The Sentencing of Environmental Offences involving Non-Human Environmental Entities in the NSW Land and Environment Court

by

Robert Douglas White

Submitted in fulfilment of the requirements of the degree of
Master of Laws

University of Tasmania
March 2017
Candidate’s Statement

I declare that the work presented in this thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of the candidate’s knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

____________________
Robert Douglas White

This thesis may be made available for loan and limited copying in accordance with the Copyright Act 1968 (Cth).

____________________
Robert Douglas White
Abstract

This thesis examines the way in which the New South Wales Land and Environment Court (NSWLEC) approaches the task of determining criminal sentences for offenders who breach environmental laws involving non-human environmental entities such as flora and fauna. The project examines a select sample of cases involving environmental crimes that fall within the jurisdiction of the New South Wales Land and Environment Court (NSWLEC). The focus of the enquiry is to determine the nature and scope of specialist knowledge used in sentencing, specifically the unique sentencing regimes and rationale construed and implemented by this Court, with a view to determining whether and how ecocentrism influences the Court’s reasoning.

The thesis addresses two major questions, namely:

(i) How does the NSWLEC identify, assess and quantify harm in regards to non-human environmental entities such as trees, landscapes and animals in matters where the harm is deemed serious enough to be prosecuted under criminal law?

and

(ii) How does the NSWLEC apportion sentence as part of its role in future deterrence and thereby respond to the damage to, death of, or destruction or degradation of the non-human environmental entity?

Each question implies a vital role for the Court in evaluating and elaborating on the seriousness of the harm. While legislation sets the definitions and limits of harm and the available penalties relevant to that harm, it is up to the Court to determine the specific nature of the harm and translate this into an appropriate sentence. The overarching theoretical question that informs the analysis is the way in which the NSWLEC draws upon an ecocentric approach in determining seriousness of harm and seriousness of offence.

The thesis examines the reasons given for sentence in cases before the NSWLEC relating to the Native Vegetation Act 2003 (NSW) and the National Parks and Wildlife Act 1974 (NSW) within the temporal scope of decisions published between the years 2000 and 2013. The relevant Acts are selected because they include provisions that refer specifically to harm directed at flora and fauna. Only those cases involving offences committed against or involving non-human environmental victims, specifically flora or fauna come within the scope of this study.

The findings reveal that an ecocentric approach informs the Court’s view of and response to environmental harm to non-human environmental entities. This is both illuminated and explained in the research, by synthesising (from across the relevant judgments) the most frequent indicia used by the NSWLEC, in assessing the seriousness of the harm and the gravity of the offence, and then distilling these into thematic determinants.
Contents

Acknowledgements

List of Tables
Legislation
Cases

Ch1
Introduction
1.1 Sentencing and Ecocentrism
1.2 New South Wales Land and Environment Court
1.3 Research Design
1.4 Thesis Structure

Ch2
Non-Human Environmental Entities and Ecocentrism
2.1 Introduction
2.2 Non-Human Environmental Entities
2.3 Theoretical Considerations: Ecocentrism
2.4 Methodological Implications: Indicators of Ecocentrism
  2.4.1 The extent to which the intrinsic value or worth of the non-human environmental entity is taken into consideration
  2.4.2 The use of ecological perspectives to estimate the degree of harm to non-human environmental entities
  2.4.3 The kinds of expertise mobilised within and demonstrated by the Court to adequately capture the nature and complexities of the environmental harm
  2.4.4 The gravity of the offence against the non-human environmental entity as reflected in the penalties given
  2.4.5 The measures taken to ensure the maintenance, restoration or preservation of ecological integrity
2.5 Conclusion

Ch3
Determining Environmental Harm
3.1 Introduction
3.2 Ecocentric Considerations in the NVA and NPWA
3.3. Native Vegetation Act 2003 (NSW)
  3.3.1 Nature of the offence
  3.3.2 The harm caused to the environment by commission of the offence
3.4 National Parks and Wildlife Act 1974 (NSW)
  3.4.1 Nature of the offence
  3.4.2 The harm caused to the environment by commission of the offence
3.5 Harm Indicia and Ecocentrism
3.6 Conclusion
Ch4

**Sentencing Offenders**

4.1 Introduction 61
4.2 General Sentencing Principles 64
  4.2.1 Purposes of sentencing 65
  4.2.2 Sentencing principles 67
4.3 Seriousness of Environmental Offences 70
  4.3.1 Punishment commensurate with the crime 70
4.4 Indicia Used in Determining Sentence for Offences under the NVA and NPWA 74
4.5 Range of Penalties Imposed 82
  4.5.1 Use of imprisonment 85
  4.5.2 Use of fines 87
4.6 Appropriateness of Sentences 91
  4.6.1 Proportionality and gravity of offence 91
  4.6.2 Use of sentencing options 93
4.7 Ecocentrism and Seriousness of Offence 98
4.8 Conclusion 101

Ch5

**Implications and Discussion**

5.1 Introduction 102
5.2 Ecocentrism and Specialist Expertise 103
5.3 Ecocentrism and Innovative Sentencing 110
5.4 Conclusion 117

Ch6

**Conclusions** 118

Bibliography 121
Acknowledgements

- To follow
### List of Tables

3.1 Indicia Used in Determining Harm, *Native Vegetation Act 2003 (NSW)*  

3.2 Indicia Used in Determining Harm, *National Parks and Wildlife Act 1974 (NSW)*  

4.1 Indicia Used in Assessing Seriousness of Offence, *Native Vegetation Act 2003 (NSW)*  


4.3 *NVA* Cases – Penalties Relative to Maximum Fine of $1,100,000  

5.1 Types of Penalties Imposed by the NSWLEC 2002-2013
**Legislation**

*Antarctic Treaty (Environmental Protection) Act 1980 (Cth)*

*Criminal Code Act 1995(Cth)*

*Crimes (Sentencing Procedure) Act 1999(NSW)*


*Environmental Planning and Assessment Act 1979 (NSW)*

*Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*

*Fines Act 1996 (NSW)*

*Land and Environment Court Act 1979 No 204(NSW)*

*Native Vegetation Act 2003 (NSW).*

*Native Vegetation Conservation Act 1997(NSW)*

*National Parks and Wildlife Act 1974 (NSW)*

*National Parks and Wildlife Amendment Act 2010 No 38 (NSW)*

*Protection of the Environment Administration Act 1991(NSW)*

*Protection of the Environmental Operations Act 1997(NSW)*

*Sentencing Act 2002 (NZ)*

*State Emergency and Rescue Management Act 1989 (NSW)*

*State Emergency Service Act 1989 (NSW)*

*Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (NZ)*

*Te Urewera Act 2014 (NZ)*

*Threatened Species Conservation Act 1995(NSW)*

*Victims’ Rights Act 2002 (NZ)*
**Cases**

*Scientology Case (1983) 153 CLR 120*


*Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84.*

*Bentley v Gordon [2005] NSWLEC 695.*

*Bentley v BGP Properties Pty Ltd [2006] 145 LGERA 234.*


*Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492.*

*Garrett v Williams, Craig Walter [2007] NSWLEC 96.*


*Garrett v Williams [2007] NSWLEC 56.*

*Director-General of the Department of Environment and Climate Change v Rae [2009] NSWLEC 137; (2009) 197 A Crim R*


*Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182*

*Director-General, Department of Environment and Climate Change v Mario Mura [2009] NSWLEC 233*

*Garrett v Freeman (No.5); Garrett v Port Macquarie Hastings Council; Carter v Port Macquarie Hastings Council [2009] NSWLEC 1.*

*Plath v Chaffey [2009] NSWLEC 196*

*Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna [2009] NSWLEC 194*

Director-General, Department of the Environment and Climate Change v Olmwood (No2) [2010] NSWLEC 100

Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] NSWLEC 43

Director-General, Department of the Environment, Climate Change and Water v Ian Colley Earthmoving Pty Ltd [2010] NSWLEC 102

Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200

Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010] NSWLEC 144

Plath v Hunter Valley Property Management Pty Limited [2010] NSWLEC 264

Director-General, Department of Environment, Climate Change and Water v Forestry Commission of New South Wales [2011] NSWLEC 102

Plath v Vaccount Pty Ltd t/as Tableland Timbers [2011] NSWLEC 202

Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4) [2011] NSWLEC 119

Director-General of the Department of Environment, Climate Change and Water v Graymarshall Pty Ltd (No2) [2011] NSWLEC 149

Chief Executive, Officer of Environment and Heritage, Department of Premier and Cabinet v Powell [2012] NSWLEC 129

Corbyn v Walker Corporation Pty Ltd [2012] NSWLEC 75

Chief Executive, Office of Environment and Heritage v Kennedy [2012] NSWLEC 159

Chief Executive, Office of Environment and Heritage v Rummery [2012] NSWLEC 271

Chief Executive, Office of Environment and Heritage v Coffs Harbour Hardwoods Sales Pty Ltd [2012] NSWLEC 52

Chief Executive, Office of Environment and Heritage v Rinaldo (Nino) Lani [2012] NSWLEC 115

Chief Executive, of the Office of Environment and Heritage v Newbigging [2013]

Chief Executive, Office of Environment and Heritage v Ausgrid [2013] NSWLEC 51
Environment Protection Authority v Forestry Commission of New South Wales [2013] NSWLEC 101

Chief Executive, Office of Environment and Heritage v Leda Management Services Pty Ltd [2013] NSWLEC 111
Ch1 Introduction

1.1 Sentencing and Ecocentrism

This thesis examines how an ecocentric approach shapes judicial decision-making in sentencing of environmental offences in ways that signal that environmental harm to non-human entities is important. It does so by analysing the way in which the New South Wales Land and Environment Court (NSWLEC) approaches the task of determining criminal sentences for offenders who breach environmental laws involving non-human environmental entities such as flora and fauna. The project examines a select sample of cases involving environmental crimes that fall within the jurisdiction of the NSWLEC. The focus of the enquiry is to determine the nature and scope of specialist knowledge used in sentencing, specifically the unique sentencing regimes and rationale construed and implemented by this court, with a view to determining whether and how ecocentrism influences the Court’s reasoning.¹

There are challenges for a system, especially in relation to criminal law, that developed almost entirely around humans as legal subjects and thus who are generally considered in criminal law as the perpetrators or victims of crime.² The refocussing of law and courts to

---


² There are exceptions to this general observation, as historically animals have, under specific circumstances, been put on trial and indeed executed for their crimes as determined in criminal courts. See Piers Beirne, ‘A Note on the Facticity of Animal Trials in Early Modern Britain; Or, the Curious Prosecution of Farmer Carter’s Dog for Murder’ (2011) 55(5) Crime, Law and Social Change 359; Paul Schiff Berman, ‘Rats, Pigs, and Statues on Trial: The creation of cultural narratives in the prosecution of animals and inanimate objects’ (1994) 69 New York University Law Review 288; and Anila Srivastava ‘Mean, Dangerous, and
consideration of non-human interests – for example, laws pertaining to animal welfare and protection, those relevant to consideration of the rights and/or value of ‘natural objects’ such as rivers, and those oriented toward protection of particular plant and animal species – has necessarily involved the adoption of new approaches that take into account these interests.\(^3\)

The thesis considers the form and success of this legal shift by examining how a specialist environment court – the New South Wales Land and Environment Court (NSWLEC) – has approached crimes involving non-human environmental entities that have been subjected to substantial harm. This class of environmental ‘victim’ includes flora and fauna that have been harmed to the extent that the offenders are dealt with via criminal proceedings for offences against environmental laws.\(^4\)

The study focuses specifically on how the NSWLEC determines the nature and extent of harm in regards to non-human environmental entities such as flora and fauna, and the penalties it assigns in relation to this harm. The theoretical lens for this examination of harm and penalty involves consideration of the philosophical approach adopted by the NSWLEC in its reasoning – that is, ecocentricism. Ecocentric approaches are premised upon concepts such as the intrinsic value of nature, the importance of ecological perspectives in assessing environmental harm, and sensitivity to and expertise in understanding the changing dynamics of the natural environment.\(^5\) How the NSWLEC deals with breaches of the law involving non-human environmental entities is analysed in the light of this overarching approach.

---

\(^3\) See for example, Peter Sankoff and Steven White (eds), *Animal Law in Australasia: A New Dialogue* (Federation Press, 2009); and Christopher Stone, ‘Should Trees Have Standing? Toward Legal Rights for Natural Objects’ (1972) 45 *Southern California Law Review* 450.

\(^4\) Not all non-human environmental entities that have been harmed are considered victims. Rather they are objects for which environmental law provides protection. Victimhood implies a status where the non-human environmental object may also be considered a subject, with relevant attendant rights and value. As observed by Preston, criminal violation of environmental law can be seen to create non-human environmental victims as well as human victims. See Brian Preston, ‘The Use of Restorative Justice for Environmental Crime’ (2011) 35 *Criminal Law Journal* 136. Nonetheless, there are ongoing debates over whether recognition of legal rights is the best method for acknowledging the value of the natural environment, rather than having legal status although not necessarily as a rights-holder. See Peter Burdon, ‘Wild Law: The Philosophy of Earth Jurisprudence’ (2010) 35(2) *Alternative Law Journal* 62; Judith Koons, above n 1.

\(^5\) See for example, Judith Koons, above n 1; Vito De Lucia, ‘Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law’ (2015)
The initial impetus for the project was to interrogate the claim made in criminological, legal and socio-legal research that courts (in a generic sense, but generally referring to magistrate-level courts) deal with environmental issues in a trivialising and/or uninformed way, and that the penalties imposed by courts tend to be lenient and thereby inconsequential in terms of deterrence or reprobation. These issues have been acknowledged in a number of jurisdictions including Sweden, Canada, the United States, and the United Kingdom, and Europe more generally. They have also been noted in Australia, but have never been empirically tested.

Recent research on sentencing by the NSWLEC has also examined the questions of consistency and proportionality; that is, how consistent the Court has been in applying additional maximum penalties in cases where they appear to be warranted. While not

---


8 Bates observes that in the past environmental crime has tended to not be regarded as ‘real crime’ particularly in lower courts in Australia, and there are illustrative examples where penalties have been manifestly low: Gerry Bates, Environmental Law in Australia (LexisNexis Butterworths, 8th ed, 2013) 823.
focused on the issue of leniency per se the study has demonstrated that a substantial number of cases involved sentences that are well below the expected penalty threshold.9

The empirical foundation for evaluating the accuracy of this belief about leniency is nonetheless scant, insofar as the number of studies on this topic is still relatively small. Therefore, opinion about this should be seen as open-ended and indicative rather than conclusive. Attention to the matter of sentencing has, however, raised several interconnecting issues that constitute the core of the present concerns.

Perceptions of leniency are generally premised upon two key considerations: the methodology for determining environmental harm; and the jurisprudence that informs the sentencing process.10 The first pertains to how decisions are made. Specifically, it refers to the methods utilised by a court to measure harm; the inference being that leniency is, in part, due to the lack of experience, training or expertise on the part of judicial officers in undertaking examinations of harm.

The second consideration informing perceptions of leniency is why decisions are made in the manner in which they are. The focus here is on whether the harm is viewed as serious or trivial and this, in turn, is influenced by human-centred or nature-centred conceptions of worth and value. For example, an instrumental view of the natural environment may well render different assessments of seriousness of offence than a view based on the intrinsic worth of nature. The test of severity of offence depends to some extent on the disposition of judicial officers to view the environment in certain ways.

The purpose of the present research is to examine the way in which ecocentric concerns are reflected in case law.11 Specifically, the concern is to examine how the NSWLEC takes into account the specific interests of the non-human in its reasoning. In doing this it addresses the

---

10 See Environmental Audit Committee, above n 7.
11 Recent interest in the notion of Earth Jurisprudence and Wild Law likewise reflect a turn toward acknowledging the intrinsic value of nature and the importance of recognising non-human interests. This extends to how courts deal with non-human entities and this is, therefore, also of interest to the present thesis. This is discussed more fully in chapter 2.
overarching question of how an ecocentric approach shapes judicial decision-making in sentencing in ways that reflect the importance of environmental harm to non-human entities.

In considering the relevance of ecocentrism, the thesis addresses two substantive empirical questions, namely:

(i) How does the NSWLEC identify, assess and quantify harm in regards to non-human environmental entities such as trees, landscapes and animals in matters where the harm is deemed serious enough to be prosecuted under criminal law?; and

(ii) How does the NSWLEC apportion sentence as part of its role in future deterrence and thereby respond to the damage to, death of, or destruction or degradation of the non-human environmental entity?

The focus on criminal provisions allows for concentration on instances in which harm is deemed serious enough to warrant criminal prosecution, which also thereby provides exemplary cases in which there is explicit rationale for the action taken by the NSWLEC in response to these offences. The focus on criminal proceedings also helps to limit the scope of the study to manageable proportions. Each question implies a vital role for the Court in evaluating and elaborating on the seriousness of the harm. While legislation sets the definitions and limits of both harm and the available penalties relevant to that harm, it is up to the Court to determine the specific nature of the harm and translate this into an appropriate sentence.

---

12 The professional role of the author as a criminologist also has an obvious bearing on why criminal proceedings have been focussed on.

13 For instance, determination of the seriousness of harm and objective gravity requires the Court to consider the nature of the offence, the maximum penalty, the harm caused to the environment by the commission of the offence, the reason for committing the offence, the foreseeable risk of harm to the environment and the offender’s control over the cause of harm to the environment, as per Bentley v BGP Properties Pty Ltd (2006) 145 LGERA, 163 and Director-General of the Department of Environment and Climate Change v Rae (2009) 197 A Crim R 31, 14.
1.2 The New South Wales Land and Environment Court

The NSWLEC was chosen as the focus for the case study for several reasons. It is the oldest specialist court of its kind in Australia. It has criminal jurisdiction and thus deals directly with environmental crimes. It has superior status to magistrate courts and therefore can provide an indication of how courts operate when environmental harm is deemed serious enough to warrant higher court attention. Whereas much of the extant literature on environmental crime and courts is critical of lower court activity in this domain, little has been written on either specialist environmental courts, or on courts that have higher court status. From this vantage point, it may well be that the issues of leniency, ignorance and inappropriateness either melt away or manifest in quite different ways.\(^\text{14}\)

The NSWLEC was created by the *Land and Environment Court Act* in 1979.\(^\text{15}\) The Court was established in the light of two key objectives: rationalisation (whereby diverse environmental, planning and land matters could be dealt with in the single court) and specialisation (through appointment of appropriate personnel and the Court’s wide jurisdiction in relation to the matters before it).\(^\text{16}\) The NSWLEC is part of the New South Wales court system, and is

\(^{14}\text{This is indicated, for example, in recent study of proportionality, consistency and severity in sentencing within the NSWLEC which demonstrated that additional maximum penalties for harming threatened species have failed in practice due to various factors, including the mulching of the evidence needed to ascertain the number of threatened plants destroyed, the numbers of which determine the quantum of possible additional penalty. Andrew Burke, above n 9.}\)

\(^{15}\text{As noted by a former Chief Justice of the NSWLEC, the Court was not directly established to protect the environment. Rather, it was established as part of the State’s court system with a comprehensive and exclusive jurisdiction in planning and environmental matters. That said, the Court is nonetheless vested with wide discretionary powers under the relevant environmental legislation that it administers, and this, according to Justice Pearlman, inevitably has the consequence of resulting in the protection of the environment. For example, the *Environmental Planning and Assessment Act 1979* (NSW) which forms the basis for most of the decisions of the Court, includes among its objects, the encouragement of the protection of the environment and the encouragement of ecologically sustainable development. Mahla Pearlman, ’20 Years of the Land and Environment Court of NSW’ (2010) 38(1) *Australian Planner* 45.}\)

\(^{16}\text{The NSWLEC was essentially established as a ‘one-stop shop’ to hear matters within its jurisdiction on an exclusive basis, and it has developed over time to operate as a form of ‘multi-door courthouse’. The Court has three principal functions that span administrative, civil and criminal functions. First, it acts as an administrative tribunal, determining planning and building appeals on their merits. Second, it also acts in a supervisory role in regards to cases of civil enforcement of planning and administrative law and judicial review of administrative decisions in those fields. Third, it has a summary criminal jurisdiction that}\)
equivalent to the Supreme Court in the hierarchy of courts in New South Wales. The judges of the Court have the same rank, title, and status as judges of the Supreme Court of New South Wales.

The NSWLEC has a wide jurisdiction to hear and determine many different types of case. These are grouped by the relevant class of the Court’s jurisdiction, and include Class 5 cases, namely, criminal proceedings for offences against planning or environmental laws. The Court needs to be cognisant of the elements constitutive of ‘ecologically sustainable development’ as outlined in the Protection of the Environment Administration Act 1991 (NSW). The PEA Act provides that ecologically sustainable development can be achieved through the implementation of particular principles and programs (such as the precautionary principle, inter-generational equity, conservation of biological diversity and ecological integrity). This is relevant to the present study insofar as these principles also implicitly involve prosecution and punishment for environmental offences. See Pearlman, above n 14; and Brian Preston, ‘Characteristics of Successful Environmental Courts and Tribunals’ (2014) 26(3) Journal of Environmental Law 365.


Land and Environment Court Act 1979 (NSW) s 9(2).

The Land and Environment Court has wide jurisdiction to hear and determine many different types of case. These are grouped by the relevant class of the Court’s jurisdiction. This research is most concerned with Class 5 cases:

- Class 1: environmental planning and protection appeals
- development appeals, residential development appeals, miscellaneous appeals
- Class 2: tree disputes and miscellaneous appeals
- Class 3: valuation, compensation and Aboriginal land claim cases
- Class 4: civil enforcement and judicial review of decisions under planning or environmental laws
- Class 5: criminal proceedings for offences against planning or environmental laws
- Classes 6 and 7: criminal appeals against convictions and sentences for environmental offences by the Local Court
- Class 8: mining matters

Appeals against the Court’s decisions.


pt3, s6(2).
include consideration of the health and wellbeing of non-human entities, including specific ecosystems, flora and fauna.

1.3 Research Design

The research undertook a detailed textual analysis of 14 cases relating to the sentencing of offenders for criminal breaches of the *Native Vegetation Act 2003 (NSW)* and 18 cases pertaining to sentencing for breaches of the *National Parks and Wildlife Act 1974 (NSW)*.

The project initially drew upon the Judicial Information Research System (JIRS) of the Judicial Commission of New South Wales, in particular those sentencing statistics associated with the Land and Environment Court of New South Wales. The JIRS Land and Environment Court statistics record sentencing outcomes for matters dealt with by the NSWLEC in its summary jurisdiction in Class 5 matters – environmental planning and protection summary enforcement. The cases within the JIRS NSWLEC statistics were inclusive of those in each category of offence from 1996 through to 2013.

A cursory examination was undertaken to determine broad sanctioning patterns. The first phase of the analysis considered statutory definitions of criminality and involved a quantitative description of number of cases, by year, by court, by offence, and the sanctions provided. However, this preliminary analysis of statistics was limited from the outset. It comprised a simple summary of information provided in the ‘penalty graph’ contained in the

---

21 A compilation of Court results was put together that provided basic information about the offence, maximum penalties and cases available in the penalty date range. For example:

<table>
<thead>
<tr>
<th>Code</th>
<th>1 = Fine</th>
<th>3 = Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>118A(2)</td>
<td>Pick plant of threatened species</td>
<td>Damage habitat of a threatened species</td>
</tr>
<tr>
<td>Add</td>
<td>Add Ord</td>
<td>Ord</td>
</tr>
<tr>
<td>Fine: 2000 PU</td>
<td>Fine: 1000 PU</td>
<td>Imprisonment: 12 Month/s</td>
</tr>
<tr>
<td>Fine per endangered plant: 100 PU</td>
<td></td>
<td>Fine: 1000 PU</td>
</tr>
<tr>
<td>31/10/2005 to Present</td>
<td>31/01/2003 to Present</td>
<td></td>
</tr>
</tbody>
</table>
JIRS. Each penalty graph for an offence contains the section number, a short description of the offence, the time frame of the sentencing statistics and the penalties that have been imposed. Each offence was examined and the specific type of penalty was recorded. This only provided a rough indication of penalty, not the rationale behind it, nor the precise magnitude of the penalty.

Drawing upon the JIRS data base, the present work examines judicial reasoning within the NSWLEC relating to the *Native Vegetation Act 2003 (NSW)* and the *National Parks and Wildlife Act 1974 (NSW)* within the temporal scope of decisions published between the years 2000 and 2013. The relevant Acts are selected because they include provisions that refer specifically to harm directed at flora and fauna. Only those cases involving offences

---


23 Thus, it provided only the type and location of the penalty within the sentencing hierarchy, for example, fines versus imprisonment.

24 The adoption of these dates for setting the parameters of the study is due to a combination of pragmatics and circumstance. In regards to the first, access to the Judicial Information Research System is not free and after expenditure of $1600 care of the University of Tasmania ‘Crime, Law and Policing’ research cluster a limited time and therefore opportunity to draw upon the JIRS was created. After six months, access to the JIRS was closed off. The end date of 2013 also reflects naivety on the part of the author that the study could be completed reasonably close to this cut-off year. In the event, this has not happened. However, subsequent examination of relevant cases post-2013 has been undertaken, and these will be referred to if and as relevant to the present analysis.

25 This emphasis not only reflects recent interest in Earth Jurisprudence and Wild Law but also similar consideration within ‘green criminology’ (that is, criminology that deals with matters of environmental harm, law enforcement, crime prevention and regulation). In particular, green victimology refers to the study of victims and victimhood that stem from or are related to environmental factors. Typically, it is humans who are treated as victims of environmental crime. They suffer loss of livelihood and good health due to contamination and exposure to toxic air, land and water and because of deforestation or illegal fishing. Environmental harm is deemed seriousness enough to warrant the label ‘crime’ if and when it affects humans in particularly adverse ways. But the non-human environmental entity has also begun to feature in green criminological analysis. Here the concern has been with how particular animal and plant species, specific ecosystems and geographical features (such as mountain tops) can be conceived as being ‘victims’ due to intentional human activities such as mining, fishing, and forestry and/or from being subjected to the destructive effects of pollution and the disposal of hazardous waste. See Christopher Williams, ‘An Environmental Victimology’ (1996) 23(4) *Social Justice* 16; Matthew Hall, *Victims of Environmental Harm: Rights, Recognition and Redress under National and International Law* (Routledge, 2013); and Rob White, *Environmental Harm: An Eco-Justice Perspective* (Policy, 2013).
committed against or involving non-human environmental victims, specifically flora or fauna come within the scope of this study. Defendants included individuals and corporations, as well as government authorities.

The selection of statutory provisions is intended to contribute to knowledge of processes and outcomes that are integral to the central research question relating to ecocentrism and the NSWLEC. While the findings of the study are context-specific, they nonetheless provide generalisations that may be of relevance to jurisdictions and case law outside the remit of the present study.

---

26 Attention to these Acts mirrors the two-pronged approach to the protection of biodiversity that has evolved alongside the emergence of environmental law generally in Australia. Broadly speaking protection of biodiversity can be divided into approaches that concentrate on protecting habitat (the ecosystems approach) and those concentrating on protection of species (the species approach). An example of the first is s 30J of the National Parks and Wildlife Act 1974 (NSW) which reserves land for a variety of purposes. For instance, the purpose of a nature reserve (of particular relevance to this thesis) is ‘to identify, protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena’. The main purpose of the Native Vegetation Act 2003 (NSW) is to manage broad-scale land clearance in rural areas as per the National Vegetation Framework. As such, the Acts considered in this research provide good examples of state intervention designed to protect non-human entities from specific types of harm, under the rubric of conservation and preservation, and which thereby acknowledging the importance of particular non-human interests. See Bates, above n 8, 471 and 480.

27 Environmental offences have been determined to be a type of offence where application of the doctrine of ‘vicarious liability’ is warranted (Bates, above n 8, 801), a point that is relevant to the present study insofar as corporations, as well as individuals, were subject to prosecution for criminal offences. Corporations are thus held liable for the actions of its employees, and there are legal provisions that determine whether vicarious liability extends to both the conduct and state of mind of the officers, employees and agents of a corporation or just to the mental element constituting the offence. See Bates, above n 8, 804.

28 For example, ‘naturalistic generalisation’ refers to a process in which readers of the case study gain insight by reflecting on the specifics of the case study and how the case study resonates with their own experience. What is crucial, therefore, is the use others make of them. See Diane Heckenberg, ‘What Makes a Good Case Study and What is it Good For?’, in Lorana Bartels and Kelly Richards (eds) Qualitative Criminology: Stories from the field (Hawkins Press, 2011); Sherri Melrose, ‘Naturalistic Generalization’ in Albert Mills, Gabrielle Durepos and Elden Wiebe (eds) Encyclopedia of Case Study Research (Sage, 2009); Lee Ruddin, ‘You Can Generalise Stupid! Social Scientists, Bent Flyvberg and Case Study Methodology’ (2006) 12 Qualitative Inquiry 797.
1.4 Thesis structure

The thesis is structured in six chapters that reflect the overarching research design.

