The Ethics of Professional Environmental Practice:
an Exploratory Study of the Ethical Principles of Practitioners

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Dedication

To my parents, Ruth and Ian Chenoweth, doctors in a tropical Queensland town for almost 40 years, whose dedication to the science of medicine and standards of patient care, combined with commitment to public good in their regional community, showed me an ideal of professional ethics.
Abstract

Although the practice ethics of many professions have been investigated in various empirical studies, those of the emerging environmental profession have received little research attention, notwithstanding community need for trust in ethical environmental experts, and the adversarial nature of practice. In Australasia, young professionals in environmental disciplines express concern and confusion regarding professional and environmental ethics, despite the currency of a code of ethics developed by the Environment Institute of Australia and New Zealand (EIANZ). As a senior environmental professional involved in certifying practitioners, I wished to contribute to the profession by researching the ‘field-tested’ ethical principles of fellow practitioners with 20 to 40 years of experience.

Fourteen (14) seasoned environmental practitioners participated in semi-structured interviews to explore how they construct meaning for their practices with respect to ethical principles, using techniques appropriate for ‘insider’ research. Literature review confirmed that the appropriate theoretical basis for such an investigation is qualitative, and in particular a phenomenological / interpretivist approach (within a constructionist paradigm) and a role identity perspective.

Interpretivist phenomenological analysis indicated that the ethical principles and environmental values of seasoned practitioners are personal and largely based on childhood and early influences, adapted to meet the situations and context of their discipline, profession, type of practice and public or private sector. Coding and iterative analysis of interview transcripts by themes and sub-themes revealed patterns and general agreement on many principles, as well as outlier approaches and omissions. Ethical principles comprise one of four broad groups of interacting influences on professional environmental practice, according to a model proposed in this thesis, the others being professional identity, capabilities and contribution.

Thematic analysis revealed three broad integrity principles (professional, technical and process integrity) generally consistent with the principles of a science-based profession, with emphasis on truth, competence, rigour and impartiality. These, together with the virtue ethic of resolve (the courage to hold firm to principles under pressure) are expressed by practitioners in three ways - as important principles for their own practices, as advice they would give to juniors, and also (conversely) as criteria for judging unethical practice. Based on case studies discussed in interviews, an ethical acceptability spectrum model is proposed whereby the persuasive capacity of
practitioners to achieve better environmental outcomes is critical in addressing compromises and reducing ethical dilemmas.

This study also revealed five ‘professional identity perspectives’ which correlate with individual practitioner roles, ethical priorities and decision-making. The practitioners interviewed for this research generally adopted perspectives of an objective scientist, problem-solver, balance-seeker, environmental advocate or practice manager, or adopted dual or changeable perspectives depending on the situation. Although this research has been a preliminary study, this typology suggests avenues for further research into different expressions of ethical principles among environmental practitioners, and different ways of addressing the tension between professional and environmental ethics.

Ethical principles are recommended for environmental practice which combine professional codes with the practice wisdom of seasoned practitioners. Four primary ethical obligations emerge: responsibilities to clients, to truth, to environmental harm reduction and to one’s own moral principles. This thesis also suggests, as an aspirational adaptation of Kant’s categorical principle, a ‘categorical sustainability imperative’ viz. *act only according to that maxim that your actions, if adopted universally, would sustain human society and all forms of life indefinitely.*

Among the implications of this research is that ethics education is inadequately addressed in environmental degree courses to date, and that professional institutes could also play a larger role in providing guidelines, moral leadership and continuing professional development, including ethical decision-making and scenario training. Another implications of this investigation, both for institutes and for environmental education, is that a ‘one size fits all’ approach to professional ethics may be inappropriate, as practitioners need a framework of principles within which they can develop ethical guidelines appropriate for their professional identity perspectives, as well as their role, situation and context.
Student Declaration and Statement of Originality

This PhD thesis titled ‘The Ethics of Professional Environmental Practice’ is no more than 10,000 words in length, exclusive of tables, figures, appendices and references. This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Signature ........... Date ........30 August 2020 ..........

