regard to ESD principles, conservation of biodiversity, and prioritise avoidance of environmental harm and innovation in the balance of drainage and ecological purposes.

Funding and 'beneficiary pays' principle

As noted above, it is appropriate that cost-sharing principles apply to management of drainage areas. This approach includes provision for 'beneficiary pays' principles, such that landholders who receive flood mitigation benefits from the schemes are required to contribute to their maintenance. However, as we make clear above, environmental benefits need to be considered as well, and these benefits are inherently of a public nature. In that respect, 'ecosystem services' that now are served by the existence of drainage systems (whether direct or indirect, eg downstream) should be supported by public funds. How such funds are allocated will vary according to appropriate methodologies and purposes in any given circumstance. Tariffs may be levied by CMAs on landholders to undertake drainage area works.²⁶ It is appropriate then that the calculation of tariffs account for distinctive private and public the benefit attained from management of the schemes. The preparation of drainage area strategies (and RCS content dealing with drainage areas), as well as Special Area Plans, as appropriate, would need to calculate precisely the balance of this 'co-funded' and co-managed approach.

Conclusion

Generally, the EDO concurs that greater clarity and structure are needed in relation to the governance and management of rural drainage areas. Reformed approaches do need to take account in particular of the fact that these schemes have and do operate as modified landscapes in the context of wider catchment and landscape management. They have overlapping and potentially conflicting purposes and functions. A relatively sophisticated and considered approach to their management is required, taking into account the diversity of interests (including private and public interests) affected.

We thank the Committee for the opportunity to make submissions to the inquiry, and EDO staff are available to assist the Committee further as may be useful.

²⁶ *Water Act 1989*, s 259(1)(c)