Following this introduction, chapter 2 provides an overview of the conceptual elements typically associated with an ecocentric approach to law. It establishes the theoretical foundations for later analyses of the decision-making processes of the NSWLEC. The purpose of the chapter is to develop indicators that can be drawn on in assessing ecocentrism in the processes and outcomes of the Court.

Chapter 3 examines how the NSWLEC interprets environmental harm in its sentencing practices. In considering the determination of environmental harm, the first step was to simply record the nature of the objective harm for each case and to attempt to summarise this by grouping types of harm into discrete categories. The translation of statutory provisions into substantive decisions requires the court to draw upon factual information (for example, the biology of trees and the ecology of wetland marshes) in order to ascertain the specific nature of the harm under consideration. The chapter reveals and outlines 13 indicia utilised by the Court in determining the seriousness of environmental harm in relation to the *Native Vegetation Act 2003 (NSW)*, across five key areas that include prior and present land clearing, vulnerability as general systems level, vulnerability at specific levels, temporal and proximity impacts and effects, and possibilities for remediation. A total of 22 indicia are identified in regards to the *National Parks and Wildlife Act 1974 (NSW)*, across 6 thematic areas that included direct damage, immediate potential and indirect impact, status of species damaged or destroyed, complexity and totality of ecological damage, re-establishment time, and reparation strategy.

Building on chapter 3’s analysis of the Court’s approach to assessing the seriousness of harm, chapter 4 considers the way in which the Court determines the seriousness of the offence, and assigns penalties and remedies. This involved recording the specific sentencing factors identified in each case and collating the penalties assigned. Acknowledging the legislative context within which the court operates and the importance of this in shaping sentencing outcomes, the chapter considers the range and type of sentences imposed by the Court and how these, in turn, reflect varying responses to environmental harm. The concern of this chapter is identification of the factors that together constitute elements of severity.
Chapter 5 considers the implications of the thesis. It establishes the importance of this case study for wider practice. While the scope of the study is limited to only one particular court, and two particular pieces of legislation over a defined period of time, the findings will be of wider interest insofar as they provide a template for future analysis of ecocentrism and judicial decision-making. They also illustrate the innovative practices made possible by the availability of wide-ranging sentencing options.

Chapter 6 concludes the thesis and identifies future research directions and priorities.
Ch2
Non-Human Environmental Entities and Ecocentrism

2.1 Introduction

The main concern of this thesis is to examine how an ecocentric philosophy shapes judicial processes and decision-making in ways that signal that environmental harm to non-human entities is important. It answers this by examining the way in which the New South Wales Land and Environment Court (NSWLEC) defines environmentally harmful activity (starting from the basis of legislative definitions) and applies penalties against those who have breached environmental laws in ways that adversely affect specific ecosystems, flora and fauna.

This chapter provides the theoretical foundation for the hypothesis that the NSWLEC is adopting an ecocentric approach to its sentencing practices for offences involving harm to non-human environmental victims. It begins by explaining the concept of non-human environmental entity. The focus is on the protection of non-human environmental entities through environmental regulation including the use of criminal prosecution for breaches of relevant statutes. The chapter then explains the concept of ecocentrism and examines the way in which that term has been recognised in legal scholarship. Ongoing developments in and continuing tensions between anthropocentric (or human-centred) and ecocentric (or nature-centred) approaches to environmental legal matters are discussed. Following this, the chapter outlines the methodological implications for the present research stemming from application of the core concepts associated with an ecocentric approach.

2.2 Non-Human Environmental Entities

Commentators such as Stone have employed the term ‘natural object’ to describe non-living entities such as rivers, mountains and oceans.1 Fauna, or animal life, is ordinarily dealt with through use of the term ‘animal’ (which can be sub-divided into, among other categories, ‘native wildlife’ and ‘threatened species’), while flora (plant life) is ordinarily referred to

under the broad category of ‘vegetation’. Ecosystems have been defined in key international conventions as ‘a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit’. Together these entities comprise what is described herein as non-human environmental entities.

Natural objects (such as trees and forests) have historically lacked legal rights as such (and, as part of this, legally acknowledged agency or volition). It is argued by some that the inherent interests of natural objects ought to be protected through legal actions by the objects themselves, with humans serving as their guardians or trustees. This thesis is not concerned with according non-human environmental entities legal standing, in part because these criminal matters have been prosecuted by enforcement agencies on behalf of the public interest. Rather the focus is on how the NSWLEC determines the type and extent of harm to non-human entities as a result of breaches of environmental law.

Consideration of the non-human environmental entity incorporates discussion of individual landscape features and specific living entities, through to particular ecosystems. Any ecosystem is made up of both abiotic components (air, water, soil, atoms and molecules) and biotic components (plants, animals, bacteria and fungi). When destruction, degradation or diminishment of these occurs in a manner deemed in environmental law to be criminal, then harm can be said to have occurred. Thus, the concern of the present work is directed to instances in which flora and fauna, and the habitats and landscapes of which they are a part, are legally determined to be harmed by particular acts and omissions, as expressed in specific legislation.

The location of non-human environmental entities within the NSWLEC is assessed here from the point of view of their status as objects that have been seriously harmed. Not all

---

2 See specifically, for example, Peter Sankoff and Steven White (eds), Animal Law in Australasia: A New Dialogue (Federation Press, 2009); and more generally, Gerry Bates, Environmental Law in Australia (LexisNexis Butterworths, 2013).
environment courts deal with environmental crime *per se*, nor are all harms perpetrated against non-human subjects considered to be criminal in nature. According to the present work is on how the NSWLEC responds to instances of environmental degradation and destruction affecting non-human entities within a criminal proceedings context, that is, with serious harm.

An important consideration in regards to harm suffered by non-human environmental entities is the extent to which such entities are afforded legal protection on the basis of their intrinsic worth. In some cases involving harm to non-human entities, ‘surrogate victims’, who are recognised as representing the community affected (including harms to particular biotic groups and abiotic environs), have been accepted by a particular court for the purpose of restorative and remediation processes. For example, a river was represented at a restorative justice conference in New Zealand by the chairperson of the Waikato River Enhancement Society, and more generally, the ‘environment’ is considered a ‘victim’ in New Zealand law and environment court judicial practice.

Public interest environmental litigation has also been used to establish future generations as victims of environmental crime, with the victims also including the environment and non-human biota, although the success of such litigation is contingent upon where cases are tried and under what circumstances. A persistent feature of this type of litigation, however, is

---

6 As indicated, for example, in the fact that the Queensland Environment Court does not deal in criminal matters, and by the 8 different classes of the NSWLEC’s jurisdiction, of which criminal proceedings is but one.
10 See for example, Mahesh Chandra Mehta, *In the Public Interest: Landmark Judgement & Orders of the Supreme Court of India on Environment & Human Rights* (Prakriti
that they tend to reproduce the idea of a separation of humans from nature, and to be premised on human self-interest rather than the intrinsic value of the non-human environmental entities as such.\textsuperscript{11} The enhancement of animal welfare laws, plus legal reform and court decisions in some jurisdictions that lean toward formal recognition of particular species as rights-holders (for example, dolphins, whales, and apes), is indicative of broad trends toward both legal standing and appreciation of the harms experienced by non-human entities.\textsuperscript{12}

These developments indicate a shift toward more ecocentric approaches in environmental law, although progress is slow in part due to the slow-moving nature of legal institutions.\textsuperscript{13} Nonetheless, rather than humans and human interests being the sole fulcrum around which law revolves, non-human interests are also increasingly featuring in laws and judicial decision-making.

2.3 Theoretical Considerations: Ecocentrism

The present interest in the topic of sentencing for criminal offences involving non-human environmental entities stems in part from developments pertaining to the adoption of an ecocentric perspective in environmental, constitutional and criminal law.\textsuperscript{14} Ecocentrism refers to viewing the environment as having value for its own sake apart from any instrumental or

\textsuperscript{13} A recent decision by India’s Minister of the Environmental and Forests to ban dolphin shows is significant as well, with the Central Animal Authority issuing the statement that ‘Cetaceans…should be seen as “non-human persons” and as such should have their own specific rights’. Timothy Bancroft-Hinchev, ‘India: Dolphins Declared Non-Human Persons’ (5 August 2013) Pravda.ru <http://english.pravda.ru/science/earth/05-08-2013-dolphins_india-0/?mode=pr... >
utilitarian value to humans. Fundamentally, it is based upon several key principles that relate to the intrinsic value of nature (including flora and fauna), the precautionary principle, the primacy of environmental wellbeing, and remediation. Protection of the environment may be based on either one of or a combination of conceptions of the rights of nature (both as subject with rights, or object worthy of protection) and duties to nature (its intrinsic worth which therefore imposes a moral obligation and duty of care).

A fundamental aspect of ecocentrism is to see entities such as animals, plants and rivers as potential rights-holders and/or as objects warranting a duty of care on the part of humans, since their interests are seen to be philosophically significant (that is, deserving greater respect and formal recognition). This can be contrasted with conventional treatments of environmental protection that focus on rights of humans, and that moreover frequently define the ‘environment’ in human-centred or anthropocentric terms. Anthropocentrism privileges humans and human interests over and above those of the non-human. Ecocentrism, on the other hand, views nature as having intrinsic value. Anthropocentrism involves a range of philosophies and practices that include disregard for and well as stewardship models of care for the environment. Nonetheless, the defining characteristic of anthropocentrism is that humans are ends-in-themselves, while other entities are only means to attain the goals of

15 See Thomas Berry, The Great Work: Our Way into the Future (Harmony/Bell Tower, 1999); Brian Preston, ‘Internalising Ecocentrism in Environmental Law’ (Paper presented at 3rd Wild Law Conference: Earth Jurisprudence – Building Theory and Practice, Griffith University Queensland, 16-18 September 2011). There are a number of concepts and propositions that constitute the core philosophical concerns of an ecocentric perspective. Many of these are contentious in their own right, in part because they are interpreted differently by different commentators. See for example, Vito De Lucia, ‘Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law’ (2015) 27 Journal of Environmental Law 91.
18 For extended discussion of rights and recognition as these pertain to issues of justice and/or for nonhuman entities, see David Schlosberg, Defining Environmental Justice: Theories, Movements, and Nature (Oxford University Press, 2007).
19 As pointed out in the Council of Europe, Manual on Human Rights and the Environment (COE, 2012) 15. The concern of this publication, which reflects legislation and case law across the European Union, is with the impact of environmental changes on individuals, rather than human impacts on the environment per se. In other words, the central concern is with human interests and human rights.
20 De Lucia, above n 15.
21 Ibid.
humans. This obtains even when ecologically benign measures or ‘ecosystem approaches’ to natural resource management are adopted if and when these methods are employed primarily for human-centred purposes. From an anthropocentric perspective, harm to the environment is thus only of consequence unless it is measured with reference to human values (e.g., economic, aesthetic, cultural).

An ecocentric approach, by contrast, encapsulates the idea of studying law as if nature mattered. This means that suitable regulation of human behaviour initially involves embracing new ways of thinking about the nature-human relationship, that is, ecocentrism. The notion of Earth Jurisprudence refers to a philosophy of law that asserts that humans are just one part of a wider community of subjects and that the wellbeing of each member of the community is reliant on the wellbeing of Earth as a whole. The Earth (‘Gaia’, ‘the environment’) ought to be seen as having certain intrinsic value, and Earth rights should extend to all species and ecosystems on the planet. A distinction can be made between a moral and ethical argument that nature has rights, and the legal rights of nature as such. Philosophically, Earth Jurisprudence is an expression of ecocentrism in that it places moral weight on the worth of non-human environmental entities.

One way to implement Earth Jurisprudence is through Wild Law, which refers to an approach to human governance that seeks to prioritise the long-term preservation of all Earth’s subjects by regulating human behaviour. Regardless of the highly abstract pronouncements

---

22 Ibid.
23 Ibid.
24 See Lin, above n 7.
27 Williams, above n 16; Berry, above n 15; Cullinan, above n 4.
28 See for example, UNESC, Study on the need to recognize and respect the rights of Mother Earth, 9th sess, Permanent Forum on Indigenous Issues (19-30 April 2010). In more specific terms, some have argued that plants, too, should be included within the realm of human moral consideration and that some Indigenous cultures recognise plants as persons and thus as appropriate recipients of respect and care. See Matthew Hall, Plants as Persons: A Philosophical Botany (State University of New York Press, 2011).
29 Williams, above n 16
30 Ibid., 261.
symptomatic of some Earth Law advocates, and the implementation difficulties of such paradigms, Earth Law approaches nonetheless highlight how laws might be changed, reformed or bolstered to better recognise non-human interests.31

Different approaches within this broad paradigm are discernible. For example, a ‘rights of nature’ approach places emphasis on the status and legal standing of the non-human.32 An ‘ecocide’ approach is primarily concerned with preventing harms to the environment.33 Other

See for example, Cullinan, above n 4; Burdon, above n 13; and Higgins, above n 14. The constitution of Ecuador, which was adopted in 2008, has provisions relating to the ‘rights of nature’ that read:

Art. 1: Nature of Pachamama, where life is reproduced and exists, has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution. Every person, people, community or nationality, will be able to demand the recognition of rights for nature before the public organisms. The application and interpretation of these rights will follow the related principles established in the Constitution.

See Thomas Linzey and Anneke Campbell, Be The Change: How to Get What You Want In Your Community (Gibbs Smith, 2009) 134; and Brian Walters, ‘Enlarging Our Vision of Rights: The Most Significant Human Rights Event in Recent Times?’ (2011) 36(4) Alternative Law Journal 263. Such pronouncements should perhaps be read as aspirational (as well as inspirational) in the sense that while they do proclaim the importance of recognising and acknowledging certain rights, there is little in the way of a concrete and specific direction for how they might best be implemented. Nonetheless, the sentiment is a powerful one, as evidenced in broad support by judiciary of the NSWLEC in extra-legal comment, and associated observations that the implementation of environmental statutes requires dedicated environmental expertise. See for example, Preston, above n 15.

32 Specifically, Stone argues that to have legally recognised worth and dignity in its own right, that the natural object can institute legal actions at its behest, that in determining the granting of legal relief, the court must take injury to the natural object into account, and that relief must run to the benefit of the natural object. Stone, above n 1. Support of the extension of legal rights to natural objects is also expressed in the form of Earth Law where, for example, it is argued that all things have the right to ‘be’ and to ‘do’ in ways that reflect their core or defining trait or characteristic, including abiotic or non-living entities such as rivers. For example, Earth Law as applied to a river would incorporate the following conception of rights:

A fundamental river right (that is, the riverine equivalent of a human right) would be the right to flow. If a water body couldn’t flow it wouldn’t be a river, and so the capacity to flow (given sufficient water) is essential to the existence of a river. Therefore, from the perspective of the river, building so many dams across it and extracting so much water from it that it ceased to flow into the sea, would be an abuse of its Earth rights.

Cullinan, above n 4, 118. See also Burdon, above n 14; Burdon, above n 13; Ito, above n 12.

legal paradigms may come to similar conclusions without necessarily sharing in the Earth Jurisprudence perspective. 34 Ultimately these initiatives do converge in attempting to provide a legal basis for enhanced protection of the environment in its own right. 35

Regimes of environmental protection incorporate both anthropocentric and ecocentric approaches. The history of environmental law is a history of evolving gradations of anthropocentrism and ecocentrism. 36 Anthropocentrism, while privileging the human over the nonhuman, nonetheless can express a moral concern for nature. This can involve an ethic of responsibility to nature as well as responsibility for nature, albeit framed in terms of human interests. 37 Protecting the environment for human benefit, for example, is evident in international agreements such as the Rio Declaration (1992) that explicitly acknowledges the environmental rights of humans, not intrinsic environmental rights as such. 38 However, nature’s intrinsic value has also been recognised in recent decades; for example, in the Convention on Biological Diversity (1992). 39 The non-human is increasingly recognised for its intrinsic, as well as instrumental, value. 40

---

34 For example, according to proponents of traditional natural law, to perceive and understand that other creatures have ends is part of what it means to be human. Moreover, as humans evolve so too will their natural capacities (including technologies and ways of thinking), and this provides ever greater space to act ecocentrically insofar it increases capacity to act other than for our own human interests: ‘Stone Age humans, who needed meat to live, no doubt killed animals in the way that they could, limited by the means available. We expect a different standard in the twenty-first century, so that actions that were natural to someone in previous eras are not the same actions that are natural to us. Our nature has allowed us to develop technologies enabling us to kill animals in a less painful way. The reason to kill animals painlessly, and to avoid doing so at all unless the same is necessary, is precisely our natural capacity (1) actually to behave in this way and (2) to understand the implications of behaving in this way. The reason stands in the absence of any practical benefit to us’. Bebhinn Donnelly and Patrick Bishop, ‘Natural Law and Ecocentrism’ (2007) 19(1) Journal of Environmental Law 89, 99.
35 See Ito, above n 12.
37 Fisher, above n 17; Donnelly and Bishop, above n 34.
38 For example, Principle 1 of the 1992 Rio Declaration states that ‘Human beings are at the centre of concerns for sustainable development’. UN Doc.A/CONF.151/26 (vol.1); 31 ILM 874 (1992) (Rio Declaration).
39 The Preamble to the Convention on Biodiversity (1992) begins with the statements: ‘Conscious of the intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components; Conscious also of the importance of biological diversity for evolution and for maintaining life sustaining systems of the biosphere’. Secretariat of the
Acknowledgement of the intrinsic worth and value of nature is vital from the point of view of an ecocentric approach, but this does not mean that instrumental uses of nature by humans is thereby rendered unimportant. Indeed, it is possible and logical to view humans in nature as necessarily using nature of their own ends. To argue otherwise, as implied in some Earth Law commentaries, has been described as at best a paradox and at worst meaningless.\(^{41}\) For example, intrinsic and instrumental aspects of the Ecuadorian Constitution include on the one hand that ‘nature is entitled to respect from humankind’ and on the other that ‘human kind is under an obligation to respect nature and at the same time is entitled to benefit from nature’.\(^{42}\) However, the instrumental use of nature can nonetheless be guided by ecocentric considerations, such as doing the least amount of harm in the process of doing so.\(^ {43}\)

### 2.4 Methodological Implications: Indicators of Ecocentrism

From an ecocentric perspective, the sentencing activities of the NSWLEC can be gauged by assessing the manner in which determinations of environmental harm and the penalties assigned in relation to this harm reflect certain principles and values. The literature on ecocentrism is wide and varied, including for example theoretical explication of concepts.

---

\(^ {40}\) Pelizzon and Ricketts observe that since 1972 in Stockholm, each iteration of nature-related agreements has progressed the recognition of the environment as an important end in itself. Pelizzon and Ricketts, above n 36. Nonetheless, there remains the issue of the co-existence of different value orientations within the same normative frameworks. For example, the Convention on Biological Diversity contains the only reference to the intrinsic value of nature in a binding international legal instrument (albeit only in its preamble), but the CBD presents mainly as neoliberal narrative in support of sustainable use (rather than preservation as such). In other words, the rhetoric of intrinsic value is not matched by the overarching purpose of the framework which is to ensure more sustainable exploitation of resources for human use. See De Lucia, above n 15.

\(^ {41}\) Donnelly and Bishop, above n 34, 96.

\(^ {42}\) Ibid.

\(^ {43}\) ‘Humans are just as entitled to live and blossom as any other species, and this inevitably necessitates some killing of, suffering by, and interference with the lives and habitats of other species. When faced with a choice, however, those who adopt an ecocentric perspective will seek to choose the course that will minimize such harm and maximize the opportunity of the widest range of organisms and communities – including ourselves – to flourish in their/our own way’. Robyn Eckersley, *Environmentalism and Political Theory: Toward an Ecocentric Approach* (State University of New York Press, 1992), 57.
such as ‘ecology’ within a critical legal framework,\textsuperscript{44} the status and position of Earth Jurisprudence in relation to natural law and other legal theories,\textsuperscript{45} and the different interpretations of ecosystem stemming from instrumental and relational understandings of nature.\textsuperscript{46} For the purposes of this study, five key indicators of ecocentrism have been distilled from this literature, which is discussed below. These indicators were chosen since they best reflect the purposes and orientation of the present work, namely, to explore the sentencing activities of the NSWLEC. It is pertinent, for instance, to consider whether the fact finding of the Court in assessing the objective harmfulness of criminal conduct for sentencing includes findings not just on the direct impacts on specific biota, such as threatened species of animals or plants, but also on the indirect impacts on ecological functioning and services and the ecological relationships between that biota and its biotic and abiotic environment.\textsuperscript{47} Likewise, an indicator of ecocentrism is the types and content of relief or remedies granted if a breach of law is found including, for example, remedial orders to restore ecosystem functioning and services, and orders of compensation for the affected environment and not solely for affected humans.\textsuperscript{48} Examination of the NSWLEC in relation to these indicators takes into account the statutory frameworks within which the Court operates and the development of the culture, expertise and experience of the Court since its establishment.

2.4.1 The extent to which the intrinsic value or worth of the non-human environmental entity is taken into consideration

At the heart of ecocentrism is the notion that non-human environmental entities have intrinsic value.\textsuperscript{49} Such considerations have already been incorporated into law in various ways. For

\textsuperscript{48} Ibid.
\textsuperscript{49} ‘Intrinsic value refers to the ethical value or worth that an object has in itself or for its own sake. In this sense an object with intrinsic value may be regarded as an end in itself and
example, in Constitutions and in recent legislation the non-human (variously described and defined) has been accorded particular rights. The Constitution of Ecuador, for example, enshrines the rights of Mother Nature by giving it legal standing and the right to seek legal redress.\textsuperscript{50} Recent legislation in Bolivia (2011), for example, includes ‘The Law of the Rights of Mother Earth’ which provides similar status and standing.\textsuperscript{51}

The intrinsic rights of nature have also been acknowledged in specific laws recently passed in New Zealand. These pertain to Te Urewer (land) and Te Awa Tupua (water).\textsuperscript{52} The laws acknowledge this land and this river as having their own mana (its own authority) and mauri (its own life force). In a similar vein to developments in Ecuador and Bolivia, the landscape/river is personified – it is its own person and cannot be owned – and this is established through legislation that establishes their status as a legal person. This means that nature (in its various manifestations) is recognised as a subject within law. In the case of the Te Urewera Act 2014, the land is to be preserved in its natural state, introduced plants and animals exterminated, and the Tuhoe people and the Crown are to work together in a stewardship role. Similarly, the Te Awa Tupua Act 2016 grants legal recognition to the Whanganui River and provides for a co-management regime involving the Whananui Iwi and the Crown.

\textsuperscript{50} Williams, above n 16, 273.

Elements of this perspective are also apparent in traditional natural law, which accords a teleology (or movement toward an end goal) to all living entities ‘According to natural law all entities, including human beings, have ends or goods that fulfil and govern their nature; to become an oak tree, for example, is an end for an acorn; it is the fulfilment of its capacity to grow and it is the only end that the growth can ultimately lead to’. Donnelly and Bishop, above n 34, 90.

\textsuperscript{51} These legal rights, however, have been contradicted by other kinds of de facto rights in practice. Specifically, there are ongoing tensions stemming from different values and assumptions – those that privilege the value of nature in and of itself, and those that rely upon an instrumental valuation of nature for human use – within the same Constitution. How the laws of Ecuador and Bolivia are exercised therefore depends to some extent on the politics surrounding resistance to or absence of extraction industries. See Kroger, above n 46. Or, to put it differently, one perspective views nature in holistic and relational terms while the other is informed by an economic concept that views it primarily in terms of ecosystem services. See De Lucia, above n 15.

\textsuperscript{52} See Te Urewera Act 2014 (NZ) and Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (NZ).
In Australia, it has been argued that ecocentric considerations such as the intrinsic value of the environment should be specified in the objects clauses of environmental legislation, in much the way the such considerations feature in the *Antarctic Treaty (Environmental Protection) Act 1980 (Cth)*. Questions remain, however, over how such rights would be implemented, who owes a duty of care and the nature of stewardship, guardianship, and how to construct a remedy when a right is breached.

Laws signal the philosophical basis for environmental protection and provide a sense of the main jurisprudential emphasis. For example, ecocentrism acknowledges the value and integrity of the natural world and consequently offers extensive protection of the environment. The purposes and aims of legislation therefore provide an essential context which delimits the boundaries of an ecocentric approach.

### 2.4.2 The use of ecological perspectives to estimate the degree of harm to non-human environmental entities

An orientation toward the valuing of non-human environmental entities can also be demonstrated in the processes undertaken to ascertain harm and the specific content of judicial reasoning. Reference to ecological criteria is an important consideration in this regard. These provide an indication that harm is established by virtue of factors intrinsic to the health and wellbeing of the non-human, rather than solely in reference to human needs or interests.

An ecocentric approach to environmental law includes support for regulation of human behaviour in ways that reflect the purposes of ecological sustainability. The principles of Ecologically Sustainable Development (ESD) provide a guiding framework for deliberations about natural resource use and environmental protection. How ESD principles are applied, however, is contentious in that they can be used to support anthropocentric instrumentalism that is exploitative of nature as well as an ecocentric approach that is protective of the

---

53 Williams, above n 16, 273.
54 Ibid.
55 Koons, above n 26; Burdon, above n 13.
56 As illustrated in the key elements of ‘ecologically sustainable development’ outlined in the *Protection of the Environment Administration Act 1991 (NSW)*.
integrity of the natural world. ESD can be interpreted as ‘sustainable management’ or a form of ‘socio-ecological integrity’ or ‘sustainable use’. Unless ESD principles are embedded as an environmental bottom-line in legislation, they tend to be weakened in ‘overall judgement approaches’ that weigh up the economic, the social and the environmental as if they were equal.

From an ecocentric perspective, sustainability is linked to ecological integrity. To maintain the integrity of an ecosystem means taking into account a number of characteristics of ecosystems. This requires sensitivity toward and knowledge of how ecosystems operate.

Whether they are applied and how ESD principles are applied is concretely manifest in the indicia utilised by a court in determining matters such as environmental harm. An

57 De Lucia, above n 15.
59 Bosselmann, above n 58. A significant practical issue in regards to sustainability is whether or not the procedural use of ESD principles is obligatory (that is, required) or advisory (simply encouraged). Duties and obligations will vary depending upon whether ESD is an object of legislation, a relevant consideration, or a strategic concept applied by administrators. See Guy Dwyer and Mark Taylor, ‘Moving from Consideration to Application: The Uptake of Principles of Ecologically Sustainable Development in Environment Decision-Making in New South Wales’ (2013) 30 Environmental Planning and Law Journal 185.
60 Koons, above n 26; Cullinan, above n 4.
61 The complexity of ecosystems is illustrated in the following description, that sees ecosystems as those which:
1. Contain living and non-living elements;
2. Have a measurable degree of diversity (species, genes, chemicals, etc.);
3. Have a degree of resilience (defined as the system’s ability to maintain relationships between system elements in the presence of disturbances);
4. Have a one-way flow of energy (from outside to inside);
5. Have a carrying capacity for particular kinds of organisms;
6. Exist in a state of non-equilibrium (i.e., they change through time);
7. Have the characteristic that changes in them are irreversible (i.e., ecosystems do not return to a previous state, but evolve to a new form).

Bosselmann, above n 58, 2439.

62 Issues pertaining to ESD can also be considered in broad theoretical terms as reflecting ongoing contests between different philosophical approaches to nature such as anthropocentrism and ecocentrism. For instance, ESD can be described as an ecosystem approach to environmental regulation that is situated within a space of conflicting values:

• Anthropocentric - which focuses on optimising human resource use through including ecological considerations (that is, environmentally sensitive multiple use)
ecocentric approach would consider such principles in the light of non-human interests and through reference to ecological concepts such as interconnectedness, totality, community, diversity, relationships and scale.

2.4.3 The kinds of expertise mobilised within and demonstrated by the Court to adequately capture the nature and complexities of the environmental harm

The dynamic nature of ecosystems places considerable pressure on administrators and the judiciary insofar as there frequently is a degree of uncertainty involved. The ever-changing nature of ‘nature’ reinforces the importance of a case-by-case analysis and a general openness to the idea that legal remedies will always be crude approximations of natural developments. From the point of view of addressing harm to non-human environmental entities, much depends upon the level of expert knowledge of administrators and ecocentric knowledge in regards to ecological integrity, health and sustainability.

- **Biocentric** – which recognises the complexity of ecological systems and where the primary constraining goal is maintenance of ecological integrity
- **Ecocentric** – which refers to eco-regional management that shifts the management focus toward ecosystem processes and away from biota as such.

Earth Law proponents would favour the latter two approaches, since these reflect broader ecocentric values pertaining to the intrinsic value of nature. Yet, the goal of sustainable use or sustainable development (as distinct from ecological sustainability) reflects the anthropocentric instrumentalism that confounds the ecocentric objective. An ecosystem approach may be deployed primarily in a methodological sense, that is as a tool to achieve sustainable development, rather than for the purposes of preservation. Nature, in this view, is conceptualised primarily as a resource and service provider, and ESD and ecosystem approaches merely as tools for its further exploitation. The emphasis or weighting of underlying values thus shapes the ends to which an ecosystem approach is used. Where there are competing values embedded in legislation, then multiple interpretations of statutory obligation are possible. See De Lucia, above n 15. Given the focus in the present study is on environmental harm, rather than ESD *per se*, the main concern is how the work of the NSWLEC draws upon ecological knowledge and ESD principles in ascertaining the degree and nature of the harm.