Alan Chenoweth
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CHAPTER 1: INTRODUCTION

I have been working in the environmental consulting field for several years now. … I’m quite disillusioned due to clients who simply don’t care about the environment. I turn away projects when I realize the goal is to use me to produce an assessment that removes their responsibility. When I explain that the data cannot be altered, many attempt to offer more money, but end up choosing to find another consultant. I want to return to why I entered this field in the beginning. I’m 40 years old now, and I need to make a change. Where does this idealist go from here? — (Jacqueline M. email to ‘Grist.org’ - quoted by Doyle (2006, p. 1).

1.1 Purpose

The profession of environmental practice is relatively young world-wide, and a professional environmental institute was established in Australia only 33 years ago (now the Environment Institute of Australia and New Zealand – EIANZ). Like most of the newer post-war professions, it is not subject to government regulation, although an institute-based professional certification program for individual practitioners (the Certified Environmental Practitioner scheme – CEnvP) was established by EIANZ in 2004. As a panellist interviewing environmental practitioners who had applied for professional certification in 2004-05, I was struck by the differences of opinion on what constituted ethical practice, and the confusion among many applicants between the principles of professional ethics and those of environmental ethics. This lack of an agreed ethical basis for practice is an issue of concern because it has been recognised for some time that professional services generally are a source of ethical tensions (McDowell, 1990), particularly in environmental consultancy (Zemansky, 1996). Although EIANZ has a professional code of ethics applicable to its members, and also applicable to certified practitioners, there is no coherent framework for ethical practice within the environmental professions generally, as exists in (for example) the medical or legal professions. This lack of an agreed ethical framework may be because environmental practice is a relatively new profession, with a wide range of disciplines and academic qualifications, little or no training in ethics prior to graduation, and a relatively low proportion of practitioners who belong to professional (as opposed to scientific) associations.

These generalisations apply not only in Australia and New Zealand but also internationally, given that modern environmental legislation spread world-wide from its
begins in USA in 1969-70 with the enactment of the *US National Environmental Policy Act* (Kolb, 2018, p. 1152). The need for skilled professionals grew steadily from that date through the 1990s and into the first decade of the 2000s (Polischuk, 2007; Thompson, 2012), although the diversity of ‘green’ jobs has always defied classification and created difficulties for monitoring trends (Green, 1994). Environmental laws and demand for qualified practitioners followed a similar trajectory world-wide, such that the number of people employed in Australia as ‘environmental scientists’ (which appears to be the closest current equivalent Australian Bureau of Statistics category) had grown to 25,300 in 2020, of which 3,600 (approximately 14%) were environmental consultants (Australian Government, 2020). This is a slight reduction from the 2017 figures of 25,900 in this category in Australia (Certified Environmental Practitioner Scheme, 2018), probably because the number of employed environmental scientists fluctuates with economic cycles and especially those of mining and other resource industries. 

A spreadsheet from the National Skills Commission (Australian Government National Skills Commission, 2020) estimates the number of environmental scientists in Australia as 21,100 in May 2019, projected to grow by 12.5% in the five years to 2024 (2.5% per year). However a report commissioned for EIANZ in 2009, arguing for a new occupation category of ‘green collar’ workers, estimated that at least 50,000 and possibly more than 300,000 people were then employed in various environment-related jobs in Australasia, depending on definitions (Connection Research, 2009). The number of people employed in various branches of environmental practice in Australia and New Zealand has grown over the past 50 years, and so have the numbers joining EIA since its formation in 1987 and its expansion to include New Zealand in 2003. This growth has been driven by expanding opportunities associated with a boom in Australian mineral resource exports combined with a multitude of federal and state environmental regulations, and additional local government requirements, driven in turn by community expectations.

By 2011, environmental practice was becoming professionalised in Australia and New Zealand, as evidenced by the establishment and stability of EIANZ and its certification scheme, and a revision of the EIANZ Code of Ethics was also underway, based on the shared values of its members. It was at this time that I considered it was both appropriate and timely to undertake research into the professional ethics of environmental practice in Australia and New Zealand. This research investigates and clarifies the moral principles which guide practitioners, hence will also help young and
early career professionals navigate the sometimes tricky ethical problems associated with this emerging and often adversarial field. The timing was also opportune in that many experienced practitioners who had commenced environmental practice in the late 1970s and 1980s were either retired or were about to do so, and their insights were expected to be valuable. Many of these practitioners had started their careers at a time when the environment profession was being established, and many of them had, in various ways, helped to professionalise environmental practice and develop standards. Accordingly, interview-based research represented an opportunity to document how this pioneering cohort had developed their own ethical principles, and to suggest some moral guideposts to help early-career professionals.