63 See Koons, above n 26; Burdon, above n 13.
64 Dwyer and Taylor, above n 59, 209.
Relevant practical questions include ‘whose voices’ are or should be heard in court; how this is, ought or might occur; and specifically, how and to whom does the non-human entity communicate its needs.\textsuperscript{66} This is compounded by the realities of ontological anthropocentrism\textsuperscript{67} which means that humans cannot ‘act like’ a river, mountain, cat or cactus, since all are distinct and separate entities.\textsuperscript{68} One needs to be careful not to conflate advocates and experts. The issue here is not who should be ‘speaking on behalf of’ nature, although this, too, is important in its own right and, in some circumstances, is relevant to how the NSWLEC responds to environmental harm.\textsuperscript{69} Rather, the concern is to discern the best and most accurate way to ascertain harm to non-human environmental entities that are essentially voiceless.\textsuperscript{70}

\textsuperscript{66} If the value of the nonhuman is to be acknowledged fully then the nonhuman must be able to convey, in some way, the nature of the harm to it. In other words, the nonhuman environmental entity needs a human translator to convey the nature and consequences of the harms suffered. See Schlosberg, above n 18; Fred Besthorn, ‘Restorative Justice in Environmental Restoration - The Twin Pillars of a Just Global Environmental Policy: Hearing the Voice of the Victim’ (2004) 3(2) \textit{Journal of Societal and Social Policy} 33; Besthorn, above n 8; Preston, above n 8.

\textsuperscript{67} Pelizzon and Ricketts, above n 36,116.

\textsuperscript{68} Pelizzon and Ricketts, above n 36. Thus, it has been noted that ‘Decisions protecting the rights of one non-human species may not necessarily serve the interests of other species. Furthermore, any attempt to speak in another’s voice, particularly when we can never discover what the ‘other’ is thinking or feeling, is inherently problematic’. Nicole Rogers and Michelle Maloney, ‘The Australian Wild Law Judgment Project’, (2014) 39(3) \textit{Alternative Law Journal} 172,174. Recognition of the inevitability of normative anthropocentric perspectives leads to the realisation that humans cannot ever have normative jurisdiction over nature (the mountain, the river), but only over human behaviour in relation to these. To go beyond anthropocentrism, from this point of view, is not to ignore the concrete realities of ontology (our essential being) but rather to acknowledge the choices and values ingrained in how humans regulate their behaviour (our moral sense). Fundamentally, what humans do in relation to the non-human is a moral decision. See Pelizzon and Ricketts, above n 36.

\textsuperscript{69} For example, in determining who ought to be involved in restorative justice type of conflict resolution processes, a process that the NSWLEC has used just the one time and in relation to environmental harm affecting an Indigenous community. However, there are a wide number of people (for example, those who have a belief in Gaia and conservation groups, through to hunters and fishers) who all may lay claim to speaking on behalf of nature. For further discussion, see Hamilton, above n 8; M Hamilton, ‘Restorative Justice Intervention in an Aboriginal Cultural Heritage Protection Context: Conspicuous Absences?’ (2014) 31 \textit{Environment and Planning Law Journal} 352; White, above n 8.

\textsuperscript{70} The problem is essentially one of method and trying to ensure the most accurate result given the problematic nature of the task: ‘We can only extrapolate from our human needs and desires in speaking for other species, but this does not necessarily ensure that the needs and wishes of other species, ecosystems and ecological communities are appropriately and adequately articulated’. Rogers and Maloney, above n 68, 174.
For the NSW LEC, the task immediately before it, therefore, is to determine what kind of expertise is required in regards to ‘speaking authoritatively about’ concrete matters of substance.\(^1\) In practice, an extensive range of expertise and technologies is drawn upon by the NSW LEC in assessing environmental harm. The kinds of experts present at the hearings, for example, include among others, terrestrial ecologists, biologists, experts in aerial photography, environmental scientists, fauna ecologists, agricultural consultants, a natural history and environmental consultant, a veterinarian, ornithologists, wetland ecologists, frog biologists, plant ecologists, plant ecology and restoration experts, and arborists.\(^2\)

2.4.4 The gravity of the offence against the non-human environmental entity as reflected in the penalties given

A recurring theme in regards to environmental offences is the perception that the formal institutions of criminal justice do not take environmental crime seriously enough.\(^3\) It is argued, for instance, that environmental crime has typically been assigned low value by magistrates and judges, at least when measured by assessing sentencing outcomes (e.g.,

\(^{1}\) For example, the question of expert evidence is particularly important in defining the ‘subject’ of the law (e.g., ‘river’, ‘riparian zone’) and thus identifying the nature of ‘victimisation’, and hence the scope of what needs to be done to ‘repair the harm’. By way of illustration, it can be noted that a ‘river’ may be defined in spiritual and cultural terms by an Indigenous community, be viewed primarily in terms of water flow according to the narrow Eurocentric conceptions common in Australian courts, be seen as being constituted by its channel banks and channel bed according to the science of geomorphology, and be conceptualised as inclusive of consideration of riparian zones, which relate to the observed influence of the river on the biota within and adjacent to the river, from an ecological perspective. See James Morris and Jacinta Ruru, ‘Giving Voice to Rivers: Legal Personality as a Vehicle for Recognising Indigenous Peoples’ Relationships to Water?’ (2010) 14(2) Australian Indigenous Law Review 49; Peter Davies, Christopher Ives, Sophia Findlay and Mark Taylor, ‘Urban Rivers and Riparian Systems – Directions and Recommendations for Legislators, Policy Makers, Developers and Community Users’ (2011) 28 Environmental Planning and Law Journal 313; Mark Taylor and Robert Stokes, ‘When is a River Not a River? Consideration of the Legal Definition of a River for Geomorphologists Practising in New South Wales, Australia’ (2005) 36(2) Australian Geographer 183. Thus, there are quite different associations with and types of expertise pertaining to rivers.


sentencing patterns over time in relation to various environmental offences compared to equivalent or matched non-environmental offences). Commentators explain the apparent lack of severity in sentencing for environmental offences by pointing to social and legal ambiguities over definitions of harm, and the inadequate operational knowledge of mainstream courts in responding to specific offences and assigning suitable penalties for environmental offenders. It has been observed that magistrates are generally not adequately prepared to adjudicate such cases and thus to address the complexity and specificity of the concepts involved in environmental crime. The relatively low number of cases which go to criminal trial has also been cited as a reason for this perceived general culture of leniency.

Many instances of environmental harm do not make it to court in the first place due to the implementation of regulatory regimes that place emphasis, for example, on use of administrative measures such as ‘penalty infringement notices’ and the like. Verbal communication and written warning letters may also be used to encourage compliance.

---


78 In the United Kingdom, for example, criminal enforcement has tended to have given way to a system of administrative fines that include a Fixed Monetary Penalty for minor offences and a Variable Monetary Penalty for more serious offences. European Union Action to Fight Environmental Crime [EFFACE] *Environmental Crime and the EU: Synthesis of the Research Project* (Ecologic Institute, 2016), 27.

79 For example, agencies such as the NSW Environmental Protection Authority [EPA] generally place emphasis on regulatory compliance and enforcement rather than criminal prosecution as such. Through audits and inspections, the EPA ensures that licensing agreements are monitored and where possible encouragement is provided to licensees to take fewer environmental risks with the assistance of the Authority. The EPA works in partnership with the Office of Environment and Heritage to manage the implementation of the *Native Vegetation Act 2003* (NSW) for example. Satellite images and aerial photography are used to monitor native vegetation clearing, and the agencies use targeted and strategic communications to respond to patterns of non-compliance. See Environmental Protection Authority, *Annual Report 2012-2013* (NSWEPA, 2013). For these agencies, ‘In those
These alternative enforcement strategies ensure that only the most serious of matters reach court, and only the most serious of these come to the NSWLEC. The system of environmental regulation is premised upon this kind of funnelling process.

There is thus already a degree of seriousness attached to cases dealt with by the NSWLEC given the prior filtering of offences that has occurred. Whether the penalties given and the rationales for the decisions made at this level (rather than by the EPA or Local Court) and in this Court (as a specialist court) mirror the perceived deficiencies of other courts in dealing with environmental offences is relevant to considerations of ecocentrism. This is because the manner in which harm to non-human environmental entities is reflected in sentencing outcomes provides an indication of their worth and value.

instances where unlawful clearing is identified, an appropriate response is determined based on such factors as the severity of the impact, culpability and any mitigating circumstances’. NSW Government, Report on Native Vegetation 2011-13 (NSW, 2013), 17. In some cases remedial directions are issued, after consultation with landholders, to ensure the harm caused by illegal clearing is addressed. The net result of this approach to regulation, compliance and enforcement is that only where there is sufficient evidence to establish a serious criminal case for prosecution will the case proceed to court. See also NSW Office of Environment & Heritage, Annual Report (DPC, 2012).

80 Bates comments that ‘even in New South Wales, “minor” crime is often referred to local and district courts rather than the Land and Environment Court, which again raises questions about the adequacy of sentencing for environmental crimes prosecuted in these courts’. Bates, above n 2.


82 Entry into the courts tends to be at the lower end – magistrate’s courts or equivalent – since more infractions and offences are similarly pitched at the lower end of the harm spectrum. See European Union Action to Fight Environmental Crime [EFFACE] Environmental Crime and the EU: Synthesis of the Research Project (Ecologic Institute, 2016); Samantha Bricknell Environmental Crime in Australia, AIC Reports Research and Public Policy Series 109 (Australian Institute of Criminology, 2010). In some jurisdictions, the reason why magistrate’s courts predominate as the key forum for dealing with environmental crimes is because such crimes are ‘strict liability’ offences. That is, while all criminal cases start in a magistrate’s court, cases will only go to trial and may transfer to the Crown Court if a defendant pleads not guilty – and most in fact plead guilty. This, too, is part of the filtering process. Shirleen Chin, Wouter Veening, and Christiane Gerstetter, Policy Brief 1: Limitations and Challenges of the Criminal Justice System in Addressing Environmental Crime, (November 2014) European Union Action To Fight Environmental Crime [EFFACE], <http://efface.eu/sites/default/files/publications/EFFACE_Policy_Brief%201_29Oct14_1>.
It is the specific combination of conduct, result and circumstance elements that defines the harm addressed by a particular environmental statute. Accordingly, specific environmental expertise is required in regards to sentencing matters involving the NSWLEC given the nature of what has been harmed. In criminal proceedings, judicial officers also weigh up objective and subjective factors pertaining to the offence and the offender including relevant mitigating and aggravating factors. The quantum of penalty and the judicial rationales for these provide an indication of ecocentrism insofar they demonstrate the level of severity of offences involving non-human environmental entities. The type of penalty given can also provide insight into the value placed on addressing environmental harm.

2.4.5 The measures taken to ensure the maintenance, restoration or preservation of ecological integrity

Attention given to addressing the harm to the non-human environmental entity by the Court also provides an indication of ecocentrism. The measures adopted by the NSWLEC to remedy a problem include not only fines but additional orders. The specific ways in which these orders are used, particularly in regards to remediation activities, is a significant indicator of concern and interest for the non-human environmental entity.

2.5 Conclusion

This chapter has discussed non-human environmental entities and the theoretical contributions of an ecocentric approach to environmental law. Harm perpetrated against animals, plants and ecosystems is reflected in specific provisions dealing with offences against environmental laws. Dealing with non-human environmental entities is, however, complicated by the specific knowledge needed to ascertain the nature and extent of the harm, as well as by the intricacies of legislation and classificatory schemes that attempt to capture the essence of such harms at particular moments in time.

Determining whether harm has occurred and the seriousness of the harm is a vital task of the NSWLEC. It is also a precursor to assigning penalty and choosing the most appropriate

83 Lin, above n 7.
sanction. One of the tasks of the court, therefore, is to ascertain the nature and quantum of environmental harm. To do this well, a court must be ecologically literate, since the subject matter – harm and sanctions pertaining to non-human environmental entities – is immensely complicated and ever changing. The next chapter describes how the NSW LEC undertakes this role in regards to determining the seriousness of environmental harm.
3.1 Introduction

This chapter seeks to demonstrate that the NSWLEC takes an ecocentric approach to the sentencing of environmental offences involving non-human environmental entities, by examining the indicia used in determining the nature and extent of harm to non-human environmental entities under the *Native Vegetation Act 2003* (NSW) and *National Parks and Wildlife Act 1974* (NSW). Ordinarily, it would be reasonable to expect that the higher the value of the environment, the more substantial will be the harm caused to that environment.\(^1\) How environmental harm is measured in specific circumstances forms the substantive content of this chapter.

The *Native Vegetation Act 2003* (NSW) came into force in 2005. It heralded in an era in which broad-scale clearing of forests and woodlands was prohibited in New South Wales unless it could be demonstrated that such clearing would improve or maintain environmental outcomes.\(^2\) The *National Parks and Wildlife Act 1974* (NSW) established protected areas whereby land may be reserved for a wide variety of purposes, including the creation of national parks, state conservation areas and nature reserves.\(^3\)

The research approach taken was chronological (starting from early relevant cases up to the present) and thematic (referring to cases dealing with non-human environmental victims). Only cases dealt with in the criminal division of the NSWLEC were included. By combining elements from distinct cases into an overarching framework, the chapter demonstrates not only the expertise of the NSWLEC in determining harm in a systematic manner, but the growing complexities and sophistication of this conceptualisation over time. The manner in which the NSWLEC determines harm is then evaluated in the light of the indicators of ecocentrism identified and discussed in chapter 2.

---

Case law analysis was undertaken by first perusing and selecting cases recorded in the JIRS that pertained to harms involving non-human environmental entities. A total of 14 NVA cases and 18 NPWA cases were included in the sample while a further 3 cases were excluded as explained below. The specific indicia drawn upon by the NSWLEC in determining harm were then systemically identified through a close reading of each sentencing decision. Because there are no prescribed or fixed considerations pertaining to determining harm, indicia are considerations which take on different weight and relevance depending on the surrounding circumstances and existence of other indicia. These indicia were then grouped into categories denoting common features. In this way, the key indicia used by the NSWLEC to ascribe the seriousness of environmental harm were identified.

The first part of the chapter briefly discusses the ecocentric elements of legislation that underpins the work of the Court. The discussion then turns to the findings relating to the Native Vegetation Act 2003 (NSW), followed by examination of the National Parks and Wildlife Act 1974 (NSW). Each section begins with a summary of the intent and nature of the legislation. This is followed by analyses that identify the key indicia drawn upon by the NSWLEC in describing and determining the nature and extent of environmental harm, the grouping of cases in relation to the specific indicia identified, and the ranking of indicia of each specific case that contributed most to final determinations of the seriousness of the harm.

3.2 Ecocentric Considerations in the NVA and NPWA

The work of the NSWLEC occurs within the statutory context of legislation that provides a modicum of support for an ecocentric approach. For example, both section 3 of the Native Vegetation Act 2003 (NSW) and section 2A(2) of the National Parks and Wildlife Act 1974 (NSW) include the direction that the objects of these Acts are to be achieved by applying the principles of ecologically sustainable development (ESD). These principles are described in s 6(2) of the Protection of the Environment Administration Act 1991 (NSW) and include the precautionary principle, intergenerational equity, the conservation of biological diversity and principles of ecological integrity. See for example, Scientology Case (1983) 153 CLR 120.

Indeed, the general tasks of the Court are broadly guided by the principles of ‘ecologically sustainable development’ as outlined in the Protection of the Environment Administration Act 1991 (NSW).
Nonetheless, even when legislation explicitly states that consideration of ESD principles is obligatory, analysis of case law suggests this is not always weighted toward ecocentrism as such. Thus, in an examination of the *National Parks and Wildlife Act 1974* (NSW), it has been observed that there is continual balancing up of the objectives of supporting development activities with considerations of environmental protection. ESD is typically one of several objects rather than *the* object of an environmental statute, thereby opening the way for its diminishment at the point of application.\(^6\)

The seriousness of environmental harm is indicated in both Acts through the setting of maximum penalties which are prescribed for specific offences. As discussed below, the penalty limits appear to indicate a relatively high value placed on protecting the flora and fauna that is the subject of the legislation.

---

In regards to the *NPWA*, the seriousness of the offences is also signalled by the provision of an additional maximum penalty that can be added for each individual plant or animal harmed, in addition to a starting maximum penalty for the offences. The effectiveness of these provisions recently has been called into question insofar cases involving high levels of environmental harm have not always had these additional penalties imposed.\(^7\)

Given that the cases reviewed in this research were all sentencing determinations, section 3A of the *Crimes (Sentencing Procedure) Act 1999* provides the foundation upon which determinations are made. Section 3A reflects the varied purposes of sentencing, which are further discussed in chapter 4. The particular interest of this chapter is with subsection (g) of Section 3A - the ‘harm done to the victim of the crime and the community’, and the ways in which the NSWLEC constructs, in legal and scientific terms, the notion of harm.

Within this legislative context, the role of the NSWLEC is to assess the nature and extent of the harm to the non-human environmental entities identified in the Acts. This requires assessment of the facts of each case as part of the determination of the seriousness of the harm. Specific ecocentric considerations pertaining to ecological sustainability,\(^8\) provision of high penalty maximums, and sentencing factors that include consideration of harm to the community, provide legislative grounding for the adoption of an ecocentric approach by the NSWLEC.

The next two sections provide analysis of harm determination pertaining to non-human environmental entities in regards to the *Native Vegetation Act 2003* (NSW) and *National Parks and Wildlife Act 1974* (NSW) respectively.

---


\(^8\) The notion of ‘ecologically sustainable development’ does not in and of itself privilege environmental considerations over economic considerations. This is evident in p3,6(2) of the *Protection of the Environment Administration Act 1991 No60* (NSW), as well as s3A(a) of the *Environmental Protection and Biodiversity Conservation Act 1999 No91*(Cth), both of which refer to the integration of economic and environmental considerations in decision-making processes. Nonetheless, p3,6(c) of the *PEA Act* states that conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.
3.3 Native Vegetation Act 2003 (NSW)

The objects of the Native Vegetation Act (2003) are:

(a) to provide for, encourage and promote the management of native vegetation on a regional basis in the social, economic and environmental interests of the State, and
(b) to prevent broadscale clearing unless it improves or maintains environmental outcomes, and
(c) to protect native vegetation of high conservation value having regard to its contribution to such matters as water quality, biodiversity, or the prevention of salinity or land degradation, and
(d) to improve the condition of existing native vegetation, particularly where it has high conservation value, and
(e) to encourage the revegetation of land, and the rehabilitation of land, with appropriate native vegetation,

in accordance with the principles of ecologically sustainable development.  

This study examined cases of sentencing determination under the NVA between 2009 and 2013. All matters involved strict liability. It is the varied indicia relating to the scale of harm and the objective gravity of the offence that are of main concern to the present work, and that were also occasionally subject to contestation within the Court.

In 10 out of 14 cases the offence (such as illegal clearing of land) was committed for commercial purposes and gain. This was generally either for the purpose of urban or rural residential development, or for the purposes of agriculture, such as increasing grazing productivity. The land clearance generally involved use of heavy machinery, such as bulldozers, often undertaken by contractors. Mechanical clearing was also frequently accompanied by burning of trees and undergrowth that had previously been clumped together for the purposes of disposal.

---

9 p1,s3, (a)(b)(c)(d) Native Vegetation Act 2003(NSW)

3.3.1 Nature of the offence

The objective seriousness of an environmental offence is illuminated by the nature of the statutory provision, contravention of which constitutes the offence. A key objective of the Native Vegetation Act (2003) is to limit the illegal clearing of native vegetation.\textsuperscript{11}

There are several reasons why there is a need to uphold the regulatory system under the Act, the foremost of which is to uphold the integrity of the regulatory system relating to native vegetation and fauna.\textsuperscript{12} This requires that persons must take the necessary steps to ascertain when consent is required to clear native vegetation, to make application in the appropriate form and manner, and to comply with the terms and conditions of the consent in undertaking the clearing. The use of the criminal law signals that breaches of this regulatory system are objectively serious. It is further observed by Preston CJ in Director-General of the Department of Environment and Climate Change v Rae that ‘clearing without consent undermines the environmental impact assessment process and the purposes of ecological sustainable development including intergenerational equity and biological diversity’\textsuperscript{13}.

3.3.2 The harm caused to the environment by commission of the offence

The Native Vegetation Act 2003 (NSW) describes ‘native vegetation’ as meaning any of the following types of indigenous vegetation:

(a) Trees (including any sapling or shrub, or any shrub),
(b) Understorey plants
(c) Groundcover (being any type of herbaceous vegetation),
(d) Plants occurring in a wetland.\textsuperscript{14}

\textsuperscript{11} s3(b) Native Vegetation Act 2003 (NSW).
\textsuperscript{12} Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182, [24].
\textsuperscript{13} Director-General of the Department of Environment and Climate Change v Rae [2009]) 197 A Crim R 31, [18].
\textsuperscript{14} s6(1)(a)(b)(c)(d) Native Vegetation Act 2003 (NSW).
Over time, the NSWLEC has given further refinement to these definitions through interpretation of specific meanings in particular circumstances (e.g., ‘vegetation’ can include both dead and living vegetation).\(^\text{15}\)

Determination of the harm caused by the offender goes to the heart of how best to conceptualise the nature of harm involving non-human environmental entities. Over time, the NSWLEC has drawn upon a wide range of general and specific indicia in determining the harm caused to the environment by commission of the offence. This has invariably involved reliance upon expert analysis and opinion. Judicial officers have developed ecological expertise based upon the 30-year history of the Court in the weighing up of a range of variables relating to site analysis, as well as statutory prescriptions and case precedent, in determining matters of fact. This means that the Court continually makes decisions over the veracity of the information before it, including challenging or dismissing expert evidence due to its speculative nature or poor methods and methodologies.\(^\text{16}\) Likewise, persons who are not qualified to give expert opinion are identified by judicial officers and dismissed.\(^\text{17}\)

Proscribed activity is set out in statute.\(^\text{18}\) The seriousness of the harm arising from undertaking proscribed activity is determined through judicial decision-making in which the Court is required to develop indicia that best reflect the intent and purposes of the legislation. In this chapter, while acknowledgement is made of the legislative parameters of harmful activity, in terms of statutory definition and penalty allocations, the main concern is to describe how the NSWLEC draws upon a wide range of ecological indicia in determining the specific harm pertaining to each case.

\(^{15}\) Bates, above n 3, 481.

\(^{16}\) See, for example, Chief Executive, Office of Environment and Heritage v Rummery [2012] NSWLEC 271, [108]-[111]; Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84, [22]; and Garrett v Freeman (No.5); Garrett v Port Macquarie Hastings Council; Carter v Port Macquarie Hastings Council [2009] NSWLEC 1, [113]-[116].

\(^{17}\) Corbyn v Walker Corporation Pty Ltd [2012] NSWLEC 75, [7].

\(^{18}\) Part 3(1)(12) stipulates that native vegetation must not be cleared except in accordance with:

- (a) A development consent granted in accordance with this Act, or
- (b) A property vegetation plan.

A person who carries out or authorises the carrying out of clearing in contravention of this section is guilty of an offence and is liable to the maximum penalty provided for under section 126 of the *Environmental Planning and Assessment Act 1979* (NSW) for a contravention of that Act.
Determination of the seriousness of harm and objective gravity requires the Court to consider the nature of the offence, the maximum penalty, the harm caused to the environment by the commission of the offence, the reason for committing the offence, the foreseeable risk of harm to the environment and the offender’s control over the cause of harm to the environment.\textsuperscript{19} In regards to offences under the \textit{Native Vegetation Act 2003 (NSW)} initial statutory elements indicate that the offence is serious because:

- the use of the criminal law signals that breaches of this regulatory system are objectively serious;
- a strict liability offence, which is premeditated, or committed intentionally, negligently or recklessly, is objectively more serious than one which is not;\textsuperscript{20} and
- the seriousness of the offence is also indicated in the high maximum penalties prescribed by Parliament that include a maximum of 10,000 penalty units or $1,100,000 and a further daily penalty of 1,000 penalty units or $110,000.\textsuperscript{21}

\textsuperscript{19} \textit{Bentley v BGP Properties Pty Ltd (2006) 145 LGERA 234, [163] and Director-General of the Department of Environment and Climate Change v Rae (2009) 197 A Crim R 31, [14].}
\textsuperscript{20} \textit{See Director-General of the Department of Environment and Climate Change v Rae (2009) 197 A Crim R 31, [42]-[43], and Director-General of the Department of Environment, Climate Change and Water v Graymarshall Pty Ltd (No2) [2011] NSWLEC 149, [13]. The offence is a strict liability offence and mens rea is not an element of the offence. However, the state of the mind of the offender at the time of the offence can have an effect of increasing the seriousness of the offence.}
\textsuperscript{21} \textit{Section 126 of the \textit{Environmental Planning and Assessment Act 1979 (NSW)} provides that for a contravention of that Act:}

(1) A person guilty of an offence against this Act shall, for every such offence, be liable to the penalty expressly imposed and if no penalty is so imposed to a penalty not exceeding 10,000 penalty units and to a further daily penalty not exceeding 1,000 penalty units.

\textit{…}

(3) Where a person is guilty of an offence involving the destruction of or damage to a tree or vegetation, the court dealing with the offence may, in addition to in in substitution for any pecuniary penalty imposed or liable to be imposed, direct that person:

(a) To plant new trees and vegetation and maintain those trees and vegetation to a mature growth, and

(b) To provide security for the performance of any obligation imposed under paragraph (a). One penalty unit is $110 pursuant to s 17 of the \textit{Crimes (Sentencing Procedure) Act 1999 (NSW)}. 
It is then up to the court to determine the ‘harm done to the victim of the crime and the community’ since there are no statutory prescribed criteria for assessing the objective seriousness of the offence.\textsuperscript{22}

While the legislation establishes that the offence is serious, it is the Court which determines how serious. As seen below, it does so mainly through consideration of ecological factors.\textsuperscript{23} The NSWLEC draws upon many factors to assess seriousness of the harm in particular cases. This chapter has grouped these into categories of indicia utilised by the Court.

Tables 3.1 (\textit{NVA}) and 3.2 (\textit{NPWA}) below provide a distillation of indicia that pertain to the type and magnitude of environmental harm involving non-human environmental entities. Each table is constructed on the basis of the facts of the case (for example, x number of trees felled, y number of birds killed) and the translation of this information into the Court’s assessment of the seriousness of the harm (which has been interpreted for the purposes of this study as being low, medium or high, as suggested in the judgment narratives). To determine the quantum of harm the NSWLEC first describes the particular events and individuals involved, and then it draws upon expert opinion and precedent in order to gauge the seriousness of the harm and the gravity of the offence.

In determining environmental harm, the issues can become very complicated. Consider, for example, the issue of scale in relation to the impact of environmental harm. The complexity of these issues is demonstrated in \textit{Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd} [2010] that involved assessment of environmental

\textsuperscript{22} \textit{Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving} [2009] NSWLEC 182, [25].

\textsuperscript{23} Relevant key concepts within the \textit{NVA} include ‘native vegetation’ and ‘clearing’.

‘native vegetation’ means any of the following types of indigenous vegetation:
(a) Trees (including any sapling or shrub, or any shrub),
(b) Understorey plants
(c) Groundcover (being any type of herbaceous vegetation),
(d) Plants occurring in a wetland.

‘clearing’ native vegetation means any one or more of the following:
(a) Cutting down, felling, thinning, logging or removing native vegetation,
(b) Killing, destroying, poisoning, ringbarking, uprooting or burning native vegetation.
harm according to local or landscape scale. In considering local scale impacts, it was found that:

The native vegetation cleared from the Land was in good condition because:

a. It contained a diversity of native plant species in four strata;
b. It was of uneven age and contained mature trees;
c. It contained recruitment trees and senescent trees; and
d. Did not contain exotic plants (weeds).\textsuperscript{24}

The conservation value of the native vegetation at the local scale was high and the clearing may have caused significant impacts on vegetation and fauna at this scale.\textsuperscript{25}

By contrast, at the landscape or wider geographical scale the nature and extent of the harm was deemed less serious.

The conservation value of the native vegetation on the Land at a landscape level is low.\textsuperscript{26}

The clearing of the vegetation is unlikely to have caused significant impacts on the vegetation, fauna habitats or habitat connectivity at this scale for the following reasons:

a. The vegetation communities on the land consist of three vegetation communities that are well represented in South-East Australia including within conservation reserves;
b. The clearing of the vegetation has impacted small areas of the vegetation communities that are well represented at a landscape level;
c. Affected vegetation appears to lie at the north edge of the Nullica State Forest, which occupies about 6,700 hectares of forested land; and

\textsuperscript{24} Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [47].
\textsuperscript{25} Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [48].
\textsuperscript{26} Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [51].
d. Previous disturbances to vegetation communities to the northern part of the Land have already compromised any habitat interconnections.\textsuperscript{27}

This case illustrates that assessment of environmental harm requires evaluation of indicia that includes damage and impact at various levels of scale.

For the purposes of this study, detailed description of the specific indicia mentioned in the judgements was undertaken in order to identify the indicia utilised in each case to interpret the facts as outlined, usually at the beginning of each case. As each case was read, relevant indicia were identified and grouped into emerging categories (for example, those pertaining to vulnerability at a general systems level, those which referred to the possibilities for remediation, and so on). The research was thus basically inductive, in that the data was gathered by considering indicia as these emerged in the course of analysing each individual case. These diverse indicia were then grouped together into logically coherent categories.

Table 3.1 summarises the categories of indicia drawn upon across the NVA cases as part of the assessment of seriousness of environmental harm. Analysis of each case was undertaken in relation to the sum total indicia for environmental seriousness as identified across the combined cases. By assessing each case in the light of the sum total indicia, Table 3.1 also provides an indication of the frequency with which certain selected indicia were drawn upon across the sample.

\textsuperscript{27} Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [52].
Table 3.1: Indicia Used to Define Environmental Harm, *Native Vegetation Act 2003 (NSW)*

<table>
<thead>
<tr>
<th>Indicia for Harm</th>
<th>Cases in Which Indicia Used</th>
<th>Total Out of 13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior and Present Land Clearing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent of cleared area and type of clearing</td>
<td>Olmwood, Heffernan, Walker (2011), Rummery, Calman, Graymarshall</td>
<td>6</td>
</tr>
<tr>
<td>Conditions under which land permitted to be cleared (e.g., RAMA)</td>
<td>Kennedy, Rummery</td>
<td>2</td>
</tr>
<tr>
<td>Prior Use and Regrowth</td>
<td>Heffernan, Kennedy, Mario Mura</td>
<td>3</td>
</tr>
<tr>
<td><strong>Vulnerability at General Systems Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Categories of vulnerability</td>
<td>Rae, Colley</td>
<td>2</td>
</tr>
<tr>
<td>Adverse impacts at a systems level</td>
<td>Rae, Olmwood, Colley, Rummery, Issa, Walker (2011), Powell</td>
<td>7</td>
</tr>
<tr>
<td>Climate change</td>
<td>Kennedy</td>
<td>1</td>
</tr>
<tr>
<td><strong>Vulnerability at Specific Levels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adverse impacts in relation to specific species</td>
<td>Kennedy, Rae, Rummery, Newbigging, Powell</td>
<td>5</td>
</tr>
<tr>
<td>Scale</td>
<td>Heffernan, Olmwood, Mura, Newbigging</td>
<td>4</td>
</tr>
<tr>
<td><strong>Temporal and Proximity Impacts and Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary and secondary impacts</td>
<td>Heffernan</td>
<td>1</td>
</tr>
<tr>
<td>Short-term and long-term impacts</td>
<td>Olmwood</td>
<td>1</td>
</tr>
<tr>
<td>Indirect effects</td>
<td>Mura, Heffernan</td>
<td>2</td>
</tr>
<tr>
<td>Cumulative effect</td>
<td>Calman, Walker (2011)</td>
<td>2</td>
</tr>
<tr>
<td>Harm to the environment need not only be considered in terms of actual harm</td>
<td>Walker (2011)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Possibilities for Remediation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possibilities for remediation</td>
<td>Rae, Colley, Calman, Issa, Graymarshall, Heffernan, Walker (2012), Kennedy</td>
<td>8</td>
</tr>
</tbody>
</table>
There are five broad categorisations that denote how one can gauge environmental harm generally. The first deals with land clearing and the technical and legal aspects of this (such as land clearing permits and issues pertaining to definitions of regrowth). The second examines vulnerability at a general systems level (e.g., ecosystems and habitats); while the third drills down to specific species (e.g., particular kinds of plants). The fourth category focuses on impact and effects and the temporal aspects of harm (e.g., short-term or long-term and cumulative effects). The final category refers to the possibility of remediation.

Table 3.1 not only identifies the indicia denoting harm, and the cases in which these indicia feature, it also provides an indication of the frequency of these indicia across the cases under consideration. The top four specific indicia in terms of frequency are worthy of further detailed comment (in order of frequency ranking) as they are most prominent in the NSWLEC discussions of harm.

Possibilities for remediation
While rated highly and included in a number of cases, there is a variety of issues which the NSWLEC must consider in evaluating the success or otherwise of remediation. These include whether the harm is capable of remedy (e.g., burning of trees reduces this possibility) through to the time it will take for remediation to occur (e.g., related to scale of clearing, type of trees cut down). Remediation potential is also related to what is left when illegal clearing takes place (e.g., mature canopy trees) since this affects general habitat and ecology, such as soil stabilisation and pollen and seed transfer.

Adverse impacts at a systems level
This refers to ecological impacts that involve ‘whole system’ interactions. In essence, the degree and nature of environmental harm is assessed in ecological terms that incorporate consideration of vegetation fragmentation (e.g., reduction in connectivity in a particular

---

28 Director-General, Department of the Environment, Climate Change and Water v Ian Colley Earthmoving Pty Ltd [2010] NSWLEC 102, [32]; Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182, [45]; Director-General of the Department of Environment, Climate Change and Water v Graymarshall Pty Ltd (No2) [2011] NSWLEC 149, [17]-[18].
29 Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [54].
locality and region), ecological value in terms of endangered ecological communities and the interconnections between species and their habitats (e.g., trees as potential habitat for native animals), loss of flora and fauna biodiversity (e.g., loss of shrub species or frogs), and soil erosion, which also may have siltation, salinity risk or adverse effects on water quality in adjacent streams or rivers.

Extent of cleared area and type of clearing

The extent of cleared area may be substantial, or less than substantial but nonetheless serious. The type of clearing includes consideration of the distinction between broad-scale (e.g., all vegetation) and selective clearing (e.g., leaving canopy trees undisturbed). It also makes reference to the distinction between non-protected regrowth that can be lawfully cleared (e.g., blackberries), and protected regrowth that could not (e.g., native vegetation). The condition of the vegetation that was cleared is also relevant, as is whether the vegetation provides some element of habitat for other native species, including food and shelter for fauna species.

Adverse impacts in relation to specific species

This involves several intersecting considerations, including for example the species, nature, age and number of trees destroyed or damaged. An important component of this assessment is the context of the vegetation type in which the tree occurs and the implications of this in

30 Director-General of the Department of Environment and Climate Change v Rae (2009) 197 A Crim R 31, [34].
31 Director-General, Department of the Environment and Climate Change v Olmwood (No2) [2010] NSWLEC 100, [46].
32 Chief Executive, Office of Environment and Heritage v Rummery [2012] NSWLEC 271, [103].
33 Director-General, Department of the Environment, Climate Change and Water v Ian Colley Earthmoving Pty Ltd [2010] NSWLEC 102, [13].
34 Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200, [39].
35 Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4) [2011] NSWLEC 119, [87].
36 Ibid [48].
37 Ibid [57].
regards to the damage caused by land clearance – in other words, features of trees such as their ecological attributes, biological interactions and contribution to the ecosystem.  

*The other indicia*

Other matters considered relevant by the Court as indicia of harm relate to scale, the prior use and amount of regrowth on the land, whether conditions existed under which the land is permitted to be cleared, categories of vulnerability, indirect effects, cumulative effect, etc.

39 *Director-General of the Department of Environment and Climate Change v Rae* (2009) 197 A Crim R 31, [37].

40 This refers to geographical size and the measurement of harm in relation to different levels of geographical focus. See *Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd* [2010] NSWLEC 200, [47]-[48], [51].

41 For example, prior use might include selective logging as well as hazard reduction burns. See *Director-General, Department of Environment and Climate Change v Mario Mura* [2009] NSWLEC 233; *Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd* [2010] NSWLEC 200.

42 Specifically, land can be cleared under particular circumstances, such as ‘routine agricultural management activity’, and there may also be an ‘offsetting environmental benefit’ such as eradication of noxious animals. See *Chief Executive, Office of Environment and Heritage v Kennedy* [2012] NSWLEC 159, at [13] and [64].

43 These categories correspond to ‘risk’, ‘conservation’ and ‘endangerment’ status, as these statuses pertain to particular biotic communities in New South Wales. Examples of these as referenced in *Director-General of the Department of Environment and Climate Change v Rae* (2009) 197 A Crim R 31, [34] include:

\[ V_1 \]

\[ V = \text{vulnerable: likely to become endangered within a few decades if action is not taken to rectify the decline of the association and protect and manage the areas} \]

\[ 1 = \text{not conserved or if so only miniscule areas are located on reserves} \]

\[ V_2 \]

\[ V = \text{vulnerable: likely to become endangered within a few decades if action is not taken to rectify the decline of the association and protect and manage the areas} \]

\[ 2 = \text{inadequately conserved, either because only relatively small areas are located in reserves or major parts of its geographical range remains unprotected} \]

44 For example, in *Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd* [2010] NSWLEC 200, [50] it was pointed out that the clearing of vegetation on the lot had the potential indirect effects:

a. Increased edge effects at the interface between cleared and uncleared areas thereby reducing the condition of uncleared vegetation and compromising its integrity due to increased impacts of wind, solar radiation and evaporation;

b. Increased the potential for weed invasion as a result of the disturbances to the ground and loss of native vegetation cover;

c. Increased access to feral predators to habitats in uncleared vegetation; and

d. Reducing habitat connectivity for flora and fauna with proximate vegetation habitats, particularly to the south.
whether the impact of the harm is short-term or long-term, whether the harm has a primary or secondary impact, or will contribute to climate change. A further consideration was the potential or risk of harm.

The next section undertakes a similar analysis of harm in respect of cases involving the *National Parks and Wildlife Act 1974* (NSW).

---

45 The cumulative effect of land clearing is a relevant consideration that goes beyond issues pertaining to an endangered ecological community as such. ‘Continuing incremental and unchecked loss of native vegetation is also a relevant environmental harm to consider. Loss of mature vegetation removes habitat for native animals and reduces biodiversity in the immediate area’. *Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t/as Jerilderie Earthmoving* [2009] NSWLEC 182, [44].

46 *Director-General, Department of the Environment and Climate Change v Olmwood (No2)* [2010] NSWLEC 100.

47 Primary impact refers to direct removal of vegetation (in regards to flora) and destruction of habitat resources (in regards to fauna). Secondary impact refers to disturbance of the foraging habitat for species such as coastal bird species, small ground-dwelling mammal species, reptile species and bats. Vegetation clearing can contribute to the loss of a locally significant corridor for wildlife. See *Director-General, Department of the Environment and Climate Change v Olmwood (No2)* [2010] NSWLEC 100, [43].

48 *Chief Executive, Office of Environment and Heritage v Kennedy* [2012] NSWLEC 159, [55].

49 This refers to issues pertaining to quality of life, ecological relationships and cumulative harm, as expressed in *Environment Protection Authority v Waste Recycling and Processing Corp* [2006] NSWLEC 419; (2006) 148 LGERA 299 at [145]-[147], which is referenced in *Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4)* [2011] NSWLEC 119, [82]:

145 Harmfulness need to not only be considered in terms of actual harm, the potential or risk of harm should also be taken into account: *Axer Pty Ltd v Environment Protection Authority* (1993) 113 LGERA 357 at 366 and *Bentley v BGP Properties Pty Ltd* (2006) 145 LGERA 234 (6 February 2006 at [175]). Harm should not be limited to measurable harm such as actual harm to human health. It can also include a broader notion of the quality of life.

146 Harm can include harm to the environment and its ecology. Harm to an animal or plant not only adversely affects that animal or plant, it also affects other biota that have ecological relationships to that animal or plant: *Bentley v BGP Properties Pty Ltd* at [174].

147 Harm can be direct or indirect, individual or cumulative. Activities that contribute incrementally to the gradual deterioration of the environment, even when they cause no discernable direct harm to human interest, should also be treated seriously.
3.4 National Parks and Wildlife Act 1974 (NSW)

The National Parks and Wildlife Act 1974 (NSW) was introduced in order to regulate matters pertaining to the environment and to heritage. The objects of this Act are as follows:

(a) the conservation of nature, including but not limited to, the conservation of:
   i. habitat, ecosystems and ecosystem processes, and
   ii. biological diversity at the community, species and genetic levels, and
   iii. landforms of significance, including geological features and processes, and
   iv. landscapes and nature features of significance including wilderness and wild rivers,

(b) the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to:
   i. places, objects and features of significance to Aboriginal people, and
   ii. places of social value to the people of New South Wales, and
   iii. places of historic, architectural or scientific significance,

(c) fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation,

(d) providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation.\(^{50}\)

Section 2A(2) states that the objects of this Act are to be achieved by applying the principles of ecologically sustainable development,\(^ {51}\) as described in s 6(2) of the Protection of the Environment Administration Act 1991.\(^ {52}\)

For present purposes the offence provisions pertaining to the destruction and damage to Aboriginal objects and places will not be considered, although the processes associated with Court resolution of some cases is of interest, particularly in relation to the use of ‘restorative

\(^{50}\) s2A(1) National Parks and Wildlife Act 1974 (NSW).

\(^{51}\) s2A(2) National Parks and Wildlife Act 1974 (NSW).

\(^{52}\) See for example, Director-General, Department of Environment, Climate Change and Water v Forestry Commission of New South Wales [2011] NSWLEC 102, [58].
justice’ measures and notions of ‘authenticity’ in expert testimony. However, given that such measures have to date only been used in just the one instance, and given the focus on non-human environmental entities in the present work, they are not considered further.

In regard to harming of protected and locally unprotected fauna, exemptions from prosecution include where the act constituting the offence was done under and in accordance with or by virtue of the authority conferred by a general license, occupier’s license, commercial fauna harvester’s license, an emu license or a scientific license; the act was authorised by and done in accordance with a conservation agreement or a joint management agreement entered into under Part 7 of the Threatened Species Conservation Act 1995, and where there is development in accordance with a development consent and approvals under the Environmental Planning and Assessment Act 1979.

The harming of fauna provisions also do not apply in cases of harming fauna for sale and fauna dealers in respect of the harming for the purposes of sale of any dingo, ferret, fox, hare or rabbit or any fauna of a species that the Governor declares not being threatened interstate fauna or threatened species, populations or communities.

57 National Parks and Wildlife Act 1974 (NSW) s 103(3) and 104(2). This illustrates that the purpose of legal intervention is not necessarily to prevent activity but it can be to simply manage it. Thus, the issue of thresholds is important to determination of harm. For it is the threshold that determines whether a specific incident or event crosses the line of what is acceptable or allowable. This requires an assessment of the type and degree of harm, in particular places, and how these harms impact specific eco-systems and animal and plant species over time. This is evident, for example, in the fact that legislation such as the National Parks and Wildlife Act 1974 (NSW) includes various exemptions, both in terms of species, some of which protected and some of which are considered ‘feral’ pests and are unprotected, and activities, insofar as exemptions from the normal operation of the statute apply in certain circumstances (such as ‘routine agriculture management activity’ provisions). Thus, in environmental law generally ‘…the focus is not on environmental harm per se, but rather on unacceptable environmental harm’. Susan Mandiberg, ‘Locating the Environmental Harm in Environmental Crimes’ (2009) 4 Utah Law Review 1177, 1187. See
The main concern of proceedings was to determine the appropriate sentence given the circumstances of the case. Most of the cases involved first-time offenders who had had no track record of prior convictions or legal transgressions. The offences varied greatly, and involved use of heavy machinery, such as bulldozers, excavators, and tractors with a flair mower, through to helicopters and planes for the purposes of aerial spraying of pesticides.

3.4.1 Nature of the offence

The objective seriousness of an environmental offence is illuminated by the nature of the statutory provision, contravention of which constitutes the offence. The key objective of the National Parks and Wildlife Act (1974) is to ensure particular conservation aims as set out in section 2A(1).

The offences in the National Parks and Wildlife Act 1974 are more serious than the offences of the Native Vegetation Act 1997 (and later NVA 2003) if these are measured in how seriousness is reflected in the penalty.  

3.4.2 The harm caused to the environment by commission of the offence

Harmful activity that requires formal response including via criminal proceedings, is defined in relevant legislation. For instance, the National Parks and Wildlife Act 1974 (NSW) defines two types of harmful activity relevant to the Act (ss 1-5A). The first refers to harming an animal (including an animal of a threatened species, population or ecological community) and includes acts that include hunt, shoot, poison, net, snare, spear, pursue, capture, trap, injure or kill, but does not include harm by changing the habitat of an animal. The second


58 Likewise, Local Court fines for the offence of harming protected fauna under the National Parks and Wildlife Act 1974 (NSW), which are in the range of $200-$2000 plus court costs and which include imposition of two-year good behaviour bonds in lieu of a monetary fine, are considerably lower than penalties meted out by the NSWLEC. See Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492, [49]-[50].

59 The National Parks and Wildlife Act 1974 (NSW) defines a wide range of terms including, for example, ‘animal’, ‘bird’, ‘critically endangered species’ (by reference to the Threatened
type of harmful activity relates to *harming an object or place*, and includes any act or omission that destroys, defaces or damages the object or place, or in relation to an object, moves the object from the land on which had been situated, or is specified by the regulations.

As with the previous discussion of the *NVA*, while acknowledgement is made of the legislative parameters of harm, in terms of statutory definition and penalty allocations, the main concern here is to describe how the NSW LEC draws upon a wide range of ecological factors in determining the specific harm pertaining to each case.

In regards to offences under the *National Parks and Wildlife Act 1974 (NSW)* initial statutory elements indicate that the offence is serious because:

- the use of the criminal law signals that breaches of this regulatory system are objectively serious;
- a strict liability offence, which is premeditated, or committed intentionally, negligently or recklessly, is objectively more serious than one which is not; and
- the seriousness of the offence is also indicated in the medium to high maximum penalties prescribed by Parliament (depending on the specific offence), and that include imprisonment as a sanction as well as fines.\(^6^0\)

---

*Species Conservation Act 1995*, and ‘fauna’. While ‘animal’ is applied in a generic sense to include any animal, whether vertebrate or invertebrate, and at whatever stage of development (but not including fish), a more specific category of animal is also identified, that of ‘game animal’. This means:

- any of the following animals that is not husbanded in the manner of a farmed animal and is killed in the field:
  - any goat, kid, swine, deer, rabbit, hare, camel, donkey, horse or bird,
  - any fauna permitted to be harmed for the purposes of sale in accordance with a license under this Act.

Likewise, ‘game bird’ is defined as:

- a wild duck, wild goose or wild quail, or a bird of any other species that the Governor, by order, declares to be a species of game bird for the purposes of this Act.

\(^6^0\) The *NPWA* has different penalties for different offences. These range, for example in relation to fauna, from 100 penalty units and, in a case where protected fauna is harmed, an additional 10 penalty units in respect of each animal that is harmed, or imprisonment for 6 months, or both, through to 1000 penalty units and, in a case where threatened interstate fauna is harmed, an additional 100 penalty units in respect of each animal that is harmed, or Imprisonment for 1 year, or both. In the case of threatened species, populations and ecological communities, harm may entail penalties to a maximum 2000 penalty units or imprisonment for 2 years or both and, in a case where an animal of any species presumed
The Court also takes into account specific types of breaches, irregularities and illegal behaviour. This initially involves consideration of the various ways in which there may be a breach of legislation, such as those pertaining to (a) lack of development consent; (b) contravention of a condition attached to a license; and (c) compliance of applications in relation to specific allowable exemptions.61

As with the NVA, it is the role of the court to determine the ‘harm done to the victim of the crime and the community’ since there is no statutory prescribed criteria for assessing the objective seriousness of the offence.62 Accordingly, the NSWLEC draws upon a wide range of indicia in order to assess seriousness of the harm in particular cases.

Table 3.2 outlines the types of ecological factors considered relevant in defining environmental harm. These include specific reference to offences relating to damaging ‘reserves’, that is, land set aside as a national park or nature reserve.63 This table also provides an indication of which cases draw upon which indicia in determining harm.

extinct, any critically endangered species or any endangered species, population or ecological community is harmed, an additional 100 penalty units in respect of each animal that is harmed. One penalty unit is $110 pursuant to s 17 of the Crimes (Sentencing Procedure) Act 1999 (NSW).

61 See ss98(3), ss98(5) ss103(3) and 104(2) National Parks and Wildlife Act 1974 (NSW)
62 Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182, [25].
63 See especially s156A of the National Parks and Wildlife Act 1974 (NSW), offence of damaging reserved land. The purpose of reserving land as a national park under the Act is set out in s 30E(1). The purpose of reserving land as a nature reserve is set out in s 30J.
Table 3.2: Indicia Used in Determining Harm, *NPWA 1974*(NSW)

<table>
<thead>
<tr>
<th>Indicia for Harm</th>
<th>Cases in Which Indicia Used</th>
<th>Total of 22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Damage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in a landscape or particular biotic community</td>
<td>Wilkinson &amp; Anor, Chaffey, Ianna, Hunter Valley Property Management</td>
<td>4</td>
</tr>
<tr>
<td>Size and content of area cleared</td>
<td>Ianna, Fish, Vaccounet</td>
<td>3</td>
</tr>
<tr>
<td><strong>Immediate, Potential and Indirect Impact</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In relation to specific threatened and vulnerable species</td>
<td>Wilkinson &amp; Anor, Gordon, Hunter Valley Property Management</td>
<td>3</td>
</tr>
<tr>
<td>Likely harm, indirect impacts, likely indirect impacts</td>
<td>Gordon, Knox, Brancourts</td>
<td>3</td>
</tr>
<tr>
<td><strong>Status of Species Damaged or Destroyed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endangered and vulnerable species</td>
<td>Knox, Gordon, Chaffey, House, Freeman &amp; Port Macquarie Hastings Council, Orogen &amp; Fish, Hunter Valley Property Management</td>
<td>7</td>
</tr>
<tr>
<td>Significance of population of threatened species</td>
<td>Gordon, Chaffey, Forestry Commission of NSW (2011)</td>
<td>3</td>
</tr>
<tr>
<td>Reserved land</td>
<td>Vaccounet, Leda, Glover, Chaffey, Coffs Harbour Hardwood Sales</td>
<td>5</td>
</tr>
<tr>
<td><strong>Complexity and Totality of Ecological Damage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particular ecological communities</td>
<td>Ianna, Williams</td>
<td>2</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Vaccounet</td>
<td>1</td>
</tr>
<tr>
<td>Specific strata of species</td>
<td>Leda</td>
<td>1</td>
</tr>
<tr>
<td><strong>Re-Establishment Time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of time before damage is redressed</td>
<td>Wilkinson &amp; Anor, Vaccounet, Leda</td>
<td>3</td>
</tr>
<tr>
<td>Whether the damage can be redressed at all</td>
<td>Leda</td>
<td>1</td>
</tr>
<tr>
<td><strong>Reparation Strategy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental service order</td>
<td>Fish, Forestry Commission of NSW (2013), Lani</td>
<td>2</td>
</tr>
<tr>
<td>Distribution of fines</td>
<td>Forestry Commission of NSW (2011), Vaccounet</td>
<td>2</td>
</tr>
<tr>
<td>Substantive measures to address the harm</td>
<td>Coffs Harbour Hardwood Sales</td>
<td>1</td>
</tr>
</tbody>
</table>
There are six broad categories that describe harms associated with the NPWA. The first is direct damage. The second refers to likely impacts (e.g., effects of demise of habitat on birds). The third considers the status of the species damaged or destroyed (e.g., endangered or threatened). The fourth category considers the complexity and totality of the damage. The fifth and sixth categories refer to re-establishment time (e.g., length of time for redress to occur) and reparation strategy (e.g., measures taken to address the harm) respectively.

Detailed discussion of the top four indicators of harm provides an illustration of the Court’s appreciation of ecological issues and the importance of ecological assessments of environmental harm.

**Habitat and Movement**

There is a continuum of harm in which immediate apparent harms also contain the possibility of potential future harm. In part, this is related to the impact of land clearance on the habitats of various threatened and vulnerable species. This affects suitability of a site as a foraging habitat, the availability of available nest sites, vulnerable or threatened species exposure to predators and so on.\(^6^4\) There are also impacts on habitat connectivity at the local level that can affect fauna.\(^6^5\) For plants, damage to vegetation can lead to susceptibility to ‘edge effects’ such as the susceptibility to the establishment of environmental weeds and thereby change in the flora habitat.\(^6^6\)

**Endangered and Vulnerable Species**

Conservation as it applies to biodiversity is integral to determination of the seriousness of harm, and particular attention is given to species vulnerability. Species are listed variously as vulnerable, endangered or protected, which acknowledges gradations of threat and vulnerability. Damage or destruction to individual plants and animals are considered, as is the

---

\(^6^4\) *Director General of National Parks and Wildlife v Wilkinson & Anor; Director General of the Department of Land and Water Conservation v Wilkinson & Anor [2002] NSWLEC 171, [36]-[38].*

\(^6^5\) *Director-General, Department of Environment, Climate Change and Water v Forestry Commission of New South Wales [2011] NSWLEC 102, [72]; and Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010] NSWLEC 144, [80]-[81].*

\(^6^6\) *Plath v Knox [2007] NSWLEC 670, [3ix], [3xv].*
concept of endangered ecological community (EEC) and direct and indirect threats to the EEC.\(^{67}\) The significance of the population of threatened species is assessed according to criteria such as conservation significance, total area of native vegetation cleared and potential genetic isolation (e.g., due to removal of habitat for the native bees which are responsible for pollinating the species).\(^{68}\)

**Reserved Land**

The location of species is relevant as if they are located in a world heritage area or nature reserve, then this compounds the gravity of the offence given that these areas are designed precisely to protect the vulnerable species.\(^{69}\) The purpose of establishing nature reserves places them in the upper levels of the hierarchy of reserved land and thus is a significant indicator of environmental harm.\(^{70}\)

**Changes in Landscape or Particular Biotic Community**

This refers to the direct damage or environmental harm as measured in accordance with the species or land in question. In regards to forest plant community, for example, the damage might be described in terms of loss of prior species as well as an increase of new and/or invasive species due to illegal land clearing.\(^{71}\) Harm can be measured in regards to size of area as well as the content of the area that is cleared.\(^{72}\) Gauging the extent of harm also may require reference to benchmark data that describes the situation prior to and arising from an offence (e.g., unauthorised taking of bird eggs).\(^{73}\)

---

\(^{67}\) See *Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna* [2009] NSWLEC 194.

\(^{68}\) *Bentley v Gordon* [2005] NSWLEC 695, [75]-[93].

\(^{69}\) *Plath v Chaffey* [2009] NSWLEC 196, [29].

\(^{70}\) *Chief Executive, Office of Environment and Heritage v Leda Management Services Pty Ltd* [2013] NSWLEC 111, [28].

\(^{71}\) *Director General of National Parks and Wildlife v Wilkinson & Anor; Director General of the Department of Land and Water Conservation v Wilkinson & Anor* [2002] NSWLEC 171, [32].

\(^{72}\) *Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna* [2009] NSWLEC 194, [36].

\(^{73}\) *Plath v Chaffey* [2009] NSWLEC 196, [44]-[48].
The other factors

Other relevant factors utilised by the NSWLEC as indicia of harm include, among others, the size and content of the area cleared, immediate, potential and indirect impact in relation to specific threatened and vulnerable species, the likelihood or potential for harm, significance of the population of species, and length of time it would take before the damage is redressed.

It is important to view evaluation of discrete indicia as part of an overall assessment process designed to distil the key elements of environmental harm in any given situation. For instance, in keeping with the mandate to engage in protection of biodiversity the deliberations of the NSWLEC require an integrated understanding of nature and, specifically, sensitivity to the interrelationship of habitat, biodiversity, landform and landscape. While individual

---

74 See Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna [2009] NSWLEC 194, [36].
75 For example, in Director General of National Parks and Wildlife v Wilkinson & Anor; Director General of the Department of Land and Water Conservation v Wilkinson & Anor [2002] NSWLEC 171, [36]: In regards to the Little Bent-wing bat:
   (a) Reduction in the quantity, variety and seasonable availability of insect prey in the cleared area of the site;
   (b) Alternations to the suitability of the site as foraging habitat;
   (c) Increased predation of bats from both the decrease in vegetation cover and the ingress of predators to the area following the clearing;
   (d) Alteration to roost availability in tree cavities; and
   (e) Reduction in the viability of roost sites outside the site by incremental reduction of foraging resources within flying distance of such roosts
76 Bentley v Gordon [2005] NSWLEC 695, [69].
77 For example, harm is considered low in regards to some types of species in a national park environment. In Glover (2010), for example, the environmental harm was considered low. ‘Banksia integrifolia was a common plant in the Reserve. The number of cones collected, relative to their abundance, was not significant’. Plath v Glover [2010] NSWLEC 119, [31].
78 For example, in In Vaccount Pty Ltd t/as Tableland Timbers it was noted that 503 trees were felled, pushed over or damaged and because of their maturity, the replacement of the 503 trees was estimated to take in excess of 100 years. Plath v Vaccount Pty Ltd t/as Tableland Timbers [2011] NSWLEC 202, at [72].
79 A good exemplar of this is provided in Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna [2009] NSWLEC 194, where environmental harm included the following elements (emphasis added by author):
   • Permanent removal of a large area of an EEC
   • Severing of connectivity between remnant vegetation and increasing the level of habitat fragmentation
   • Removal of threatened fauna and flora habitat, including features that are limiting factors affecting distribution and abundance of fauna, for example tree hollows
   • Loss of biodiversity values
indicia were identified across the cases, it was the totality of indicia in any given case that ultimately shaped the determination of harm. This is why, for example, harmful activity at the local scale may be considered high but is discounted in the Court’s judgement by the fact that it is less harmful at the landscape level.