To date there has been little attention paid by ethicists to the ecology and conservation biology disciplines (Minteer & Collins, 2008). Reviews of published literature indicate that the ethical principles of environmental practitioners has not previously been subject to research investigation, hence this study is considered a preliminary exploration. The purpose of this study has been to investigate ethics in the emerging environment profession, by examining how experienced practitioners in Australia and New Zealand understand the moral dimensions of their roles and practices. Accordingly, the research question guiding the research is:

**How do seasoned environmental practitioners construct meaning for their practices with respect to ethical principles and codes?**

This question is closely linked to the roles, identities and meaning which each professional attaches to his or her practice, and is explored through an interpretivist phenomenological approach, based on in-depth semi-structured interviews of seasoned environmental professionals, each with more than 20 years practice experience.

The term seasoned practitioner is adopted, where ‘seasoned’ is defined as “rendered competent through trial and experience …. a person who has been around forever, doing what they do, and doing it well … They have lots of experience, and they can handle just about anything that comes their way” (Seasoned, 2020). This term is preferred over ‘senior’ or ‘leading’ which convey age, eminence and leadership roles, or ‘experienced’ which is commonly used in position descriptions for mid-career professionals.
1.2 Background and Context

The dictionary definition of ‘environment’ is:

1. surroundings and conditions, esp. as affecting people’s lives …. 3. External conditions affecting the existence of plants and animals … [and] … the totality of the physical conditions of the earth or a part of it, esp. as affected by human activity (Pearsall & Trumble, 2002, p. 7471).

This definition covers everything in nature, on land and in the air and water, as well as our social and cultural surrounds, and the terms ‘environmental practice’ and ‘environment profession’ are similarly broad, with little agreement on what constitute environmental expertise (Lidskog & Sundqvist, 2018). The profession encompasses a wide range of disciplines, sectors and roles, linked by a common objective of applying professional expertise to managing the environment so as to retain its values, and managing human impacts on the environment. Environmental practitioners may be research scientists, engineers or consultants in ecology, water quality, site contamination and waste management (the ‘green’, ‘blue’ and ‘brown’ aspects of practice), or they may be industrial technical managers, sometimes with multiple roles (Gluch, 2009). They may be advisers in climate change, social impacts and cultural heritage, agency officers in policy, protected area management and compliance, as well as planners, project managers, academics and lawyers, both specialist and generalist.

While the attributes of a profession and professionals are fully reviewed in Chapter 2 below, it is helpful in this introductory chapter to mention the shared characteristics of ‘professionals’ as a group of skilled individuals with special knowledge, a high level of training in a recognised body of learning accepted by the community, a commitment to use these skills in the interest of others, membership of an association which sets standards and discipline, a personal relationship of trust with clients, and a degree of autonomy in exercising personal judgement (Koehn, 1994, p. 56) (Australian Council of Professions, 2003).

Not all people with environment-related degrees or working in the environment sector regard themselves as part of an environmental profession – many regard themselves primarily as scientists, planners, engineers or managers, and may belong to technical associations appropriate for their specific discipline. However the various fields of environmental practice are becoming ‘professionalised’ following the establishment in 1987 of the Environment Institute of Australia and New Zealand (EIANZ) (Morris, 2017), the main professional institute for environmental practitioners
in Australasia, and an increasing number of practitioners now consider themselves as professionals, both within and outside EIANZ. With respect to the diversity of qualifications and roles, EIANZ as a professional association is more ‘work-oriented’ than ‘discipline-oriented’ and many institute members also belong to other more specialised professional and industry groups. Nevertheless EIANZ has developed a core set of shared values and professional standards based on science, service, statutory responsibilities and sustainability, and a Code of Ethics and Professional Conduct (EIANZ, 2012), appended hereto (Appendix C).

Notwithstanding this increasing professionalisation, there is a tendency for regulatory agencies and conservation groups to regard environmental consultants as ‘hired guns’ of mining and developer clients (Buckley, 1991, p. 207; Owen, 2019a) This perception remains, and the environment profession in Australia and New Zealand faces a challenge in gaining and maintaining the trust of the wider community. Another challenge is the rapid pace of change in environmental legislation, challenging the capacity of the profession to provide up-to-date advice.