3.5 Harm Indicia and Ecocentrism

The intrinsic worth of particular species is to some extent embedded in legislation which is directed at protecting vulnerable species. The role of the NSWLEC is to measure the extent of environmental harm against non-human entities such as birds and trees and interpret the nature and dynamics of this harm over time and in relation to specific places.

As demonstrated in this chapter, the Court uses a wide range of indicia in determining harm in regards to native vegetation protected under the Native Vegetation Act 2003 (NSW) and landscapes, flora and fauna protected until the provisions of the National Parks and Wildlife Act 1974 (NSW). The sheer number of indicia invoked, and their strategic synthesis in determining the seriousness of environmental harm in each specific case, indicates that the NSWLEC mobilises considerable non-legal expertise in order to adequately capture the nature and complexities of the environmental harm.

The prominence of indicia is partly related to the selection of cases that come before the Court, in the sense that these instances of environmental harm have already passed through a range of filters and therefore been judged serious enough to warrant the attention of the NSWLEC. Once in the Court, the focus is on assessing the extent of damage to the health and wellbeing of the non-human entities that have been subjected to the harm and to punish offenders in relation to this. This is illustrated in the preponderance of indicia that bear

- Loss of **ecosystem services**, including soil stabilisation, wind protection, carbon storage and fixation, sediment trapping and nutrient filtration, slowing and detention of floodwaters and groundwater recharge
- Loss of **regeneration potential** for a high conservation value vegetation community through loss of above ground reproductive function as well as loss of soil seed-bank
- Increased **prevalence of introduced species** including environmental weeds
- **Soil compaction**
- **Reduced resilience of ecosystem to withstand and adapt to impacts of climate change**
- Reduced capacity to maintain **genetic diversity of component species**, including a reduced opportunity for genetic exchange and reduction in gene pool.
directly on the nature of the harm to the particular species, ecosystem or biotic community (e.g., changes in their habitat or damage and destruction of particular individuals and communities). An ecological perspective is central to these determinations.

There is thus an emphasis by the Court on the importance of the adverse impacts on systems and species in defining the seriousness of environmental harm. This highlights the value of the non-human entity and positions it as having worth. Implicit acknowledgement of this status is also evident in the way in which the Court places great store in remediation and reparation. Such measures, designed to address issues pertaining to ecological integrity, also bolster the view that the Court broadly adopts an ecocentric approach in its reasoning.

3.6 Conclusion

This chapter has provided a detailed summary and synthesis of the indicia considered by the NSWLEC in appraising the extent and nature of environmental harm arising from offences against environmental laws described in the Native Vegetation Act 2003 (NSW) and the National Parks and Wildlife Act 1974 (NSW).

The findings of this chapter, focussing on determination of environmental harm, outline the key indicia and main rationales that ultimately form the basis for the setting of penalties. How the Court responds to specific instances of harm and types of offender draws upon these initial judgements regarding the seriousness of the environmental harm in each case. Once the level and extent of harm has been determined, the next task is to calculate an appropriate response.

The evolving basis for these subsequent sentencing determinations relates to the broad sentencing approaches and specific penalties outlined in Bentley v BGP Properties Pty Ltd (2006)\textsuperscript{80}, the Protection of the Environment Operations Act 1997 (NSW) and in the National Parks and Wildlife Amendment Act 2010 (NSW).\textsuperscript{81} The NSWLEC draws upon these sentencing templates in devising appropriate penalties in the light of the specific facts of each case. Chapter 4 examines in greater depth the use by the Court of a range of specific penalties in accordance with circumstances and variables. As discussed later, the movement toward

\textsuperscript{80} Bentley v BGP Properties Pty Ltd (2006) 145 LGERA 234.
\textsuperscript{81} This is discussed further in chapter 4.
more reparative measures (as well as reliance upon existing punitive measures) has been bolstered by the provision of new sentencing options that allow the NSW LEC greater scope to focus specifically on matters involving the repairing of environmental harm.
Ch4
Sentencing Offenders

4.1 Introduction

The previous chapter was directed at how the New South Wales Land and Environment Court (NSWLEC) evaluates the nature and seriousness of environmental harm. Once the Court has assessed what the harm is, including its seriousness (as determined by indicia such as impact, scale and vulnerability of species or ecosystem), the Court determines what should be done about it. This chapter examines the ways in which the Court sentenced offenders in criminal proceedings for offences against environmental laws that involved harms pertaining to flora and fauna. The focus is on how the NSWLEC determines the seriousness of the offence and how this is manifest in the penalties handed down. The manner it does this will be evaluated in relation to ecocentric concerns and objectives.

Punishment is imposed on the basis of the seriousness of the harm. The ‘intuitive synthesis’\(^1\) exercised by judicial officers involves assessment of a range of factors, including mitigating and aggravating factors, as set out in section 21A of the Crimes (Sentencing Procedure) Act 1999. The Court also has to take into account other relevant matters in passing sentence such as, for example, when and if there is a guilty plea,\(^2\) the degree to which the administration of justice has been facilitated by the defence,\(^3\) and the degree to which the offender has assisted law enforcement authorities in relation to the offence.\(^4\)

The seriousness of offence, as distinct from the seriousness of harm, thus takes into account subjective factors pertaining to the offender as well as objective factors pertaining to the offence. In this sense, sentencing is an inherently anthropocentric activity – it is the human perpetrator who is at the centre of the punishment process. The question is to what degree or in what ways ecocentric considerations feature in the final sentencing decision.

---

\(^{1}\) See Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4) [2011] NSWLEC 119, [23].
\(^{2}\) Crimes (Sentencing Procedure) Act 1999 (NSW) s 22.
\(^{3}\) Ibid s 22A.
\(^{4}\) Ibid s 23.
The method adopted in this chapter is based upon a two-pronged approach to examining the seriousness of the offence, which is then followed by analysis of sentencing options and the penalties given. An attempt was made to discern the three most important elements used by the Court in determining and applying a suitable penalty.\(^5\) In regards to the seriousness of the

\(^5\) For the *NVA* cases, for example, the gravity of offence was based on ranked factors such as:

| Mura 2009 | Lower end of scale | Small area of 12 hectares  
|           |                  | Left canopy trees intact, hence mitigation  
|           |                  | Financial position of defendant poor, bankrupt |
| Rae 2009 | Medium objective gravity | Actual environmental harm of high seriousness, but remediation possible  
|           |                  | State of mind of offender included premeditation, intentionality and foreseeability of risk  
|           |                  | Profit from crime |
| Graymarshall 2011 | Very environmentally harmful, offence of high objective gravity | 38 ha or mature to late mature vegetation with significant habitat components  
|           |                  | Loss of critical habitat is significant and recovery is slow  
|           |                  | Commercial gain motivation, NOT routine agricultural management activity and NOT regrowth |

For the *NPWA* cases, a similar process of ranking was employed:

| Orogen/Fish (2010) | Low to medium significance, overall culpability low | Practical measures to mitigate the harm caused by the offence are currently being undertaken  
|                    |                                              | The adverse impact on professional reputation and their professional embarrassment resulting from this offence means that the defendants have been subjected to extra-curial punishment  
|                    |                                              | Actual felling of vegetation and habitat of the koala |
| Freeman & Port Macquarie Hastings Council (2009) | Offences are serious, level of gravity is at upper limit of moderate seriousness | Freeman  
|                                |                                              | Action was deliberate and intentional and Freeman ignored regulatory environment and statutory obligation  
|                                |                                              | Damage to the habitat of the two threatened species was significant (but no evidence of actual harm to either threatened species)  
|                                |                                              | General deterrence Council  
|                                |                                              | The fact that the council itself is a public body which administers the system of development control is a highly relevant consideration and further reinforces the need for general deterrence  
|                                |                                              | Restoration actions by Council |
The top three sentencing indicia were identified in each case (e.g., ecological value of area, motive of offender). These elements not only include reference to the seriousness of environmental harm, but subjective factors relating to the offender. For example, disregard of the wellbeing and integrity of the local environment on the part of the offender forms part of the sentencing rationale, as it is indicative of propensities toward environmentally harmful behaviour.

The elements identified in these ranking were then combined into a general matrix which lists all the indicia highlighted in the sample cases. This is presented below in Tables 4.1 and 4.2 which deal with the NVA and NPWA respectively. The frequency by which the Court references indicia is shown in the number of cases in which the indicia is mentioned. This provides insight into the indicia that are drawn upon the most in determining the severity of the offence.

In considering the nature of the penalties imposed, the study gave careful consideration to how the NSWLEC utilises a broad spectrum of penalties and remedies in adjudicating criminal cases. Sentencing outcomes under each piece of legislation were examined in order to identify the range of penalties employed, and the weight of these.

The sentencing practices of the Court are shaped by legislation that sets out the hierarchy of sanctions available within this jurisdiction. A significant legislative development in this regard was the introduction of new sentencing measures in the National Parks and Wildlife Amendment Act 2010 No 38 (NSW). For the criminal offences covered by NPWA, this meant the possibility of creative and innovative ways for dealing with offenders. This, too, was of

| Gordon (2005) | Substantial harm, gravity of offence at higher end of the scale | Cumulative impacts in regards to significance of population of threatened species, direct damage, fragmentation, weed infestation, edge effects An actuating reason for the defendant carrying out the activities of slashing, clearing and excavating the site which resulted in the picking of Tetratheca juncea was to prepare and submit a development application in order to use the land for a higher economic use The fine should be such as will make it worthwhile the costs of taking precautions to avoid damaging threatened species are undertaken |

6 Such as, for example, the Crimes (Sentencing Procedure) Act 1999 (NSW).
great interest to the study because, as noted previously, courts have been criticised for both leniency in sentencing environmental offenders, and general ineffectiveness in either remedying or preventing harm.\(^7\)

The chapter begins by briefly reviewing the statutory framework within which the NSWLEC undertakes its work, in particular, the purposes of criminal law and relevant sentencing considerations. This is followed by discussion of the penalties for offences against environmental laws, including the range of sentencing options available to the Court for these offences.

Offences under the *Native Vegetation Act 2003 (NSW)* and *National Parks and Wildlife Act 1974 (NSW)* are examined, with continued focus on non-human environmental entities, but this time from the perspective of the overall sentencing process. Sentencing outcomes are analysed with attention given to issues relating to appropriateness and the range of penalties used. Specific analysis includes quantifying the level of fines imposed for offences under the *NVA* relative to the maximum penalty. The imposition of fines for both the *NVA* and *NPWA* are also jointly considered. Comparisons pre- and post- 2010 are also made in regard to the sentencing practices of the Court vis-à-vis the *National Parks and Wildlife Act 1974 (NSW)* cases, and particular illustrations of sentencing innovation are noted.

The main concern of the chapter is to gauge the seriousness of harm and the seriousness of the offence by considering the nature of the sentence imposed by the Court. In doing so, both the statutory basis for penalties and the exercise of discretion by the NSWLEC in responding to specific instances of harmful conduct are discussed.

### 4.2 General Sentencing Principles

Sentencing is a core function of those courts invested with responsibility for adjudicating criminal cases. In deciding sentence, the court typically weighs up a range of matters,

---

including sentencing aims, sentencing principles, offender-specific factors, offence-specific factors, legislative intent and the specific facts of the case. Case law as well as statutory obligation provide the general framework within which the ‘intuitive synthesis’ is made, and this in itself provides a concrete indication of the seriousness of the harm and the gravity of the offence.

4.2.1 Purposes of sentencing

The sentencing of adult offenders in New South Wales is governed by the *Crimes (Sentencing Procedure) Act 1999* (NSW) which sets out the purposes of sentencing in s 3A. These aims include punishment, deterrence, rehabilitation, denunciation, and community protection. Specifically, the purposes of imposing a sentence on an offender include:

(a) to ensure that the offender is adequately punished for the offense;
(b) to prevent crime by deterring the offender and other persons from committing similar offences,
(c) to protect the community from the offender,
(d) to promote the rehabilitation of the offender,
(e) to make the offender accountable for his or her actions,
(f) to denounce the conduct of the offender,
(g) to recognise the harm done to the victim of the crime and the community’.

---

9 *Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4)* [2011] NSWLEC 119, [23].
10 Around the country, the aims of sentencing, which are both symbolic and functional, are generally seen to include:
- denunciation and public reprobation
- retribution and ‘just deserts’
- incapacitation and community protection
- rehabilitation and reform
- individual and general deterrence
- reparation and restitution.
11 *Crimes (Sentencing Procedure) Act 1999* (NSW) s3A.
Although not explicitly included in sentencing purposes, increasingly the aim of restorative justice is being incorporated into sentencing provisions, including in the specific area of environmental offences.\(^{12}\) Moreover, the various sentencing options that are available in sentencing for environmental offences reflect purposes of sentencing such as general deterrence, restoration and reparation.\(^{13}\) Additional orders in the *Protection of the Environment Operations Act 1997 (NSW)*, for example, include orders for restoration and prevention;\(^{14}\) orders for payment of costs, expenses and compensation;\(^{15}\) orders to pay

\(^{12}\) Within the context of the criminal law and particular mandate of the New South Wales Land and Environment Court, there is no specific or explicit reference to ‘restorative justice’ *per se* as a method or remedy. The *Protection of the Environment Operations Act 1997 – S 250* does make reference to an additional order (c) the offender to carry out a specified project for the restoration or enhancement of the environment in a public place or for the public benefit; and subsection (1A) allows that without limiting subsection (1)(c), the court may order the offender to carry out any social or community activity for the benefit of the community or persons that are adversely affected by the offence (a ‘restorative justice activity’) that the offender has agreed to carry out. While clearly oriented toward ‘repairing the harm’, this does not necessarily include victim-offender interactions and exchanges characteristic of the restorative justice *process* more generally, where the emphasis is on repairing the relationship between offender and victim. In the history of the NSWLEC there has in fact been only one instance in which restorative justice, involving processes of mediation and community conferencing, has been used, although a number of opportunities to do so have occurred over time. See Mark Hamilton, ‘Restorative Justice Intervention in an Aboriginal Cultural Heritage Protection Context: Conspicuous Absences?’ (2014) 31 Environmental Planning and Law Journal 352. This situation can be contrasted with New Zealand where, for example, relevant sections of both the *Sentencing Act 2002 (NZ)* and the *Victims’ Rights Act 2002 (NZ)* contemplate restorative justice intervention and restorative justice processes have long been utilised by the New Zealand Environment Court. Restorative justice conferences are utilised across a wide variety of offences (e.g., pollution, both air and water; breach of conditions of development consent; and destruction of trees); a wide variety of victims (i.e., individuals; communities; and the environment); and a wide variety of outcomes (e.g., a defendant apology; payment of costs; tree planting). See Mark Hamilton, ‘Restorative Justice Intervention in an Environmental Law Context: Garrett v Williams, Prosecutions Under the Resource Management Act 1991 (NZ), and Beyond’ (2008) 25 Environmental Planning and Law Journal 263; and Fred McElrea, ‘The Use of Restorative Justice in RMA Prosecutions’ (Delivered at Salmon Lecture to the Resource Management Law Association New Zealand, 27 July 2004); see also Katherine van Wormer & Lorenn Walker (eds), *Restorative Justice Today: Practical Applications* (Sage, 2012); and Evan Hamman, Reece Walters and Rowena Maguire, ‘Environmental Crime and Specialist Courts: The Case for a ‘One-Stop (Judicial) Shop’ in Queensland’ (2015) 27(1) *Current Issues in Criminal Justice* 59.

\(^{13}\) Brian Preston, ‘A judge’s perspective on using sentencing databases’ (Paper presented to Judicial Reasoning: Art or Science? Conference, Canberra, 7-8 February 2009).

\(^{14}\) s 245 *Protection of the Environment Operations Act 1997 (NSW)*; see also s126(3) *Environmental Planning and Assessment Act 1979 (NSW)*

\(^{15}\) ss 246-247 *Protection of the Environment Operations Act 1997 (NSW).*
investigation costs;\textsuperscript{16} monetary benefit orders;\textsuperscript{17} publication orders;\textsuperscript{18} environmental service orders;\textsuperscript{19} environmental audit orders;\textsuperscript{20} payment into an environmental trust;\textsuperscript{21} order to attend a training course;\textsuperscript{22} order to establish a training course;\textsuperscript{23} and order to provide financial assistance.\textsuperscript{24} No Australian jurisdiction has specified a ranking of sentencing purposes or a primary rationale, and each is weighed up in importance on a case-by-case basis.\textsuperscript{25}

4.2.2 General sentencing principles

General sentencing principles also include and make reference to proportionality (in which sentences bear a reasonable or proportionate relationship to the criminal conduct in question); parity (in which equal justice requires that between co-offenders there should not be a marked disparity in sentence); totality (where in cases where an offender is being sentenced for multiple offences the aggregate is to be just and appropriate); consistency (which is intended to ensure that like cases are treated alike, regardless of who passes sentence); maximum penalty (as a measure of the seriousness of the offence); previous convictions (in which the antecedent criminal history of the offender is a factor to be taken into account); and parsimony (which requires that the sentence should not be in excess of that required to achieve defined social purposes).\textsuperscript{26}

Specific penalty provisions and provisions setting out factors which are relevant to the sentencing exercise are also contained in specific legislation.\textsuperscript{27} In addition, particular categories of defendant may require special sensitivity by the judiciary to social and cultural

\textsuperscript{16} s 248(1) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{17} s 249 Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{18} ss 250(1)(a)-(b) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{19} s 250(1)(c) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{20} s 250(1)(d) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{22} s 250(1)(f) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{23} s 250(1)(g) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{24} s 250(1)(h) Protection of the Environment Operations Act 1997 (NSW).
\textsuperscript{25} Geraldine MacKenzie, Nigel Stobbs and Jodie O’Leary, Principles of Sentencing (Federation Press, 2010).
\textsuperscript{27} See for example, the National Parks and Wildlife Amendment Act 2010 Part 15 Division 2 s194 that sets out matters to be considered in imposing penalty.
circumstances. Maximum penalties for criminal offences are specified in the offence provisions themselves, and may involve a wide range of sentencing orders, from dismiss the charge without conviction through to imprisonment. This is further discussed below in relation to the *NVA* and the *NPWA*.

In determining sentence, the sentencing judge considers the details of the offending conduct (the circumstances in which it occurred and the objective seriousness of the harm) and the subjective characteristics of the offender which might be considered as either aggravating or mitigating the seriousness of the particular instance of the offence (their general reputation and good character, prior criminal history, expressions of remorse and so on). Criminal punishment combines consequentialist aims (such as deterrence, rehabilitation and community protection) and expressive aims (such as denunciation and retribution). The intent is to deter others from engaging in similar acts or omissions, and to send a message to the community that such offences are indeed wrong and harmful. The degree of penalty indicates the extent to which the court ascertains seriousness of harm (that is, the objective damage caused by the specific action) and the gravity or seriousness of offence (that also incorporates the culpability of the offender).

Criminal law frequently rests upon the premise that two elements must be present to constitute a crime – the act (and, less commonly, an omission), and the intent. That is, there is a conduct element (*actus reus*) comprising wrongful acts, omissions or a state of affairs that constitute a violation of the law, and there is also a mental element (*mens rea*) where the focus is on criminal intent and the awareness that actions were wilful and wrongful. The mental element may take several forms such as intention, recklessness or knowledge in relation to the prohibited conduct, but there are many crimes known as offences of *strict liability* (and of absolute liability), which do not require any such awareness at all. The latter offences are particularly relevant to environmental crimes insofar as the public interest

---

29 see for example, *Crimes (Sentencing Procedure) Act 1999* (NSW) s 21 A
is favoured over traditional approaches to subjective elements such as intent.\textsuperscript{32} The mental element is nonetheless relevant at sentencing, as discussed below.

Strict liability means that regardless of intent or fault, if someone commits an act (or omission) that is strictly prohibited by law then they must be held to account. Strict liability laws thus punish people regardless of their state of mind, although the defendant may in defence plead ‘honest and reasonable mistake of fact’ and if this is supported by some \textit{prima facie} evidence the prosecution will have to rebut this defence beyond reasonable doubt.\textsuperscript{33} For offences classified as ‘absolute liability’ offences, there is no defence that can be pleaded.\textsuperscript{34} Strict liability offences are regarded as so undesirable as to merit the imposition of criminal punishment; yet, maximum penalties for strict liability offences are generally lower than for crimes committed with intent.\textsuperscript{35}

While guilty in the eyes of the law regardless of intent, recklessness or negligence, subjective factors do nonetheless come into play at the sentencing stage, where judges weigh up such factors as part of sentencing determinations.\textsuperscript{36} Intent is thus still important in environmental crime cases, as was evident throughout the cases considered in this study. But consideration of intent is not relevant to assessment of guilt or innocence as, depending on the legislation, the act is in and of itself may be considered worthy of penalty. Rather, intent is taken into account, in certain circumstances, as a factor of sentencing.\textsuperscript{37}

\textsuperscript{32} Gerry Bates, \textit{Environmental Law in Australia} (LexisNexis Butterworths, 2013),
\textsuperscript{33} Ibid, 793; see also \textit{Criminal Code Act 1995} No 12 Division 6 – Cases where fault elements are not required.
\textsuperscript{34} It has rarely been interpreted in Australia that environmental offences are of absolute liability. Bates, above n 32, 794.
\textsuperscript{35} Bates, above n 32, 794.
\textsuperscript{36} It has been observed that ‘A strict liability offence that is committed intentionally or negligently will be objectively more serious than one which is committed unintentionally or non-negligently’. Brian Preston, ‘Principled Sentencing for Environmental Offences – Part 2: Sentencing Considerations and Options’ (2007) 31 \textit{Criminal Law Journal} 142, 147. See also Brian Preston, ‘Principled Sentencing for Environmental Offences – Part 1: Purposes of Sentencing’ (2007) 31 \textit{Criminal Law Journal} 91.
\textsuperscript{37} Preston, Principled Sentencing for Environmental Offences – Part 2, above n 36.
4.3 Seriousness of Environmental Offences

The basis for sentencing is the gravity or seriousness of the offence. This is comprised of many different elements, of which seriousness of harm is but one. As demonstrated in chapter 3, seriousness of harm is largely determined by the NSWLEC on the basis of ecological indicia.

An ecocentric approach is more limited, nuanced and complicated, however, when it comes to determinations that involve human-related factors (such as the state of mind of the perpetrator of harm). Hence, sentencing necessarily has an anthropocentric component. The question for the present study is the way in which ecocentrism may likewise be evident in sentencing decisions and outcomes. To some extent this can be gauged in terms of the severity of the sentence given.38

4.3.1 Punishment commensurate with the crime

The more serious the offence, the harsher the response or sentencing tariff; thus, at the extremes of the severity spectrum, murder receives a severe penalty while shoplifting is dealt with leniently.39 Seriousness of offence is indicated in the application of the principle of proportionality, which refers to the idea that the severity of punishment should be commensurate with the seriousness of the criminal conduct.40 Ordinal proportionality concerns the relative seriousness of offences compared to other offences (for example, murder versus burglary). Cardinal proportionality relates to the notion that the penalty (within a scale of punishments) should not be out of proportion to the gravity of the crime involved.41

39 White, above n 30.
40 Preston, Principled Sentencing for Environmental Offences – Part 2, above n 36.
41 Ibid.
An overarching question, therefore, is whether, both legislatively and judicially, the level of seriousness of environmental harm is sufficiently acknowledged. This is partly a matter of perspective and partly an empirical issue. Philosophically, some types of harms are viewed as less damaging than others, and thus to warrant different treatment than those perceived to be more serious.

For example, it has been observed that environmental crime frequently embodies a certain ambiguity. This is because it is not only located in frameworks of risk (e.g., precautionary principle) or evaluated in terms of actual harms (e.g., polluter pays), but is also judged in the context of cost-benefit analysis (e.g., license to trade or to pollute or to kill or capture). Some argue that the notion of trade-off implicit within a cost-benefit approach immediately undermines the potential seriousness of the harm in question. Certainly an Earth Jurisprudence perspective would view such considerations as indicators of the privileging of human interests over the non-human, and an abrogation of responsibility toward nature as a whole.

On the other hand, one can also empirically compare environmental offences with other offences, such as homicide, theft, burglary and fraud, and the severity of penalty that accompanies conviction for particular kinds of acts and omissions in order to gauge ordinal proportionality. A rough survey of various countries seems to point to the trend that most offences involving the environment are prosecuted in lower courts (or dealt with by civil and administrative penalties), and that most penalties are on the lower rather than higher end of

---


43 “Criminal law is normally reserved for the punishment of socially unacceptable behaviour. Harm to the environment is, in many situations, considered to be acceptable (for example in certain circumstances we are prepared to allow such pollution under license or authorization) because it is an inherent consequence of many industrial activities which provide significant benefits. This is the rationale for having a system of regulation which defines the framework for determining whether such benefits outweigh the harm caused. The criminal law is not suited to such a balancing process, and thus is mainly used to address clearly unacceptable behaviour or to reinforce the regulatory system”. Stuart Bell and Donald McGillivray, *Environmental Law* (Oxford University Press, 7th edition, 2008), 281.

the scale. For example, over 90 percent of all environmental crimes in the United Kingdom are dealt with in the Magistrate’s Court and the most common sanction is fines, and these are low level. A comparison of European states in regard to environmental prosecution and sentencing found that the fine is the criminal penalty most commonly used in legal practice, and that the amounts imposed are apparently relatively low on average. In the United States, there is the anomaly that at the same time when appellate courts were interpreting environmental guidelines so as to provide for increasingly severe sentences, the district courts were actually imposing increasingly lenient sentences.

Prison time has remained the exception not the norm. In jurisdictions such as Flanders, Belgium even when prison sentences are imposed they are not always executed, but are often used as a suspended or probationary sentence. In the United States, where incarceration for federal environmental offences occurs, the mean sentence lengths are small and occur when the defendant is an individual rather than a corporation. Imprisonment tends to be given to offenders who have violated non-environmental laws as part of their offence (such as conspiracy, tax fraud, drug or firearm offences). Moreover, it seems that low-culpability defendants may receive harsher sanctions than high-culpability defendants given how appellate courts have ignored culpability considerations when interpreting ambiguous provisions under environmental sentencing law guidelines.

In Canada, recent analysis has once again confirmed the ambiguities in law and leniency in punishment when it comes to environmental offences. Internationally, concern has been expressed that many emerging definitions of environmental crime have actually constrained the term by limiting it to crimes associated with breaches of environmental and/or

---

46 Michael Faure and George Heine, Criminal Enforcement of Environmental Law in the European Union (Danish Environmental Protection Agency, 2000).
50 Lynch, above n 38.
51 Ibid.
52 O’Hear, above n 37.
53 Fogel, above n 38.
endangered species legislation only. Typically, therefore, environmental crime is seen only as an infraction or misdemeanour – that is, less serious – than felony or indictable offences.54

From the point of view of Earth Jurisprudence and Wild Law the apparent low level of penalty, generally, appears to indicate that such harms are philosophically not considered particularly serious compared to others (and especially those involving human subjects). The implication is that these courts are not adopting an ecocentric approach in decision-making, including cases that involve harm to non-human environmental entities, since the penalties appear lenient. While the evidence for this remains thin given the dearth of relevant substantive studies in this area, this perception seems to be confirmed in other ways as well.

For instance, even where there are severe penalties available, they may not be applied by the judiciary, especially if they are not familiar with environmental crime and its consequences.55 This then relates to cardinal proportionality. The experience in the United Kingdom has been that the trivialisation of environmental offences in the courtroom serves to impede enforcement as a whole and to diminish the threats posed by prosecution.56 Specifically, the level of sentences given in courts, principally magistrate’s courts, for environmental crimes has been seen to be too low for them to be effective either as punishment or a deterrent. This is not necessarily due to the legislative regime within which they work, but includes factors such as perceptions by magistrates regarding the seriousness of environmental crime and their relative inexperience in dealing with such crimes.57

55 Gavin Hayman and Duncan Brack, International Environmental Crime: The Nature and Control of Environmental Black Markets (Sustainable Development Programme, Royal Institute of International Affairs, 2002); see also O’Hear, above n 37.
57 “Many different reasons were cited for this phenomenon of low sentences. Some proffered the view that magistrates were unsympathetic to the idea that environmental crime was real crime. Others felt that they were sympathetic but lacked the proper guidance or the necessary experience. It was also suggested that the higher maxima involved in many environmental crimes dissuaded the practitioner from using the full scope of sentencing available by dint of their very rarity: a magistrate used to sentencing by fines of no more than [Pounds Sterling] 5,000 will baulk at going higher, even when permitted, in an area in which he [sic] feels he has little experience”. Environmental Audit Committee, House of Commons of the United Kingdom, Environmental Crime and the Courts (2004), 11, emphasis in original.
The next part of the present study examines the manner in which the NSWLEC determines sentencing outcomes. Given the apparent experience elsewhere, the concern is to investigate the reasons why the penalties imposed are given and thereby to examine if similar trends are occurring in regards to the NSWLEC.

4.4 Indicia Used in Determining Sentence for Offences under the NVA and NPWA

The cases in the present study were examined so as to identify and rank the most apparent reasons for the sentencing decisions made by the NSWLEC. In order to do this, a close reading of each case was undertaken to discern the three most important elements used by the Court in determining and applying a suitable sentence. These were then combined into a composite table for cases pertaining to each Act.

The Court considers both objective circumstance and subjective factors in determining a suitable penalty in each case. While *mens rea* is not pertinent in determining guilt, since these are strict liability cases, the mental element (including for example, expressions of remorse and the prior record of the defendant) is nonetheless relevant in determining the gravity of the offence overall.\(^\text{58}\)

The indicia most likely to be mentioned and highlighted in sentencing judgements pertaining to the *NVA* are presented in Table 4.1.

---

\(^{58}\) It is notable and striking that state agencies such as the Forestry Commission of New South Wales have extensive records of causing environmental harm and damage. This is illustrated by the many Penalty Infringement Notices issued to the Forestry Commission, as well as a number of criminal convictions for environmental offences in the Land and Environment Court of New South Wales. These provide evidence not only of the state (through its agencies and officers) acting as ‘offender’, but this agency in particular as having a long track record of ‘repeat offending’. See *Environmental Protection Authority v Forestry Commission of New South Wales* [2013] NSWLEC 101.
Table 4.1: Indicia Used in Assessing Seriousness of Offence, *Native Vegetation Act 2003 (NSW)*

<table>
<thead>
<tr>
<th>Indicia</th>
<th>Cases</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of Clearance (understorey only or including canopy trees)</td>
<td>Issa 2010, Mura 2009, Heffernan 2010</td>
<td>3</td>
</tr>
<tr>
<td>Indirect or Cumulative Impacts</td>
<td>Calman/Williams 2009, Walker 2011, Kennedy 2012</td>
<td>3</td>
</tr>
<tr>
<td>Culpability of Offender (e.g., intent, premeditation)</td>
<td>Rae 2009, Walker 2011, Walker 2012</td>
<td>3</td>
</tr>
<tr>
<td>Motive (e.g., for profit)</td>
<td>Rae 2009, Olmwood 2010, Powell 2012</td>
<td>3</td>
</tr>
<tr>
<td>Impacts on Connectivity or other Ecological Values</td>
<td>Colley 2010, Powell 2012</td>
<td>2</td>
</tr>
<tr>
<td>Other Exacerbating Factors (e.g., burning)</td>
<td>Colley 2010,</td>
<td>1</td>
</tr>
</tbody>
</table>
The leading indicia of the gravity or seriousness of the offence in regards to the *Native Vegetation Act 2003* (NSW) include:

*Scale and specific impact of clearance*

The level of harm in any particular instance is shaped by a combination of indicia that include both scale and specific impact. For example, in one case a substantial amount of land was cleared, but this was nonetheless unlikely to result in long-term impact, thereby contributing to an assessment that the offence was of low to moderate objective gravity.\(^{59}\) Where canopy trees were left intact, this contributed to an evaluation that the harm was at the lower end of the scale.\(^{60}\)

*Ecological value of area*

The clearance of areas of high ecological value is considered an offence of high objective gravity. For example, land areas comprised of mature and late mature trees with significant habitat components means that the harm caused is significant.\(^{61}\)

*Likely effectiveness of remediation*

The time it would take and whether there is a good chance or only the possibility of successful remediation is indicia in assessing the seriousness of the offence.\(^{62}\) Where remediation possibilities have moderate to good potential, for example, the offence may be assessed as being of low-to-moderate gravity.\(^{63}\) On the other hand, in some instances the previous condition of the land may have been poor, which affects assessments of remediation and associated costs.\(^{64}\)

\(^{59}\) *Director-General, Department of the Environment and Climate Change v Olmwood (No2)* [2010] NSWLEC 100.

\(^{60}\) *Director-General, Department of Environment and Climate Change v Mario Mura* [2009] NSWLEC 233.

\(^{61}\) *Director-General of the Department of Environment, Climate Change and Water v Graymarshall Pty Ltd (No2)* [2011] NSWLEC 149.

\(^{62}\) See *Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving* [2009] NSWLEC 182.

\(^{63}\) *Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd* [2010] NSWLEC 200.

\(^{64}\) *Chief Executive, Office of Environment and Heritage v Kennedy* [2012] NSWLEC 159.
Financial means

While the objective damage and destruction to the environment may be quite high, the subjective factors pertaining to the offender can influence the overall assessment of the gravity of the offence. Thus, a number of trees of high ecological value were removed in one case, but the low level of culpability of the offender and their limited means to pay a substantial fine contributed to it being deemed a low gravity offence.65

The other indicia

Other indicia used in assessing the seriousness of the offence included the specific nature of the land clearance,66 cumulative impacts,67 culpability of offender,68 motive,69 wider ecological impacts,70 and exacerbating factors such as burning of the felled vegetation.71

The first three indicia – scale and specific impact of clearance, ecological value of area, and likely effectiveness of remediation – speak to the objective effects and consequences of environmental harm; the next most significant indicator addresses issues of capacity of the offender to be punished through the means of a fine. Thus, ecological factors feature prominently in the rankings of the most important indicia mentioned in sentencing.

Table 4.2 summarises the key indicia used by the NSWLEC in determining the seriousness of offences committed under the provisions of the NPWA.

65 Director-General, Department of the Environment, Climate Change and Water v Ian Colley Earthmoving Pty Ltd [2010] NSWLEC 102.
66 For example, retention of a majority of canopy trees in the cleared area weighs in favour of mitigation. See Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] NSWLEC 43.
67 This refers to the cumulative effect of clearing native vegetation without adequate environmental assessment on individual properties. See Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182.
68 For example, the state of mind of the offender in Director-General of the Department of Environment and Climate Change v 31 (2009) 197 A Crim R included premeditation, intentionality and foreseeability of risk.
69 For example, the involvement of the offender in property development for a number of years indicates profit as a key motivation for the offence. Director-General, Department of the Environment and Climate Change v Olmwood (No2) [2010] NSWLEC 100.
70 For example, in Chief Executive, Officer of Environment and Heritage, Department of Premier and Cabinet v Powell [2012] NSWLEC 129 the harm also relates to hollow bearing trees and the loss of habitat and connectivity.
71 Director-General, Department of the Environment, Climate Change and Water v Ian Colley Earthmoving Pty Ltd [2010] NSWLEC 102.

<table>
<thead>
<tr>
<th>Indicia</th>
<th>Cases</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale of Damage (e.g., number of birds, total area)</td>
<td>Wilkinson &amp; Anor 2002, House 2006, Knox 2007</td>
<td>3</td>
</tr>
<tr>
<td>Motive (e.g., for profit)</td>
<td>Gordon 2005, Williams 2007</td>
<td>2</td>
</tr>
<tr>
<td>Indirect or Cumulative Impacts</td>
<td>Gordon 2005</td>
<td>1</td>
</tr>
<tr>
<td>Other Exacerbating Factors (e.g., method of damage)</td>
<td>Wilkinson &amp; Anor 2002</td>
<td>1</td>
</tr>
</tbody>
</table>
The leading indicia that determined the level of seriousness of harm in regards to the National Parks and Wildlife Act 1974 (NSW) include:

**Threatened species/endangered population/endangered ecological community**

The degree of impact on the threatened species – that is, how significant and serious the damage or destruction is – affects the determination of the seriousness of the offence. 72

A measure of the objective seriousness of the offence includes the number of birds killed and injured,73 the mulching and clearing of land containing an endangered ecological community,74 damage to the habitat of threatened species,75 individual trees listed as an endangered population affected by land clearance,76 and the complete disappearance of an endangered ecological community as a result of actions undertaken by the offender.77

**Culpability of offender**

The blatant disregard of expert advice indicates knowledge that what is being done is wrong.78 Criminal negligence relevant to sentencing is demonstrated in a high degree of carelessness such as to show a disregard for the objects of the statute.79 Prior criminal convictions for environmental offences plus previous penalty infringement notices indicate a record of repeat offending, and this is a factor in determining the gravity of the offence.80

---

73 Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492.
74 Garrett v Williams [2007] NSWLEC 56.
77 Department of Environment & Climate Change v Sommerville; Department of Environment and Climate Change v Ianna [2009] NSWLEC 194.
Potential and/or plan for remediation/reparation
Agreement to undertake remediation of a site contributes to assessment that an offence is at the lower end of seriousness, as does making reparation for the harm and taking practical measures to mitigate the harm more generally.

Financial means/statutory obligation/reputation
Engaging in illegal activity for financial gain places the offence at the upper end of the seriousness scale. The seriousness of offence is compounded when it involves public bodies that ignore and violate the regulatory environment and statutory obligations. The Court weighs up factors pertaining to objective seriousness of harm and subjective factors such as negative publicity on the offender. Extra-legal punishment involves instances where there is adverse impact on professional reputation and professional embarrassment resulting from an offence and this is also taken into account in determining the level of culpability.

Land reserved for conservation purposes
An offence is deemed serious insofar as the specified role of national parks in protecting vegetation has been explicitly violated. For example, actions which impinge upon reserving land as a nature reserve, and as a national park, and ensuring that a world heritage area is protected, are serious matters.

81 Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84; Chief Executive, Office of Environment and Heritage v Coffs Harbour Hardwoods Sales Pty Ltd [2012] NSWLEC 52.
84 Garrett v Freeman (No.5); Garrett v Port Macquarie Hastings Council; Carter v Port Macquarie Hastings Council [2009] NSWLEC 1; Environment Protection Authority v Forestry Commission of New South Wales [2013] NSWLEC 101.
86 Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010] NSWLEC 144.
The other indicia

Other indicia taken into account by the NSWLEC include the scale of damage,\(^{91}\) the potential for harm,\(^{92}\) motive,\(^{93}\) cumulative effects,\(^{94}\) and the method of damage.\(^{95}\)

Overall, the NSWLEC bundles together a wide range of indicia in ascertaining the seriousness of the offence. Offences deemed to be of low gravity are characterised, for example, as not constituting significant environmental harm,\(^{96}\) there is absence of actual harm to animal,\(^{97}\) the harm is of low impact,\(^{98}\) the total area is not significant,\(^{99}\) the actions involved protected fauna only,\(^{100}\) there is low culpability\(^ {101}\) and remediation is possible.\(^ {102}\)

Offences considered to be of moderate seriousness include those where, for example, there is more significant environmental harm,\(^ {103}\) threatened species are affected,\(^ {104}\) there is

---

\(^{91}\) For example, the number of birds killed and injured, as in Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492.

\(^{92}\) In Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84, for example, it was ascertained that there was absence of any actual harm to Koalas, although there was clearly the potential for such harm.

\(^{93}\) Such as clearing and excavating the site in order to later use the land for a higher economic use. See Bentley v Gordon [2005] NSWLEC 695.

\(^{94}\) These include the effects of clearing on populations of threatened species, fragmentation, weed infestation and edge effects. See Bentley v Gordon [2005] NSWLEC 695.

\(^{95}\) For example, the use of a bulldozer. See Director General of National Parks and Wildlife v Wilkinson & Anor; Director General of the Department of Land and Water Conservation v Wilkinson & Anor [2002] NSWLEC 171.

\(^{96}\) Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] NSWLEC 43, [12].

\(^{97}\) Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84.

\(^{98}\) Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200.

\(^{99}\) Director-General, Department of Environment and Climate Change v Mario Mura [2009] NSWLEC 233.

\(^{100}\) Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010] NSWLEC 144.

\(^{101}\) Plath v Knox [2007] NSWLEC 670.

\(^{102}\) Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] NSWLEC 43.

\(^{103}\) Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4) [2011] NSWLEC 119.

\(^{104}\) Plath v Chaffey [2009] NSWLEC 196.
significant damage to habitat, the offender ignores and/or undermines regulatory and statutory obligations, there are uneven or limited amounts of damage, and there is limited possibility for remediation.

In the case of offences seen as of high seriousness, the indicia include, for example, significant and serious environmental harm, larger scale and extent of damage, endangered species, profit and commercial gain from the illegal activity, premeditated and intentional action, and no or little remediation possible.

These various indicia interrelate in unique ways in each case. Accordingly, in the course of its deliberations the Court ultimately makes judgement as to which indicia are most important in any given situation and bases its final sentencing decision on this assessment.

4.5 Range of Penalties Imposed

A range of penalty types, approaches and mechanisms have emerged in Australia in recent years in regards to environmental sentencing options indicating a shift upwards in ordinal rankings of seriousness (that is, these sorts of crimes compared to other crime types) and/or attempts to fashion responses that better match the nature and dynamics of environmental harm. That is, altogether such measures appear to denote a change in the seriousness with which the community regards environmental offences, as reflected in legislative changes to

---

105 Director-General, Department of Environment and Climate Change v Walker Corporation Pty Limited (No4) [2011] NSWLEC 119.
106 Garrett v Freeman (No.5); Garrett v Port Macquarie Hastings Council; Carter v Port Macquarie Hastings Council [2009] NSWLEC 1.
107 Director-General, Department of the Environment and Climate Change v Olmwood (No2) [2010] NSWLEC 100.
108 Chief Executive, Office of Environment and Heritage v Leda Management Services Pty Ltd [2013] NSWLEC 111.
112 Director-General of the Department of Environment, Climate Change and Water v Graymarshall Pty Ltd (No2) [2011] NSWLEC 149.
113 Garrett v Williams, Craig Walter [2007] NSWLEC 96.
114 Garrett v Williams, Craig Walter [2007] NSWLEC 96.
offence classifications and sentence regimes.\textsuperscript{116} How this burgeoning range of sentencing options translates into sentencing outcomes warrants ongoing and close scrutiny, and is of particular interest to the present chapter. This is important because prosecutorial and judicial interventions around environmental harm provide concrete evidence of the specific valuing of environmental harm in and by the criminal justice system at any point in time.

Sentencing options available to the NSW LEC for enforcement and compliance purposes are provided under the \textit{Protection of the Environment Operations Act 1997 (NSW)}. Options include terms of imprisonment, fines, clean-up or preventative action orders, and orders for compensation to those who suffered damage to property as a result of the offence or who incurred costs in taking steps to clean up the harm caused by the offence.\textsuperscript{117}

The \textit{National Parks and Wildlife Act 1974 (NSW)} was amended in 2010 to expand the range of measures a court may impose.\textsuperscript{118} These include additional orders that provide the court may do any one or more of the following:

(a) Order the offender to take specified action to publicise the offence (including the circumstances of the offence) and its environmental and other consequences and any other orders made against the person,

(b) Order the offender to take specified action to notify specified persons or classes of persons of the offence (including the circumstances of the offence) and its consequences and of any orders made against the person (including, for example, the publication in an annual report or any other notice to shareholders or a company or the notification of persons aggrieved or affected by the offender’s conduct),

(c) Order the offender to carry out a specified project for the restoration or enhancement of the environment in a public place or for the public benefit

(d) Order the offender to pay a specified amount to the Environmental Trust established under the Environmental Trust Act 1998, or a specified organization,

\textsuperscript{116} Preston, ‘Principled Sentencing for Environmental Offences – Part 2’, above n 36; see also Bates, above n 32.

\textsuperscript{117} See ss244-251 \textit{Protection of the Environment Operations Act 1997 (NSW)}.

\textsuperscript{118} \textit{National Parks and Wildlife Amendment Act 2010 (NSW)}.  

for the purposes of a specified project for the restoration or enhancement of the environment or for general environmental purposes,

(e) Order the offender to attend, or to cause an employee or employees or a contractor or contractors of the offender to attend, a training or other course specified by the court,

(f) Order the offender to establish, for employees or contractors of the offender, a training course of a kind specified by the court.¹¹⁹

The National Parks and Wildlife Amendment Act 2010 also includes general provisions pertaining to matters to be considered in imposing penalty.¹²⁰ To a large extent these parallel the factors utilised in determining the seriousness of the environmental harm as discussed in Director-General of the Department of Environment and Climate Change v Rae [2009].¹²¹

Section 194 (2) extends the purview of the Court beyond the specific factors laid out in s 194(1) by permitting the Court to ‘take into consideration other matters that it considers relevant’. This gives the NSWLEC wide discretion in determining what factors to take into account in sentencing offenders. Analysis of the penalties imposed by the NSWLEC provide insight into how legislatively provided sentencing options are being translated into penalties at the concrete level, and how the Court is utilising these wide discretionary powers.

¹¹⁹ (s205(1)) National Parks and Wildlife Amendment Act 2010 (NSW).
¹²⁰ S 194 states:
¹²¹ Director-General of the Department of Environment and Climate Change v Rae [2009] NSWLEC 137.
4.5.1 Use of imprisonment

It is notable that imprisonment was not used in any of the cases investigated herein involving offences under the *Native Vegetation Act 2003* (NSW) or *the National Parks and Wildlife Act 1974 (NSW)*. This is not surprising given that custodial sentences are not common in Australia or indeed internationally for environmental crimes.\(^{122}\)

The use of imprisonment in the Australian context tends to be infrequent and is guided by specific circumstances, as outlined in *Plath v Rawson [2009]*:

(a) where the offender’s conduct involves a considerable degree of willfulness and deception;
(b) where an actuating reason for the offender’s conduct is to make a profit or save an expense and;
(c) where the offender’s conduct posed a high level of risk to or actually caused considerable harm to the environment and the public;
(d) where the offender’s conduct is over an extended period or is of a repetitive nature;
(e) where deterrence, both individual and general, makes the custodial sentence appropriate.\(^{123}\)

While there are various elements to these circumstances, of particular interest to the present discussion is the linking of proportionality (in this instance pertaining to the use of imprisonment) to assessments of the level of risk or harm to the environment. From the point of view of evaluation of the facts of each case and interpretation of the type and magnitude of harm, none of the criminal offences against environmental laws that affect non-human environmental entities in the present study was responded to with the use of penal sanctions.

Judgements in the NSWLEC demonstrate an ecocentric approach insofar there is reliance upon ecological criteria in determining harm. Ecological communities, animals and plants are ascribed certain status in and by the law (including the *NVA* and *NPWA*) – for example, as threatened or vulnerable species warranting protection or as noxious animals warranting

\(^{122}\) Bates, above n 32; Billiet, above n 49, 96.

\(^{123}\) *Plath v Rawson [2009]* NSWLEC 178 at [181].
extermination – which denotes their worth from a human-centred point of view. Even protected species are not fully protected in the sense that exemptions generally apply that allow the usual legislative safeguards to be over-ridden in relation to specific actors (for example, Indigenous people) and specific circumstances (for example, routine agricultural management activity).

Legislation is more nuanced than simply dividing species into ‘good’ and ‘bad’ and assigning penalties in an across-the-board generic fashion. Relevant statutes acknowledge that harm involving the non-human environmental entity needs to be evaluated at the level of community as well as the individual. Thus, for example, section 188A of the National Parks and Wildlife Act 1974 (NSW), that deals with harming or picking threatened species, endangered populations or endangered ecological communities, includes provisions that enhance penalties for each individual or plant that is harmed. Yet, such legislation tends to advantage (or disadvantage) particular animals, plants and ecological communities on the basis of human instrumental purposes and perceptions of worth. In this context, harm to non-human environmental entities is diminished relative to harm against humans.

124 Specifically (emphasis added), the section says:

(1) A person must not:

(a) Harm any animal that is of, or is part of, a threatened species, an endangered population or an endangered ecological community, or

(b) Use any substance, animal, firearm, explosive, net, trap, hunting device or instrument or means whatever for the purpose of harming any such animal.

Penalty:

(a) In respect of any species presumed extinct, any critically endangered species or any endangered species, population or ecological community – 2000 penalty units or imprisonment for 2 years or both and, in a case where an animal of any species presumed extinct, any critically endangered species or any endangered species, population or ecological community is harmed, an additional 100 penalty units in respect of each animal that is harmed.

(b) In respect of any vulnerable species – 500 penalty units or imprisonment for 1 year or both, and, in a case where an animal of any vulnerable species is harmed, an additional 50 penalty units in respect of each animal that is harmed.

(2) A person must not pick any plant that is of, or is part of, a threatened species, an endangered population or an endangered ecological community.

Penalty:

(a) In respect of any species presumed extinct, any critically endangered species or any endangered species, population or ecological community – 2000 penalty units or imprisonment for 2 years or both, and an additional 100 penalty units in respect of each whole plant that was affected by or concerned in the action that constituted the offence.

(b) In respect of any vulnerable species – 500 penalty units or imprisonment for 1 year or both, and an additional 50 penalty units in respect of each whole plant that was affected by or concerned in the action that constituted the offence.
Together these considerations add up to a valuing of harm to the non-human that is less than that for a human. A person who kills another human commits homicide and will usually be imprisoned if convicted. A person who kills an animal or a plant will generally not be sentenced to imprisonment. This is so even though legislation, as with the NPWA, may include imprisonment for up to two years for offences such as ‘pick plant of threatened species’ and ‘damage habitat of threatened species’.\textsuperscript{125}

However, the non-use of imprisonment may be due to a number of factors beyond that of solely expressing the seriousness of the offence \textit{per se}. For example, especially in the context of harm to non-human environmental entities, judicial balancing of sentencing purposes in the NSWLEC generally reflects a concern with remediation as well as punishment of the offender. Of course, whether a term of imprisonment is imposed is only one indicator of seriousness.

\textit{4.5.2 Use of fines}

The specific penalties imposed by the NSWLEC consisted of fines, and fines plus orders. The gravity of the offence is expressed primarily through the maximum penalty, but this varies considerably depending upon the offence and the legislation. For example, ‘pick plant of threatened species’ in the \textit{National Parks and Wildlife Act 1974} (NSW) has maximums that include a fine of 2000 Penalty Units (or $220,000), plus fines per endangered place of 100 Penalty Units (or $1100), plus imprisonment of 2 years. By contrast, while the \textit{Native Vegetation Act 2003} (NSW) does not include imprisonment as part of the maximum penalty, the fine for ‘carry out/authorise clearing contrary to section 12’ is substantial at 10000 Penalty Units ($1,100,000) plus 1000 Penalty Units per day ($110,000).

Table 4.3 provides an approximation of the proportion of the maximum penalty that was given by the NSWLEC in the cases under present consideration. To interpret the table adequately requires additional detail regarding other elements that contributed to the overall costs to the offender.

\textsuperscript{125} Sections 118A(2) and 118D(1) respectively.
For example, in all cases the defendant was ordered to pay prosecutor’s costs, which can be substantial. For example, in Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] these costs were $24,333,126 in Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] they were $30,000,127 and in Chief Executive, of the Office of Environment and Heritage v Newbigging [2013] were $45,000, which included investigation costs.128

Conversely, the defendants in Director-General, Department of Environment and Climate Change v Mario Mura [2009] and Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] had personal financial difficulties which the Court took into account, thereby diminishing what would have been the normal fine in such cases.129

126 Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009] NSWLEC 182.
127 Director-General, Department of Environment Climate Change and Water v Vin Heffernan Pty Ltd [2010] NSWLEC 200.
128 Chief Executive, of the Office of Environment and Heritage v Newbigging [2013] NSWLEC 144.
129 Director-General, Department of Environment and Climate Change v Mario Mura [2009] NSWLEC 23; Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No6) [2010] NSWLEC 43.
<table>
<thead>
<tr>
<th>Case</th>
<th>Actual</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rae [2009]</td>
<td>$160,000</td>
<td>15%</td>
</tr>
<tr>
<td>Mario Mura [2009]</td>
<td>$20,000 deemed appropriate; $5000 actual</td>
<td>2%, 1%</td>
</tr>
<tr>
<td>Calman Australia Pty Ltd; Iroch Pty Ltd: GD &amp; JA Williams Pty Ltd t-as Jerilderie Earthmoving [2009]</td>
<td>$22,000 Calman Australia Ltd</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>$22,000 Iroch Pty Ltd</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>$22,000 GD &amp; JA Pty Ltd</td>
<td>2%</td>
</tr>
<tr>
<td>Olmwood (No2) [2010]</td>
<td>$100,000</td>
<td>9%</td>
</tr>
<tr>
<td>Jack &amp; Bill Issa Pty Ltd (No6) [2010]</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Ian Colley Earthmoving Pty Ltd [2010]</td>
<td>$5,000</td>
<td>1%</td>
</tr>
<tr>
<td>Vin Heffernan Pty Ltd [2010]</td>
<td>$30,150</td>
<td>3%</td>
</tr>
<tr>
<td>Walker Corporation Pty Limited (No4) [2011]</td>
<td>$200,000</td>
<td>19%</td>
</tr>
<tr>
<td>Graymarshall Pty Ltd (No2) [2011]</td>
<td>$200,000</td>
<td>19%</td>
</tr>
<tr>
<td>Powell [2012]</td>
<td>$120,000</td>
<td>11%</td>
</tr>
<tr>
<td>Walker Corporation Pty Ltd [2012]</td>
<td>$80,000</td>
<td>8%</td>
</tr>
<tr>
<td>Kennedy [2012]</td>
<td>$40,000</td>
<td>4%</td>
</tr>
<tr>
<td>Rummery [2012]</td>
<td>$80,040</td>
<td>8%</td>
</tr>
<tr>
<td>Newbigging [2013]</td>
<td>$112,000</td>
<td>11%</td>
</tr>
</tbody>
</table>
It is also notable that in majority of the *NVA* cases examined in the present study a 25 percent discount was granted for pleading guilty. This was usually stated explicitly as part of proceedings and factored in as part of the final determination of penalty. This discount is provided under s21A(3)(k) and s22 of the *Crimes (Sentencing Procedure) Act* and s6 of the *Fines Act 1996*. Given that these cases were strict liability cases, it is perhaps not surprising to find this trend. In effect, the discount reduces the maximum possible fine for *NVA* cases by $275,000, thus from $1,100,000 to a new maximum of $825,000. Where the full discount is granted, the proportionate fine is thus higher in relation to the discounted maximum. For example, a $200,000 fine, in effect, constitutes 24% rather than 19% of the maximum when the full discount is granted.

The fines were categorised into low-mid-high range to gauge the overall penalty patterns. For the *NVA* cases, there were 4 fines within the $0-39,000 range, 3 within the $40,000-99,000 range, and 6 in the $100,000-330,000 range. \(^{130}\)

The fine maximums for the *NPWA* cases varied from a maximum fine of $11,000 plus $1100 per protected animal under ‘harm protected fauna’ offences \(^ {131}\) to a maximum of $220,000 plus $11,000 for each plant that was affected under the ‘pick plant of threatened species’ offences. \(^ {132}\) Moreover, the maximum possible fine depends upon the number of offences with which the defendant is charged, plus the number of specific plants or animals harmed. In *Garrett on behalf of the Director-General of the Department of Conservation and Environment v House* [2006], for example, the maximum penalty was determined to be $96,000, based upon $11,000 for the main offence plus an additional $1100 for each sparrow harmed. \(^ {133}\)

For the *NPWA* cases, the figures were 12 in the low range ($0-39,000), 5 in the mid-range ($40,000-99,000), and 1 in the top range ($100,000-330,000). There were 7 *NPWA* cases in the post-2010 period during which the Court had options of fines plus additional orders.

\[^{130}\] The prosecutor’s costs in regard the *NPWA* offences were also substantial, with $10,000-$15,000 at the lower end rising to $85,000 and $167,000 at the upper end.

\[^{131}\] s98(2)(a) National Parks and Wildlife Act 1974 (NSW)

\[^{132}\] s118A(2) National Parks and Wildlife Act 1974 (NSW)

\[^{133}\] *Garrett on behalf of the Director-General of the Department of Conservation and Environment v House* [2006] NSWLEC 492.
(service, publication, rehabilitation) and/or additional payments into environment-related funds. A number of the NPWA cases also included additional orders and payments (including, for example, funding of rehabilitation projects). Thus, analysis of fines only, would fail to take account other aspects of the sentencing process that, combined, provide a more robust picture of how the NSWLEC responds to the challenges and complexities of criminal offences against environmental laws.

4.6 Appropriateness of Sentences

Basic principles of totality, consistency, and proportionality were referenced throughout proceedings so as to ensure that as far as possible like offences in similar circumstances incur similar penalties.