The importance of ethical practice in establishing trust in professions (Ozar, 2014), and especially in environmental practitioners, is central to this research thesis. Professionals are in possession of specialist knowledge, and the community (especially decision-makers) need to trust that this knowledge is being deployed ethically. This is particularly true for environmental practice, which has particular expertise in understanding environment-related constraints, opportunities, impacts and long-term sustainability. This profession is in a unique position of interpreting and representing the interests of (‘speaking for’) the environment, often in adversarial situations where credibility is critical.

Application of ESD and ‘best environmental practice’ require professional practice at a high level, and integration (and ‘trade-offs’) across a wide range of disciplines, issues and regulations. Decision-makers need to be confident they can trust environment professionals, not only with respect to technical competence, but also with respect to honest opinions, full and open reporting, and other aspects of ethics. Without the trust that environmental professionals are ethical, the default assumption will be that they may be paid by clients to ‘spin’ the facts, thereby misusing their specialised expertise. Based on that assumption, community groups commit scarce resources to verify their suspicions of misrepresentation (eg. Pickersgill and Burgess 2011), and
public agencies unnecessarily replicate investigations in order to double-check impact assessments.

Another ‘driver’ for this research is the role of an ethics code in the development of a professional culture amongst environmental practitioners in general and EIANZ in particular, and the needs of young and early career professionals for guidance in environmental practice and ecological research, fields which ‘frequently raise difficult and varied ethical questions’ (Minteer & Collins 2008 p.483). The rapid growth of the ‘green’ professions, the wide diversity of specialisations and the remoteness of work-sites (especially in the mining and resource sector, where many graduates are first employed) have been impediments to developing mentoring relationships outside work. Practitioners in the early years of their careers need guidance and reassurance as they develop their ‘moral compass’, and although professional codes of ethics can provide an initial ‘road map’, the combined experience of respected leaders in the profession (their collective ethical narrative) will, in my opinion, be valuable.

The role of professional institutes in mentoring, either by formal programs or by facilitating collegiate interaction between older and younger practitioners, will also benefit from this research. An understanding of the ethical principles used by senior respected members of the profession will help establish ‘guideposts’ and a common vocabulary for discussion of ethical dilemmas and decision-making.

1.3 Personal Reflections (‘Positioning’ the Researcher)

As explained previously I have been involved in the EIANZ certification scheme from the outset. Accordingly, this study is ‘insider’ research into the environment profession, of which I am a senior retired member in Queensland, with more than 40 years experience in practice in both the public and private sectors, as well as research and tertiary teaching, and close involvement for much of this time with several professional institutes, including EIANZ. In addition, at the time of commencement of this research, my role in establishing and governing the EIANZ’s Certified Environmental Practitioner (CEnvP) Program from 2004 to 2011 had provided me with insights into practice ethics within the profession, and raised questions for me regarding the relationship between professional and environmental ethics. Certification is available for practitioners with at least 5 years experience, and the assessment process includes interviews which place considerable emphasis on each candidate’s understanding of professional ethics. My interest in this field also led me to take an
active role in rewriting the EIANZ Code of Ethics in 2011-12; and to chair the CEnvP Board for four years in 2014-18, before retiring. While this background provided the motivation and experience to undertake research into professional ethics of environmental practitioners, it also carries a responsibility to critically examine and reflect upon my own perceptions, values and biases at the outset, and during all stages of the research and analysis (Grbich, 1999). From the outset of this research, this critical reflection influenced the development and refinement of the research question, and the theoretical basis and methodology adopted for the investigation.