4.6.1 Proportionality and gravity of offence

Proportionality, in the context of these cases and as commented on by sentencing judges, generally referred to the idea that punishment must be proportionate to the gravity of the offending behaviour. The principle of proportionality is intended to prevent the imposition of unduly harsh sentences as well as unduly lenient sentences – the punishment should be broadly commensurate to the gravity of the offence for which the offender has been convicted.

In the present study, the approach adopted by the NSWLEC in assessing proportionality included the objective circumstances of the offence and the subjective circumstances of the offender. Consideration of objective circumstances involved the maximum penalty plus the seriousness of the environmental harm (for example, the significance of population of endangered species, fragmentation, weed infestation, edge effects, and direct damage). An ecocentric approach is central to consideration of the seriousness of environmental harm since it is ecological factors which are used in determining the nature and extent of such harm.

134 Director-General of the Department of Environment and Climate Change v Rae [2009] NSWLEC 137; reported at (2009) 197 A Crim R.
135 See Kate Warner et al, Sentencing in Tasmania (Federation Press, 2002), 76-78; MacKenzie, above n 26; Bagaric, above n 26.
Consideration of aggravating features of the offence involved the state of mind of offender at the time of the offence (for example, knowledge of species, knowledge of obligation, knowledge of potential impact, reasons for commission of offence).\textsuperscript{136} The focus on the offender is informed by anthropocentric considerations.\textsuperscript{137} It is the offender as actor that is assessed, including their behaviour subsequent to being charged with the offence.\textsuperscript{138} Legislation sets out the broad categories denoting ‘aggravating’ and ‘mitigating’ factors.\textsuperscript{139} It is the job of the Court, however, to interpret specific facts as particular factors in sentencing – that is, to use legislative guidelines for practical application. The types of mitigating factors identified by the Court include, for example, defendant poor health,\textsuperscript{140} person of otherwise good character,\textsuperscript{141} offender remorse,\textsuperscript{142} the adverse effect of negative publicity on the offender,\textsuperscript{143} adverse effect on professional reputation,\textsuperscript{144} and offsetting environmental benefit (such as eradication of noxious animals).\textsuperscript{145} Aggravating factors included, for example, blatant disregard of expert advice,\textsuperscript{146} no remorse,\textsuperscript{147} prior convictions,\textsuperscript{148} attempts at

\begin{itemize}
  \item \textsuperscript{136} See Bentley v Gordon [2005] NSWLEC 695, [163]; Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492, [33]; and Chief Executive, Office of Environment and Heritage v Leda Management Services Pty Ltd [2013] NSWLEC 111, [62] and NPWA s194 sentencing matters and s200, 205 orders.
  \item \textsuperscript{137} This obtains for both individuals and corporations. The latter are prosecuted under s175B of the NPWA, ‘offences by corporations’, and in some instances the manager is prosecuted as part of the proceeding. This is provided for in sections of the \textit{National Parks and Wildlife Amendment Act 2010 No38} pertaining to offences by corporations under which each person who is a director of a corporation or who is concerned in the management of the corporation is taken to have contravened the same provision (subject to specific exceptions).
  \item \textsuperscript{138} For example, cooperating with authorities and facilitating the administration of justice. See sections 22A and 23 \textit{Crimes (Sentencing Procedure) Act 1999}.
  \item \textsuperscript{139} Specifically, Part 3 of the \textit{Crimes (Sentencing Procedure) Act 1999} (NSW) Act
  \item \textsuperscript{140} Plath v Chaffey [2009] NSWLEC 196.
  \item \textsuperscript{141} Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492.
  \item \textsuperscript{142} Chief Executive, Office of Environment and Heritage v Rummery [2012] NSWLEC 271.
  \item \textsuperscript{143} Garrett on behalf of the Director-General of the Department of Conservation and Environment v House [2006] NSWLEC 492.
  \item \textsuperscript{144} Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010] NSWLEC 144.
  \item \textsuperscript{145} Chief Executive, Office of Environment and Heritage v Kennedy [2012] NSWLEC 159.
  \item \textsuperscript{146} Chief Executive, Officer of Environment and Heritage, Department of Premier and Cabinet v Powell [2012] NSWLEC 129.
  \item \textsuperscript{147} Chief Executive, of the Office of Environment and Heritage v Newbigging [2013]
  \item \textsuperscript{148} Corbyn v Walker Corporation Pty Ltd [2012] NSWLEC 75.
\end{itemize}
concealment,\textsuperscript{149} public body ignoring regulatory environment and statutory obligation,\textsuperscript{150} and illegal activity continuing after departmental contact and expert advice.\textsuperscript{151}

It has been noted that NSW LEC case law interprets the principle of proportionality to refer to how proportionality controls the upper and lower boundaries of a sentence.\textsuperscript{152} Importantly, proportionality as applied to an environmental offence is measured by the degree of environmental harm, such that the more serious the harm then ordinarily the higher the penalty.\textsuperscript{153} This appears to establish a strong ecocentric dimension to assessments of proportionality. Yet, as discussed below, it is the substantive content of the penalty that reflects an ecocentric approach above and beyond the severity of penalty as such.

\textit{4.6.2 Use of sentencing options}

The present discussion is concerned with how the NSW LEC utilised the sentencing strategies available to punish offenders and to repair the environmental harm. Legislation now allows for considerable flexibility in sentencing environmental offenders\textsuperscript{154} and this, in turn, has enabled the NSW LEC to better tailor sentencing to fit the crime and the offender.\textsuperscript{155} As part of this trend, the interests of the non-human environmental entities that have been harmed are also being directly addressed. As demonstrated below, the NSW LEC is using a full repertoire of sentencing options as part of criminal proceedings for offences against environmental laws. Given the lack of such options in other jurisdictions, for example, in the European Union, this provides an exemplar of practice that could well provide direction for potential

\textsuperscript{149} Chief Executive, of the Office of Environment and Heritage v Newbigging [2013].
\textsuperscript{150} Garrett v Freeman (No.5); Garrett v Port Macquarie Hastings Council; Carter v Port Macquarie Hastings Council [2009] NSWLEC 1.
\textsuperscript{151} Carmody v Brancourts Nominees Pty Limited; Carmody v Brancourt [No.2] [2003] NSWLEC 84.
\textsuperscript{153} Ibid.
\textsuperscript{154} National Parks and Wildlife Amendment Act 2010 (NSW)
legal reforms elsewhere.\textsuperscript{156} It also provides an illustration of how an ecocentric orientation is translated into sentencing outcomes.

Examples of sentences given by the NSWLEC in responding to offences under the \textit{National Parks and Wildlife Act 1974 (NSW)} provide an indication of changing sentencing practices due to the availability of wider range of sentencing options. The first example is from a pre-2010 case.\textsuperscript{157} Other examples occur after amendment to the \textit{NPWA}.\textsuperscript{158} Across these cases there is clear orientation toward remediation and reparation, although this is expressed differently depending upon the sentencing options available.

In \textit{Garrett v Williams [2007]}, the defendant was convicted for the act of mass clearing and mulching of 2.9 hectares. The land was cleared to prepare the way for subdivision consent by undermining the status of the area as worthy of conservation. The defendant’s actions were in blatant disregard of the advice of his own consultant and the NSWLEC deemed that he must have known that what he was doing was wrong. The aggregate fine imposed by the court was $330,000, plus prosecutor’s costs of $85,000. The defendant was also ordered to undertake 400 hours of community service. There were clear concerns here to express general and specific deterrence, and if ‘time is money’ the scale of the penalty is considerable. The reparative element lies in the fact that the penalty fine was to be paid into the \textit{National Parks and Wildlife Fund}.

In \textit{Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010]}, the act consisted of felling vegetation and habitat of the koala, a listed species under \textit{Threatened Species Conservation Act 1995 (NSW)}. The company Orogen was fined $10,000 and Fish the sum of $5,000, plus prosecutor’s costs and both were subjected to an \textit{Environmental Service Order}, and a \textit{Publication Order}. The NSWLEC acknowledged that the defendants had been subjected to extra-curial punishment in that there was adverse impact on professional

---

\textsuperscript{156} Chin, above n 7.
\textsuperscript{157} \textit{Garrett v Williams [2007]} NSWLEC 56.
\textsuperscript{158} \textit{Gordon Plath of the Department of Environment and Climate Change v Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd [2010]} NSWLEC 144; \textit{Chief Executive, Office of Environment and Heritage v Coffs Harbour Hardwoods Sales Pty Ltd [2012]} NSWLEC 52; \textit{Chief Executive, Office of Environment and Heritage v Rinaldo (Nino) Lani [2012]} NSWLEC 115; \textit{Plath v Vaccount Pty Ltd t/as Tableland Timbers [2011]} NSWLEC 202.
reputation and their professional embarrassment resulting from the offence. The reparative
element lies in orders to conduct substantial parts of a koala habitat mapping project (as
spelled out in a submitted exhibit put forward by the defendants). The Targeted Koala Habitat
Utilisation Assessment Project cost $17,400 to prepare, and was accepted by the NSWLEC as
the basis for a work order. There was a reprobation element as well insofar the defendants
were subject to a publication order. This involved publication of a notice in the Sydney
Morning Herald and in the Newsletter of the Ecological Consultants Association of NSW.
The specific wording of the notice was included as part of the court order. The
significance of this case therefore is twofold. First, the defendants were ordered to undertake
a specific project directly related to the nature of the harm associated with the original
offence. Secondly, the NSWLEC specified the exact wording of the publication order, and
where it was to be published.

In Chief Executive, Office of Environment and Heritage v Coffs Harbour Hardwoods Sales
Pty Ltd [2012] the defendant was convicted for offences that involved logging operations for
a log haulage route in which 13 Newry Golden Wattle were killed and 8 damaged. The
defendant was fined $45,000 on one offence and $40,000 on another, and ordered to pay
prosecutor’s costs of $26,000. A publication order was issued for the Coffs Harbour

---

159 Extra-curial punishment refers to any serious loss or detriment an offender has suffered or
will suffer as a result of committing an offence, quite apart from any punishment imposed by
a sentencing judge. Gordon Plath of the Department of Environment and Climate Change v
Fish; Gordon Plath of the Department of Environment and Climate Change v Orogen Pty Ltd
[2010] NSWLEC 144.
160 Environmental consultant convicted of causing damage to koala habitat at Taylors
Beach, Port Stephens:
Orogen Pty Ltd and its director Anthony Fish have been convicted in the Land and
Environment Court of causing damage to habitat of threatened species, namely the Koala,
knowing that the land concerned was habitat of that kind. Orogen and Mr Fish provided a
developer with advice on what vegetation could be lawfully cleared on a property but failed
to advise that damaging the habitat of the Koala was unlawful under the National Parks and
Wildlife Act. Both Orogen and Mr Fish were aware that the property contained habitat of the
Koala and Koala movement corridors. Vegetation containing Koala habitat was subsequently
cleared. The offences occurred at a proposed development site at 60 Port Stephens Drive,
Taylors Beach, at the intersection of Sky Close. Orogen and Mr Fish both pleaded guilty. Orogen and Mr Fish were fined a total of $15,000.
The company was also ordered to pay the prosecutor’s costs and investigation expenses.
This advertisement was placed by order of the Land and Environment Court and paid for by
Orogen Pty Ltd and Mr Fish.
161 Chief Executive, Office of Environment and Heritage v Coffs Harbour Hardwoods Sales
Pty Ltd [2012] NSWLEC 52.
Advocate and the Bellinger Courier Sun. There was also imposition of an Environmental Service Order to the effect that the defendant was ordered to design and erect strainer posts and a gate in a specific location with the sign saying ‘Trail closed for Rehabilitation’. The defendant was also ordered to plan and carry out works for the mitigation and/or prevention of soil erosion in Jaaningga Nature Reserve caused by the defendant’s clearing. This case is significant insofar as it also involved reparation of the specific harm caused by the defendant.

In Chief Executive, Office of Environment and Heritage v Rinaldo (Nino) Lani [2012] the act for which the defendant was convicted consisted of the clearing of the habitat of the squirrel glider.\textsuperscript{162} The defendant was fined $20,000, ordered to pay 75% of prosecutor’s costs, and subject to a publication order. The need for specific deterrence was generated by the defendant’s conduct that indicated an attitude of disregard towards the system of environment protection legislation and planning control. In the words of the NSWLEC, ‘they need to be taught a lesson which will, hopefully, discourage them from like conduct in the future’.\textsuperscript{163} There were two reparative elements in this case. First, the penalty fine was to be paid into the National Parks and Wildlife Fund for the specific purpose of mapping and study of the squirrel glider populations in Booti Booti National Park and any Crown land or council controlled land in the Foster area along with the study of the connectivity of these areas within the urban landscape of the Foster area. Secondly, the defendant was subject to the very specific directions regarding what had to be done.\textsuperscript{164} This case was significant because while

---


\textsuperscript{163} Ibid, [56].

\textsuperscript{164} Within three weeks of the date of these orders, the defendant, pursuant to section 200(1)(d) of the National Parks and Wildlife Act, shall retain consultants with the following expertise, being consultants acceptable to the prosecutor:
(a) a bush regenerator;
(b) an ecologist; and
(c) an expert with special knowledge of the threatened species squirrel glider (Petaurus norfolcensis).

(6) Within 11 weeks of the date of these orders, the defendant shall prepare a remediation plan for Area B in the map annexed to these orders relating to the land at lot 22, deposited plan 843479 located near Southern Parkway, Foster, to include the following:
(a) regeneration of cleared vegetation;
(b) a timeframe for all actions proposed as part of the remediation plan implementation; and
(c) any other actions the consultants deem to be required to remediate the site.

(7) Within 12 weeks of the date of these orders the defendant shall provide the remediation plan as produced in accordance with Order (6) above to the prosecutor.
the fine imposed was directed to the National Parks and Wildlife Fund (a general pool used for environmental purposes), the precise use of the money was specified. Likewise, remediation was ordered for specific rehabilitation purposes and the NSWLEC was very precise in its instructions so that the performance would be of standard and the tasks undertaken.

Finally, in *Plath v Vaccount Pty Ltd t/as Tableland Timbers* [2011], the defendant was convicted for offences associated with the unlawful harvest of trees in a national park, and involved the felling of 503 trees. The defendant was fined $73,000, and ordered to pay prosecutor’s costs and disbursements of $47,100 and prosecutor’s investigation costs to the amount of $2,900. The defendant was ordered to pay a specific recipient, the Northern Rivers Catchment Management Authority, the fine amount to be used for general environmental purposes. Notably, the NSWLEC also ordered that all future public references by Vaccount Pty Ltd t/as Timberlands Timbers to the payment above shall be accompanied by the following passage:

“The contribution by Vaccount Pty Ltd, trading as Timberland Timbers, to the Northern Rivers Catchment Management Authority is part of a penalty imposed on it by the Land and Environment Court of NSW after it was convicted of damaging reserve land, being an offence against s 156A of the *National Parks and Wildlife Act 1974*”.

This case features the payment to a specific agency for general environmental purposes. The additional reference to any publicity pertaining to the payment of the fine is important as

(8) No later than 20 weeks after the date of these orders the defendant shall cause the consultants to carry out all works required by the remediation plan and in accordance with the time frame under the remediation plan.
(9) The defendant shall provide copies to the prosecutor of all retainers and instructions given to the consultants at the same time as they are given to the consultants.
(10) In the event that any or all of the consultants are unable to continue to act pursuant to these orders, they may be replaced by the defendant engaging a replacement consultant acceptable to the prosecutor.
(11) Schedule 7 to the Uniform Civil Procedure Rules 2005 is directed to apply to the performance of the duties of the consultants as if they are parties’ single expert witness in these proceedings.
(12) Notwithstanding Order (11) above, the defendant shall pay the professional fees, costs and expenses of the consultants
well. It has been observed that compliance with regulations (or in this case, with a court order) are sometimes used by companies as part of a public relations exercise in which they claim to be environmentally virtuous because of the compliance or financial contribution. The NSWLEC forestalled this by imposing the above order.

The tailoring of court outcomes across these five cases illustrates the flexible use of sentencing options, which is enhanced when a wide range is available to the Court, especially under the expanded suite of penalties post-2010. Thus, while community service was used solely for deterrent purposes in the 2007 case above (since it was imposed as a general criminal justice sanction and implemented through that system), after the legislative changes of 2010 community service has been re-directed to specific environmental purposes and thus has become reparative as well as deterrent.

4.7 Ecocentrism and Seriousness of Offence

A fine is the most common penalty for environmental offences in places such as the USA, the UK, Belgium and Australia. In Australia, it has also been observed that while overall most jurisdictions are strengthening penalties for environmental offences, the fines nonetheless remain low, especially relative to the maximum statutory penalty limits. This seems to be the same for the cases examined in the present study, as illustrated in Table 4.3 which shows low fine levels relative to the maximum. These findings imply that both ordinal proportionality (the seriousness of environmental offences compared to other criminal offences) and cardinal proportionality (the penalty levels within the overall scale of punishments) do not fully reflect the seriousness of the offence as construed by those arguing that offenders who transgress against ecosystems, animals and plants should be more fully held to account.


167 Pepper, above n 155.
Yet, the existing data in regards to the use of fines, particularly around questions of leniency and harshness in sentencing, require further analysis and elaboration. For example, concerns that warrant further attention include the difference in sentencing outcomes between the NSWLEC and the Local Court, comparisons between criminal proceedings for offences against environmental laws and other roughly equivalent offences involving criminal proceedings, systematic empirical evidence regarding trends in fine levels over time, and comparisons of NSWLEC sentencing outcomes with fines imposed in other countries. Moreover, the nature of the ‘intuitive synthesis’ – which encapsulates consideration of objective harm and subjective circumstance – means that factors such as capacity to pay have a bearing on sentencing determinations as well as indicia pertaining to environmental harm. The Court weighs up a wide range of factors and does so in accordance with sentencing principles such as consistency and proportionality. A serious offence, therefore, does not always result in a high range penalty outcome, depending upon circumstances.

If the purpose of the NSWLEC is seen to reside primarily in terms of reparation of harm and deterrence of future offending, then what counts is how sentencing can best contribute to these purposes. Fines, in this instance, are not simply a ‘cost of business’. They are intended to be large enough to have deterrent effect but, just as importantly, they are translated into meaningful projects and programs that attempt to concretely remediate the damage and repair the harm. The linking of fines to specific environmental purposes thereby marks it off from more generic fine schemes in which the money is channelled into consolidated revenue.

In recent extra-judicial comment, Justice Pepper of the NSWLEC has observed that harsher penalties are being imposed by the courts in the absence of increases in statutory maximums. This is apparently occurring due to a more profound appreciation of the concept of environmental harm and how this feeds into the classification of the seriousness of the crime. As such, this would seem to reflect ecocentric considerations about the value of

---

168 Bricknell, above n 42. This statement can also be interpreted at a broad structural level to indicate that occasional large fines for a small number of corporations can obscure the otherwise relatively small fines levied against others; moreover, even relatively large fines do not necessarily serve to deter large corporate actors – see Stretesky, above n 166.

169 “With the mainstreaming of environmental concepts such as ecologically sustainable
development, inter-generational equity and the precautionary principle, both at the international and the local level, there is an increasing recognition of the true scale of damage
non-human environmental entities, as does the emphasis on reparation in relation to the specific environmental harm.

The tailoring of sanctions and remedies by the court, over time, particularly in the direction of reparation is significant. When specific remedies are examined, they seem to indicate evidence of specialist knowledge and expertise by the judiciary about the nature of environmental harm and sustained efforts to ensure that the sentence fits the crime. This requires sensitivity to the importance of ecological principles, including regeneration and reparation, as well as knowledge of what might be most suitable in given circumstances. The content of extended environmental service orders also indicates reliance upon and/or awareness of scientific knowledge and methodological nous, as well as reflecting experience of likely offender behaviour post-hearing. With respect to this, the fact that the New South Wales Land and Environment Court is a specialist court also seems to be particularly important.

The principles of ecologically sustainable development as set out in the Protection of the Environment Administration Act 1991 (NSW) form part of the blueprint for decisions made in the NSWLEC. However, as indicated throughout this chapter, putting principles into practice in an effective manner requires a combination of informed decision-making, the ability to exercise judicial discretion, and suitable legislatively provided sentencing regimes to be in place.¹⁷⁰

When it comes to sentencing outcomes, it is the imposition of orders, particularly in respect to the NPWA that is of special note. This is because, rather than use of just the one punitive option (for example, a fine), the NSWLEC has, since 2010, exhibited even greater flexibility and discretion in tailoring sentences to fit the specific circumstances of the offender and the

---

170 Interestingly, in latter cases examined as part of the present study, defence arguments tended to be less about quantum of harm (that is, how much damage has been incurred and the overall seriousness of the harm) and more about exemptions and whether the defendant’s actions could be included within provisions covered by exemptions (that is, exceptions allowable under the relevant Act such as routine agricultural management activity). Whether this is because it is difficult to contest empirical evidence of harm due to strict liability and the sophistication of the ecological expertise of the Court is, however, a matter for conjecture.
offence. Not only does this ensure a better fit between problem and response, it also represents punishment that in many instances is of greater burden to the offender than imposition of a fine only.

It has been suggested that the effectiveness of combining different types of orders is that they put a spotlight on the fact that a crime has been committed, while simultaneously producing an environmental good. If this is indeed the case, then such sentencing processes appear to address matters of the seriousness of environmental crime better than former approaches. They also reflect key concerns of an ecocentric approach in regards to appropriateness of penalty and matters of ecological integrity as discussed in chapter 2. Not only does the NSWLEC determine the nature of the harm to non-human environmental entities by reference to ecological criteria, it imposes penalties that include measures designed to ensure the maintenance, restoration or preservation of the harmed plant and animal species, ecological community and ecosystem.

4.8 Conclusion

This chapter has analysed the sentencing practices of the NSWLEC in relation to the indicia and factors that were influential in determining the severity or gravity of the offence. It has discussed the general sentencing framework and principles that guide such reasoning, and examined the specific sentencing outcomes of relevant cases. As demonstrated, informed by recent legislative changes, the Court has expanded its repertoire of responses to environmental harm in a number of respects. This has allowed considerable flexibility in dealing with offences which have ranged in gravity due to great variation in objective circumstances and subjective factors. The implications of this approach are further discussed in chapter 5.

---

171 Bricknell, above n 42, 21.
Ch.5: Implications and Discussion

5.1 Introduction

This study set out to determine whether the NSW LEC took an ecocentric approach in its interpretation and application of environmental statutes. It did so by examining how the Court identifies, assesses and quantifies harm in regards to non-human entities such as flora and fauna in sentencing matters, and how it sets penalties for offenders as part of its role in deterring future acts against non-human environmental entities and responding to the particular damage to, death of, or destruction or degradation of the non-human environmental entity.

The substantive findings at the centre of these analyses, presented in chapters 3 and 4, are that the Court does adopt an ecocentric approach to determining and responding to environmental harm, if we take account considerations such as the worth of non-human environmental entities, expertise, ecological perspectives, remediation of harm and penalty as discussed in chapter 2. This is demonstrated, for example, in the use by judicial officers of ecological criteria in assessing environmental harm and, specifically, the indicia used to determine environmental harm identified in chapter 3. The worth and value of non-human environmental entities are also reflected in penalties that offer opportunities to restore ecological integrity and address harms to specific species and their habitats as discussed in chapter 4. This is achieved by combining sanctions in ways that are oriented toward repairing the harm while simultaneously creating appropriate burdens for the offender.

This chapter considers the implications of these findings for enabling the further development of ecocentric approaches in cases involving criminal proceedings for breaches of environmental laws. In particular, it discusses two key factors that seem to facilitate an ecocentric approach: consolidating and developing specialist expertise; and having a wide range of sentencing options.
5.2 Ecocentrism and Specialist Expertise

Specialist expertise is vital to an ecocentric approach because assessing harm in instances involving non-human environmental entities demands an appreciation of and reliance upon ecological and other associated types of specialist knowledge (such as botany and zoology).

Specialist environment courts provide an ideal forum for the development and deployment of such expertise.¹ For instance, an international survey and evaluation has found that specialist environment courts, that is, courts and tribunals established specifically for dealing with environmental matters and for which particular expertise among court officers is fostered, can and do have greater insight into the nature of environmental offences.²

There are plenty of advocates, including amongst the judiciary, for specialist environmental tribunals and courts.³ Greater consistency in approach and outcome can be achieved by specialist agencies that deal with environmental crimes and it is notable that, today, there are over 350 environmental courts and tribunals (ECTs) authorised in some 41 countries, and the number is growing.⁴ The increase in specialist courts is also apparent in Australia, although the jurisdiction of these bodies varies widely throughout the country.⁵ Such institutions

³ See for example, Angus Nurse, An Introduction to Green Criminology & Environmental Justice (Sage, 2016); Pring, above n 2; and Carrie Boyd, ‘Expanding the Arsenal for Sentencing Environmental Crimes: Would Therapeutic Jurisprudence and Restorative Justice Work?’ (2008) 32(2) William & Mary Environmental Law and Policy Review 483. It has been observed that: ‘An environmental court is better able to address the pressing, pervasive and pernicious environmental problems that confront society (such as global warming and loss of biodiversity). New institutions and creative attitudes are required to address these problems. Specialisation enables use of special knowledge and expertise in both the process and the substance of resolution of these problems. Rationalisation enlarges the remedies available’. Brian Preston, ‘Characteristics of Successful Environmental Courts and Tribunals’ (2014) 26(3) Journal of Environmental Law 365, 87.
⁴ Pring, above n 2.
ostensibly represent a significant improvement when it comes to both comprehending the
extent and nature of environmental harm, and in providing remedies that best match the
offence in question.

Among the building blocks for an effective and appropriate response to environmental
offences are the mobilisation of scientific and technical expertise and the competence of
judges and decision-makers, which vary considerably both internationally and within
Australia. Moreover, there need not be a separate court, as such, as long as specialist
expertise can be acquired by judiciary within the particular court that hears environmental
crime cases. In Canada, the lack of expertise on the part of the judiciary has been shown to
present as an added difficulty in establishing proof of the perpetration of an environmental
offence. On the other hand, advocacy for a specialist court does not equate to being
advocates within the court, certainly at least not within an adversarial system characteristic of
Australian courts. That is, the role of the judge in an environment court is meant to be one of
impartiality in regards to the proceedings before them and towards the specific protagonists
in each case.

Even where specialist expertise is available, however, this is no guarantee that the penalty
will be proportionate to the offence. Again, this depends in part upon the status of the court in
question. For example, in South Australia the Environment, Resources and Development
Court is comprised of district court judges and the court is constrained by its status to impose
fines only within certain limits, which are well below the legislative maximum penalty for

---

Issues in Criminal Justice 59.; White, above n 1; and Gerry Bates, Environmental Law in
Australia (LexisNexis Butterworths, 8th edition, 2013), 54. For example, the NSWLEC is
staffed by Supreme Court judges, while the Queensland Planning and Environment Court and
the South Australian Environment, Resources and Development Court are staffed by District
Court judges.

6 See Kenneth Markowitz and Jo Geradu, ‘The Importance of the Judiciary in Environmental
Compliance and Enforcement’ (2012) 29 Pace Environmental Law Review 538; Preston,
above n 3.

7 Curtis Fogel and Jan Lipovsek, ‘Green Crime in the Canadian Courts’ (2013) 6(2) Journal
of Politics and Law 48, 50.

8 See Michael Rackemann, ‘Environmental Decision-Making, the Rule of Law and
Environmental Justice: A Case Study of the Planning and Environment Court of Queensland’
(2011) Resource Management: Theory & Practice 37; and Michael Rackemann,
‘Environmental Dispute Resolution – Lessons from the States’ (Paper presented at the
environmental offences. By contrast, the NSWLEC has the status, and powers, of the Supreme Court, and thus is enabled to set harsher penalties than its South Australian counterpart, as well as draw upon a wide spectrum of penalty options.

Adopting an ecocentric approach in assessing and responding to harm is difficult because it requires extensive breadth and depth in the knowledge and expertise to be drawn upon. An informed and flexible perspective is needed precisely because of the intricacies of nature itself. For example, a crucial consideration is the uncertainty surrounding knowledge about present species and future developments. Because nature is so dynamic this makes it hard to define all species exhaustively, and there will inevitably be imperfect knowledge of species. Nature is always in a constant state of flux, making the estimation of a suitable baseline or threshold by which to gauge harm complicated, since these also vary depending upon the species.

---

9 See Bates, above n 5, 784.
11 ‘An ecological community is a dynamic, and not a static entity. It is a living entity, capable of growth, maturation, senescence and regeneration. The processes of succession mean that a community will alter over time in response to external and internal forces. External forces can be acute or chronic. Acute disturbances are events such as bushfire, storms or floods. Chronic disturbance can occur by reason of factors such as anthropogenic climate change. Either way, external forces cause disturbance to the flora and fauna that constitute the community at any point in time and any particular location. The dynamic nature of communities and their constituent species makes it impossible to define exhaustively all species that comprise the community at any instant in time and in any place’. Preston, Threatened Species Conservation Act 1995 (NSW): Part 1, above n 10, 257.
12 ‘…a complete listing of species in the community is impractical, indeed perhaps impossible, task. The problem is exacerbated by our imperfect knowledge of all biodiversity – there are many species yet to be identified or classified taxonomically’. Ibid 257.
13 ‘The number or proportion of species in a particular location can vary in both the short and long term. Some species may not be visible at certain times of the year. In the case of fauna, the species may be migratory or nomadic. In the case of flora, the species by nature may be ephemeral, annual or opportunistic. The species may also have vegetative or floral parts that are visible above ground at only certain times of the year. Some species of flora may not be found for some time after disturbances such as fire while other species may have existed only in the seed bank and therefore not be visible until disturbance such as fire’. Ibid 258.
Rather than laying down a principle of general application, assessments have to be made on a case-by-case basis.\textsuperscript{14} The use of discretionary power in environmental decision-making more generally is viewed by some commentators as advantageous insofar as it can facilitate individualised justice.\textsuperscript{15} In cases involving harm to environments, judicial discretion is necessary in order to deal with the inherent uncertainties and complexities associated with nature.\textsuperscript{16} This desired flexibility is also acknowledged in commentary on the extent of judicial discretion relative to the level of specificity in legislation, in deciding what type of penalties will apply to what type of behaviour.\textsuperscript{17}

These considerations illustrate the complicated nature of trying to assess present conditions and future prospects in regards to non-human environmental entities. The NSWLEC has a significant role to play in determining the objects that have been harmed, and the ways in which they have been harmed. In doing so, the Court has had to develop its own specialist expertise in classificatory matters, in categorising different types of harm, and in drawing upon the expertise of those who are specially trained in sciences relevant to evaluation of harm as this relates to non-human environmental entities.


\textsuperscript{15} ‘Use of discretion as a mechanism for ensuring individualised justice recognises that, in this epoch of globalisation, static and technocratic competence rules will often be insufficient for dealing with uncertainties and complexities in:
1. regulating dynamic environments at different scales;
2. environmental governance and stakeholder engagement;
3. determining the cumulative environmental impact of developments conducted at the project or activity scale; and
4. scientific knowledge and understanding of ecosystem functioning’.


\textsuperscript{17} In this regard, the experience of the NSWLEC tends to mirror the observation that ‘Even though the legislator should determine the penalties there is still the option of providing very broad penalty provisions, hence allowing a large amount of discretion to the judge to determine which would be a proportionate penalty for a particular offence’. Michael Faure, ‘The Implementation of the Environmental Crime Directives in Europe’ (Paper presented at Ninth International Conference on Environmental Compliance and Enforcement, Canada, 2011), 365.
The substantive work of the NSW LEC has thus resulted in the development of detailed frameworks within which specific types of environmental harm can be categorised. This manifests in the use of particular indicia as benchmarks for assessing harm. As shown in chapter 3, this includes indicia specific to native vegetation, and indicia pertaining to ecological communities, plants and animals. For example, in assessing cases prosecuted under the NVA, relevant considerations included assessment of prior and present land clearing; vulnerability at general systems level; vulnerability at specific levels; temporal and proximity impacts and effects; and the possibilities for remediation. Each of these categories embodies specific indicia of harm. Similarly, in regards to the NPWA consideration of the harm to ecological communities, plants and animals included detailed assessment of direct damage; immediate, potential and indirect impact; status of species damaged or destroyed; complexity and totality of ecological damage; re-establishment time; and reparation strategy. These methods of categorisation are variously applied insofar as they are suited to assessment of specific offences, and have developed organically over time as the Court has developed its specific expertise.

The principle of consistency has ensured that this process of assessment and development of indicia is intentional and structured rather than random, ad hoc and arbitrary. Like cases are examined in relation to like cases, and prior judgements are drawn upon to provide relevant sentencing templates.18

Adoption of an ecocentric approach is enhanced by the intersection of legislative frameworks supportive of ecological sustainability, the employment of assessment methods that categorise harm and facilitate determination of its seriousness according to ecological criteria, and the developing ecological expertise of the judiciary that is in part fostered by regular exposure to relevant experts (such as botanists, arborists, and ecologists) in the course of Court proceedings.

Detailed investigation, analysis and expert perusal is exercised and drawn upon by the NSWLEC in determining the specific degree and type of environmental harm in each

18 For example, a method for broadly determining the objective gravity of offence is set out in Bentley v BGP Properties Pty Ltd (2006) 145 LGERA 234; and Director-General of the Department of Environment and Climate Change v Rae (2009) 197 A Crim R 31.
instance. This requires the Court to carefully consider evidence and expert opinion from varying sources in order to categorise the specific harm in question. This process of assessment demands of the NSWLEC prerequisite knowledge of basic ecological processes and contexts.

For example, the NSWLEC has actively attempted to filter out ‘bad’ science and ‘poor’ expertise. This is illustrated in Chief Executive, Office of Environment and Heritage v Kennedy [2012] where the Court had to determine the number of trees that had been cleared and in doing so rejected the expert testimony of the prosecution expert.19 In a similar vein, disputes involving several expert witnesses include cases where the conflict is not over the basic facts (such as causing damage to habitat, not being critical habitat, of a threatened species, knowing that the land concerned was habitat of that kind) but over the amount of vegetation that was cleared, and its impact on the threatened species. This means making decisions regarding which expert testimony is most reliable and in relation to the estimates or opinions being made. Poor methods and methodologies, particularly where there is conflicting expert evidence, provides occasion for the NSWLEC to disregard certain evidence, especially when countered by expert opinion given by scientists of known repute.20

Conversely, persons who are not qualified to give specific expert opinion have been dismissed by the NSWLEC. For example, in Corbyn v Walker Corporation Pty Ltd [2012] a company ‘Environmental Land Clearing’ Pty Ltd (‘ELC’) claimed special expertise, but as

19 Chief Executive, Office of Environment and Heritage v Kennedy [2012] NSWLEC 159. The Court accepted the prosecution expert’s view that the cleared woodland appeared to comprise four distinct communities. However, it found that while Dr Nadolny assessed the number of mature trees cleared as being between 2500 and 4000, the Court found that few more than 600 were cleared. The NSWLEC found that prior to the clearing the Property included areas of much regrowth, scattered bigger timber, and much fallen dead timber and timber heaps, stumps and bare ground, and that it had been extensively logged by earlier owners prior to 1990 [at 61]. The baseline measure from which to gauge environmental damage needs to take into account the previous state of the Property. Moreover, it was concluded that ‘Dr Nadolny’s estimate is theoretical, being based on a comparison with the number of trees on the adjoining stock route. That area is Crown land and has not been subject to normal agricultural activities, and hence has a far higher proportion of trees per hectare than the Property. The Property had been extensively logged under earlier ownerships’ [at 62].

the Court observed: ‘ELC held themselves out to be specialist in environmental clearing but this proved to be no more than having in their possession specialist equipment for land clearing and did not, as it transpired, extend to any particular specialised knowledge of what could be lawfully cleared under the NVA’.21 In Chief Executive, Office of Environment and Heritage v Rinaldo (Nino) Lani [2012] the evidence of Mr B Summerell was refused admission on the ground that he was not qualified to give evidence which ought to have been given by an arborist.22

The NSW LEC necessarily relies upon expert advice and expert testimony in the course of its deliberations. A wide range of experts is called upon and many different disciplines and scientific techniques are utilised in attempts to ascertain the nature, extent and dynamics of environmental harm. As with any court, the NSW LEC has to appraise who is an expert for what, and to what extent. Much of this relies upon the ‘basis test’, which refers to a test that focuses on the actual opinions expressed by the expert witness and evaluating its veracity in two ways: the opinion of the witness must be ‘wholly or substantially based’ on the specialised knowledge; and the factual basis of the opinion must be disclosed and proven by admissible evidence.23 Coupled with matters pertaining to relevance to the case, qualifications of the person, and bona fide possession of specialised expertise, the basis test enables and assists the judiciary in making decisions regarding which evidence and which experts, on particular matters, provide the best and most reliable opinion.

As this research has demonstrated, determining the precise nature of environmental harm, including its seriousness, is subject to distinct categorisation based upon the establishment, over time, of clusters of indicia. These categorisations assist in helping to define the parameters of harm within which environmental harm is perpetrated. Judgements concerning the nature of harm are confirmed in the weighing up of expert evidence in ways that testify to the specific expertise and experience of the Court itself in such matters. Each case is unique in some respects, given variable circumstances and a diversity of objective and subjective factors at play in any given situation. Categorisations of harm based upon prior decisions and knowledge built up by the Court over time, as well as critical scrutiny of expert opinion

---

21 Corbyn v Walker Corporation Pty Ltd [2012] NSWLEC 75, [7].
(which likewise indirectly builds expertise), enable the NSWLEC to continue to develop specific indicia for evaluating environmental harm to non-human environmental entities. The success of the Court depends upon judges being knowledgeable and competent – they need to be ‘environmentally literate’.  

5.3 Ecocentrism and Innovative Sentencing

An important consideration that influences perceptions of whether or not an ecocentric approach has been adopted is the penalty regime. This need not be solely about application of criminal penalties, since the overarching issue is how best to address matters pertaining to environmental harm as circumstances dictate. Nonetheless the imposition of criminal penalties provides a clear indication of the severity of the offence.

International experience demonstrates that environmental crime tends not to attract harsh penalties and/or that its seriousness entirely depends upon the jurisdiction within which the crime is committed. Even where other jurisdictions ostensibly are in favour of taking

24 Preston, above n 3, 377.
25 For example, for example, in some instances administrative sanctions can be more severe than criminal sanctions (such as when they involve revocation of licenses) and similar to criminal penalties they may be oriented to prevention and punishment. See See Shirleen Chin, Wouter Veening, and Christiane Gerstetter, Policy Brief 1: Limitations and Challenges of the Criminal Justice System in Addressing Environmental Crime, (November 2014) European Union Action To Fight Environmental Crime [EFFACE], <http://efface.eu/sites/default/files/publications/EFFACE_Policy_Brief%201_29Oct14_1.pdf>.
26 European Union Action to Fight Environmental Crime [EFFACE], Environmental Crime and the EU: Synthesis of the Research Project (Ecologic Institute, 2016); Lebovitz, Michael, Newbigging, Heidi & Puritz, Alice (eds) Empty Threat: Does the Law Combat Illegal Wildlife Trade? An Eleven-Country Review of Legislative and Judicial Approaches (DLA Piper, 2013). These kinds of issues are being addressed in various ways both in Australia and overseas. For example, INTERPOL provides information to support the work of prosecutors of environmental crimes, while in England a substantial tool kit has been prepared to guide magistrates in assessing the seriousness of environmental offences, determining sentencing criteria for environmental offences, and working through specific types of cases. See Interpol Pollution Crime Working Group, Arguments for Prosecutors of Environmental Crimes (Advocacy Memorandum, 5 June 2007); Magistrates’ Association (UK) Costing the Earth: Guidance for Sentencers (Magistrates’ Association, 2009). The United Nations Environment Programme has also put resources into judicial training on environmental law. See United Nations Environment Programme, Judicial Training Modules on Environmental Law: Application of Environmental Law by National Courts and Tribunals (UNEP, 2007). Other recommendations include measures such as the development of model sentencing guidelines.
environmental crime seriously (or more seriously than previously), there are obstacles that have made this difficult to achieve in practice. For example, the Directive 2008/99/EC of the European Parliament and of the Council of 19 November on the protection of the environment through criminal law is intended to bolster efforts to deal with nine specific environmental offences, that include reference to discharges and emissions, hazardous materials, deterioration of habitat, and protected flora and fauna. The Directive underlines that penalties have to be substantial and that Member States take the necessary measures to ensure that the offences are punishable by ‘effective, proportionate and dissuasive criminal penalties’. 27

The phrase ‘effective, proportionate and dissuasive’ is subject to different interpretations, and the institutional and legislative contexts within which criminal penalties for environmental offences are to be executed vary greatly within the European Union context. 28 For present purposes, these three notions are taken to indicate certain basic requirements: ‘effectiveness’ deals with matters of specific and general deterrence, restoration of harm, and prevention of future harm; ‘dissuasiveness’ deals with deterrence, as well as harm to society, potential benefits to perpetrators, and the probability of detection; and ‘proportionality’ makes reference to what or who is harmed, and acknowledges that concrete harm is more serious than endangering an interest. 29

As illustrated by the analyses in chapters 3 and 4, the NSWLEC appears to have addressed most of the concerns expressed in regards to effectiveness, dissuasiveness and proportionality. The NSWLEC operates in statutory context that provides for substantial penalties for environmental offences, and that provides a broad spectrum of sanctions that can be drawn upon in sentencing offenders. The cost to offenders therefore can be substantial and involve financial, reputational, and resource implications. Many of the penalties imposed by the NSWLEC also include requirements that the defendant do something. That is, they are not simply passive recipients of penalties such as fines (or, indeed, of imprisonment). Rather,

29 Faure, above n 17.
punishment is something which must also be accomplished by the offender.\textsuperscript{30} This is time, energy and resource consuming, especially if it involves relatively substantial remediation or rehabilitation works. Combining financial sanctions such as fines with activity-based sanctions such as remediation means that compared to many other jurisdictions, the NSWLEC imposes sentences of greater burden to the offender than otherwise has been the case.

The Court is also futures-oriented, not only in regards to the deterrent effect of combined penalties, but also in regards to repairing the harm. This entails making available resources for non-human environmental entities (through for example funding being directed to suitable conservation organisations, and via direct remedial action).\textsuperscript{31}

Once the nature, extent and seriousness of environmental harm has been determined, the next question is how best to respond to it. Typically, in many jurisdictions the main response has been use of a fine. The imposition of fines, as such, is limited.\textsuperscript{32} Nevertheless, there has been

\textsuperscript{30} This has been described as an instance when a ‘problem-solving model makes executives “useful” at their own expense instead of simply levying them a fine or mandating time in prison’. Boyd, above n 4, 505.

\textsuperscript{31} This can be termed ‘reparative justice’ to distinguish it from the more familiar term ‘restorative justice’. See Rob White, ‘Reparative Justice, Environmental Crime and Penalties for the Powerful’, \textit{Crime, Law and Social Change} (2016) DOI: 10.1007/s10611-016-9635-5. Restorative justice has no or at best limited purchase in the cases examined in the present study. This is not surprising in that when to apply restorative justice methods depends very much on the protagonists involved and who the victims are. It has been argued, for example, that restorative justice is most useful when applied to crimes that result in identifiable harms within a specific local community or that are committed by a specific individual. See Boyd, above n 4, 508. When nonhuman environmental entities are involved with rare exceptions a restorative justice process is perhaps less appropriate. An exception would be instances where there is an ontological or representational unity between human and nonhuman environmental victim that is recognised in both legal frameworks and cultural understandings – for instance, Indigenous people and their connection with ‘country’. See Rob White, ‘Indigenous Communities, Environmental Protection and Restorative Justice’ (2015) 18(2) \textit{Australian Indigenous Law Review} 43.

\textsuperscript{32} For instance, analysis of environmental penalties for small businesses in the United States, while acknowledging specific factors that are meant to be taken into consideration by administrators or courts in determining penalty, observes that statutes do not provide guidance as to what penalty factors are most important. Moreover, it was found that giving ability-to-pay discounts to polluters that are financially capable of complying with environmental regulations means that firms whose ability to pay is less than the penalty amount face no increased liability for increased pollution. Nicolas Dufau, ‘Too Small to Fail: A New Perspective on Environmental Penalties for Small Businesses’ (2014) 81 \textit{University of Chicago Law Review} 1795.
suggestion that better use of fines may provide better outcomes. The use of cumulative penalties, as in the case of points systems in motoring offences, so that a penalty infringement notice (PIN) does not become ‘routine’ or permit wealthy operators the ‘right’ to pollute, has for example been suggested. The more often you cause harm, the greater the penalty each time. Likewise, the United Nations Environment Programme’s ‘Global Judges Programme’ includes reference to the imposition of deterrent fines based upon ‘economic benefit of noncompliance’ (EBN). This takes account the value to the violator of deferred compliance, that is, the money that should have been spent on environmental improvements that was presumably invested elsewhere, earning a rate of return on an annual basis.

It is not only fines that are seen to provide limited value as a punishment. While prison sentences are used on occasion as a sanction for environmental crime, their specific use depends upon the context of their imposition. For example, in Flanders, Belgium prison sentences are usually combined with other sanctions such as fines or community service orders. However, the Belgian practice is one of suspending the execution of prison sentences and there has also evolved a policy of non-execution of ‘short’ effective sentences, thereby reducing the credibility of the threat of harsher penalties for non-compliance.

The NSWLEC utilises sanctions in ways that appear to overcome some of the pitfalls identified above, while also building upon some of the suggested courses of action as well. The present range of orders has been characterised as falling into two broad groups.

Orders aimed at restoration/preventing a recurrence of the offence
- Clean up orders
- Compensation orders
- Investigation costs orders (order the offender to pay costs and expenses incurred during the investigation of an offence)

34 UNEP, above n 26.
• Monetary benefits penalty orders (order the offender to pay a sum up to the amount of the monetary benefit derived from the offence)
• Environmental audit orders (order the offender to carry out a specified environmental audit of activities carried on by the offender)

Orders aimed at punishing or deterring offenders
• Fines/custodial sentence
• Environmental service orders (order the offender to carry out a specified project for the restoration or enhancement of the environment in a public place or for the public benefit)
• Publication orders (order the offender to publish details of the offence and the orders made by the court in, for example, a newspaper and/or in a company’s Annual Report)

The basis for the use of penalties is initially guided by two considerations. The first is the legislatively provided range and type of sentencing options available. The wider the range and number of options, the greater the degree of judicial discretion in what penalties to use and how best to use them in given circumstances.

Secondly, in criminal cases the determination of sentence is based upon ‘intuitive synthesis’ involving judicial decision-making as informed by consideration of objective harms and subjective factors. Yet this method is simultaneously shaped by precedent (given judicial concerns with consistency) and the possibilities of innovation (depending upon the variety and type of remedies available to the Court). It is thus both backward looking and forward looking.

As demonstrated in chapter 4, the NSWLEC is drawing upon a wide range of sentencing options in response to specific offences and offenders. It is not only this range that is significant however. What also appears to make a difference is the combination of sanctions. It is the combining of different sanctions to match circumstances (and specific offenders and offending) that allows the Court to provide tailor-made solutions to the problem of environmental harm before it.

Table 5.1 provides a summary of the penalties (including non-penalty costs to the offender, such as payment of prosecutor’s costs) utilised by the NSWLEC across all cases examined in
the current project. Essentially, the New South Wales Land and Environment Court is able to draw upon selected measures which best suit each particular situation, and that combine punitive as well as reparative elements.

From the point of view of ecocentrism, this also provides for more supportive and nuanced responses to the harms against non-human environmental entities than application of fines as a punitive measure in its own right. There is a demonstrated concern on the part of the NSWLEC with remediation and reparation – both in ascertaining the scope and nature of environmental harm, and in responding with appropriate penalties where harm has occurred. In other words, the non-human environmental entity is treated as ‘victim’ insofar as it is deemed worthy and of value enough to warrant specific treatment intended to repair the harm. While violation of environmental law is a crime against the state, victim needs can nonetheless be acknowledged through such sentencing strategies.
<table>
<thead>
<tr>
<th>Type of Penalty Imposed</th>
<th>Specific Order</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fines</strong></td>
<td>General consolidated revenue</td>
</tr>
<tr>
<td></td>
<td>Directed to Environmental Fund</td>
</tr>
<tr>
<td></td>
<td>Directed to Specific Environmental Project</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td>Prosecutor costs</td>
</tr>
<tr>
<td></td>
<td>Investigation costs</td>
</tr>
<tr>
<td><strong>Community Service Order</strong></td>
<td>General community benefit</td>
</tr>
<tr>
<td><strong>Reprobation</strong></td>
<td>Publication Order</td>
</tr>
<tr>
<td><em>(in relation to defendant)</em></td>
<td>Public Notice (in regards to specific site)</td>
</tr>
<tr>
<td></td>
<td>Publicity related to Fine Order (so as not to benefit from financial contribution ordered as part of an offence resolution)</td>
</tr>
<tr>
<td><strong>Rehabilitation</strong></td>
<td>Environmental Service Order</td>
</tr>
<tr>
<td><em>(in relation to environment)</em></td>
<td>Monitoring</td>
</tr>
<tr>
<td></td>
<td>Rehabilitation/remediation</td>
</tr>
</tbody>
</table>
From the point of view of sentencing purposes, this broad approach enables the NSWLEC to impose punishments that are both punitive and reparative at the same time. Sentencing is informed by the notion of problem-solving. For the NSWLEC, the legislatively established sentencing options provides opportunity for remedies that are intended to deter future offending, while also contributing to remediation and rehabilitation of the environmental damage. The flexibility of the penalties thus provides for greater scope to address the harms directly, rather than simply punish the offender.

5.4 Conclusion

The component elements of ecocentrism described in chapter 2 include considerations of the intrinsic value of non-human environmental entities, use of ecological perspectives in determining harm, development and application of ecological expertise in decision making, penalties that adequately reflect the gravity of the offence, and concerns about present and future ecological integrity.

The analyses presented in chapters 3 and 4 demonstrate that the actions of the New South Wales Land and Environment Court are consistent with an ecocentric ethos as shown in the use and development of relevant indicia of environmental harm and in the types of penalty given. Ecocentrism can be used to further develop additional indicia in responding to the changing complexities of nature.

This chapter has argued that the ecocentric approach adopted by the NSWLEC is bolstered by the fact that the Court is a specialist court that over time continues to develop particular expertise in relation to environmental matters, and that the Court has been able to use the sentencing options available to it innovatively to reflect ecocentric concerns such as environmental rehabilitation.
Chapter 6:
Conclusions

This thesis aimed to investigate the ways in which the New South Wales Land and Environment Court (NSWLEC) deals with offences committed against or involving non-human environmental entities in order to assess the extent to which it adopted an ecocentric approach. It considered how the NSWLEC construes the nature and seriousness of environmental harm, and the manner it determines the punishment of those who perpetrate environmental harm. The substantive focus of the study were cases involving flora and fauna that were dealt with in criminal proceedings for offences against environmental laws, in particular the Native Vegetation Act 2003 (NSW) and the National Parks and Wildlife Act 1974 (NSW).

This thesis has shown that the NSWLEC demonstrates considerable ecological expertise in determining the seriousness of environmental harm, and that it has applied penalties that convey the message that environmental crimes are taken seriously by the Court. Each of these outcomes both indicates and flow from the adoption of an ecocentric approach by the NSWLEC.

This study has made two important contributions to the scholarship on environmental crime and sentencing practices. First, the information contained herein can be used to inform the sentencing deliberations of other types of courts about factors used to gauge the extent and nature of harm affecting non-human entities such as trees and animals. This is especially pertinent to other specialist environmental courts and tribunals and to magistrates and equivalent lower courts across diverse jurisdictions. General guides drafted by environmental regulators may be useful in specific circumstances, but case law and actual judicial experience provides valuable insights into how harm is determined within the sentencing process.

Second, the study provides best practice guidelines for courts dealing with offences against environmental laws, and is thus a platform for improving judicial practice and legislative options in other jurisdictions. Legislative systems vary greatly in the types of remedies and penalties available in regards to combating environmental crime, but knowledge of different
and novel sentencing options, and the innovative application of these at a practical level, may provide the basis for relevant law reform pertaining to criminal provisions.

There are many variables that determine the outcome when criminal cases involving environmental harm to non-human entities are prosecuted. These include, for example, which courts the cases are heard in (e.g., magistrates or a superior court), what kind of court (e.g., generalist or specialist), what types of penalties can be assigned to offenders (e.g., fines or action orders), and what remedies might be invoked for the harm caused (e.g., remediation). Perennial problems in this area in many jurisdictions compared to that of the NSWLEC have included the perception that environmental crime is not a real crime. It would be expected that such problems would be compounded when the ‘victim’ is in fact a non-human environmental entity such as a river, plant, bird or animal, given the complications arising from assessing harm in relation to the non-human environmental entity (such as reliance upon specialist expertise).

The practical experience of the NSWLEC in both determining seriousness of harm, and applying relevant sentences, can serve as an exemplar of good practice in dealing with environmental crime using an ecocentric approach, the indicia for which were mapped out in chapter 2. As shown in chapter 3, the NSWLEC recognises the intrinsic value of the non-human environmental entity in several different ways, not least of which is the manner it utilises factual material, and specifically ecological, perspectives in order to gauge the nature and extent of environmental harm. Moreover, the types of penalties imposed by the Court, as discussed in chapter 4, illustrate an ongoing concern to address the health and wellbeing of particular species and ecosystems via remediation and reparation. Both in determining and measuring harm, and in sentencing offenders, the Court has exhibited a consciousness of and sensitivity to ecological integrity, biodiversity and the importance of environmental protection.

This investigation reveals that an ecocentric approach is not necessarily reliant upon concepts such as standing or the intrinsic rights of animals, plants or natural objects. Rather, it encompasses acknowledgement of the intrinsic value of the non-human by placing substantial emphasis on ensuring the conservation and wellbeing of such entities. This is achieved through sophisticated understandings of ecological integrity (and thus health and harm) accompanied by adoption of measures that offer appropriate responses to harms.
against non-human environmental entities. The adoption of an ecocentric approach by the Court is, therefore, buttressed by the availability of a wide range of orders so that tailored penalties can be provided; and the combining of sanctions in ways that are oriented toward repairing the harm while simultaneously creating appropriate burdens for the offender.

Compared to other courts and what is occurring in many other jurisdictions, the experience of the NSWLEC demonstrates that offences involving harm to non-human environmental entities are best dealt with when there are clear guidelines and multiple options at the statute level, and specialist expertise informing discretionary interpretations at the court level.

An intriguing question raised by this study relates to the matters of leniency and the presumed lack of adequate specialist knowledge on the part of judicial officers in responding to environmental harm. The small number of studies which have empirically examined the sentencing of environmental offenders to date certainly seem to point in this direction. This would make the NSWLEC an exception to the general rule in regards to sentencing that involves harm to non-human environmental entities (low fines notwithstanding).

Yet, the employment of an ecocentric framework to unpack the decisions and outcomes of sentencing in the NSWLEC reveals a much more nuanced and complicated process than a simple analysis of, for example, fines, would suggest. This is demonstrated in the innovative ways in which the Court is applying sanctions, many of which are directly relevant to addressing the harms to non-human environmental entities. Methodologically, therefore, how Court decisions and sentencing results are analysed has a significant bearing on how they are interpreted. For example, quantitative analyses of sentencing outcomes tend to suggest leniency, partly because they tend to focus on single penalty outcomes such as fines or imprisonment, rather than outcomes featuring multiple orders. Existing studies also generally do not focus on ecocentrism specifically. Use of the methods adopted in the present study to analysis other jurisdictions would be beneficial in this regard. It could well be that systematic meta-analysis of case law would reveal greater similarity to the NSWLEC.
Bibliography


Environmental Protection Authority, Annual Report 2012-2013 (NSW EPA, 2013).


Faure, Michael, and Gunter Heine, Criminal Enforcement of Environmental Law in the European Union (Danish Environmental Protection Agency, 2000).

Findlay, Mark, Stephen Odgers and Stanley Yeo, Australian Criminal Justice (Oxford University Press, 2005).


Hall, Matthew, Plants as Persons: A Philosophical Botany (State University of New York Press, 2011).

Hall, Matthew, Victims of Environmental Harm: Rights, Recognition and Redress Under National and International Law (Routledge, 2013)


Heckenberg, Diane ‘What Makes a Good Case Study and What is it Good For?’, in Lorana Bartels and Kelly Richards (eds) Qualitative Criminology: Stories from the field (Hawkins Press, 2011)

Higgins, Polly, Eradicating Ecocide: Laws and Governance to Prevent the Destruction of Our Planet (Shepheard-Walwyn Publishers Ltd, 2010).


Interpol Pollution Crime Working Group, Arguments for Prosecutors of Environmental Crimes (Advocacy Memorandum, 5 June 2007).


Linzey, Thomas, and Anneke Campbell, Be The Change: How to Get What You Want In Your Community (Gibbs Smith, 2009).


Maloney, Michelle, and Peter Burdon (eds), Wild Law: In Practice (Routledge, 2014).


Mehta, Mahesh Chandra, In the Public Interest: Landmark Judgement & Orders of the Supreme Court of India on Environment & Human Rights (Prakriti Publications) vols 1-3.


Nurse, Angus, *An Introduction to Green Criminology & Environmental Justice* (Sage, 2016).


Pearlman, Mahla, ’20 Years of the Land and Environment Court of NSW’ (2010) 38(1) *Australian Planner* 45.


Sankoff, Peter, and Steven White (eds), Animal Law in Australasia: A New Dialogue (Federation Press, 2009).


White, Rob, Environmental Harm: An Eco-Justice Perspective (Policy, 2013).


White, Rob, and Diane Heckenberg, Green Criminology: An Introduction to the Study of Environmental Harm (Routledge, 2014).