My career has been largely contemporaneous with the establishment of the environmental profession in Australia. During my early childhood in North Queensland, I observed and no doubt absorbed the professional ethics of my medical parents, whereby doctors are committed to servicing the welfare of patients, irrespective of their own interests and views. I chose to study agricultural science (the broadest natural resource management degree available in the late 1960s) and then spent five years as a research plant cell physiologist, so am a scientist by training. In 1975 I joined a multi-disciplinary consulting firm as a plant ecologist and was fortunate to have as an early-career mentor Ted Coaldrake (1920 - 1986), a former CSIRO research scientist and expert in coastal sand ecosystems, who became the first environmental consultant in Queensland. As well as introducing me to ecology, resource management and environmental impact assessment, he encouraged me to undertake post-graduate studies in the then new field of landscape architecture, which integrated design and human perceptions with natural sciences. Over the following 13 years I switched back and forth between multi-disciplinary consultancy firms and public service positions, and also gained a post-graduate qualification in urban and regional planning, before forming my own inter-disciplinary consultancy practice in 1991. I was among the first members of EIANZ when it was formed in 1987 and have held various voluntary institute offices and conference organisation roles for the past 20 years. During my career, I have also served other professional institutes on the governing Councils and as State or national presidents of the Australian Institute of Landscape Architects (AILA), Australian Institute of Horticulture (AIH) and Parks & Leisure Australia, including significant roles in establishing industry-based certification or registration schemes for AILA and AIH. My commitment to professionalisation through professional institutes, certification and ethics are part of my practice identity, and part of the ‘baggage’ I bring to this research.
This stage of my career now presents an opportunity to reflect upon the nature and direction of the environmental profession and to contribute to the benefit of younger people entering the profession. I am aware of the difficulties faced by young and early career professionals when faced with ethical dilemmas; as they perceive tensions and gaps between professional codes of ethics, the environmental ethics of individuals and the demands and responsibilities of their workplaces.

My roles as an interview panellist assessing applicants for certification in 2004-05, and on the CEnvP Board reviewing more than 300 applicants for certification in the period 2004–2012, provided two preliminary insights into the careers and practice ethics of the profession. First, environmental practitioners generally graduate in a range of sciences and other university degree programs, generally with no preparation for a professional career, and little understanding of the concept of a profession nor undergraduate training in ethics. The main exposure of environmental science graduates to ethical considerations is usually early in their careers, learning from colleagues and seniors, as well as corporate risk management procedures, public service codes or Institute codes of ethics. Prior to undertaking this research, my impression was that graduates are socialised into becoming a professional when they enter the workforce (or during student practicum placements) where the dominant early-career influences are the workplace cultures of their employer organisations and supervisors.

Second, while senior professionals may subscribe to codes of ethics in a broad sense, they interpret them through their personal moral framework and practice priorities. In general, they have developed their own frameworks and guiding principles, possibly through early mentoring and professionalisation by colleagues within their field, plus some ethical problems, indemnity claims and legal processes faced during their careers. These personal principles often different in content or emphasis from institute or organisational codes of ethics. They may also vary between practitioners in different fields of environmental practice, for example between those managing international impact assessment projects and those involved in environmental audits. This implies that institute or organisational codes of ethics may be frameworks of broad principles, which are adapted as one’s career progresses.

My experience in co-authoring the EIANZ Code of Ethics (and my roles with other professional institutes) also led me to believe that a code of professional ethics, based on shared values, is an important part of the common aspirations (the ‘glue’) which binds members of the new and diverse environmental profession together.
Accordingly, this research into the ethical principles and practices of industry leaders has the potential to be both valuable and instructive for EI ANZ.

In undertaking this research, I have been constantly aware of my personal values and biases regarding the importance of a collegiate profession, the high value I place on individual and group ethics, and my conviction that a code of ethics helps establish and maintain a commitment to shared values. I also consider that principles of professional ethics suited to the environmental practice will help develop a credible profession trusted by the community. However I have also been aware that my training in sciences, design and planning equipped me with a positivist mindset which was initially challenged by the type of qualitative research needed to explore how professionals construct meaning. In order to appreciate how environmental practitioners develop and apply their ethical principles, the role of the researcher must be to allow their voices to be presented and analysed in a trustworthy manner (Gubrium & Holstein, 2002).

1.4 Research Aims

In 40 years of experience across a range of roles, sectors and organisations, environmental considerations have been a consistent thread in my career. Those decades largely corresponded to the development of the profession of environmental practice in Australia and New Zealand, hence the participants in this research have been my colleagues in a journey towards professionalisation. Over this period, my exposure to a number of ethical issues, and my observations of practitioner responses to ethical problems, led me to ponder the moral dimensions of practice in these fields. However in order to investigate the values and ethical principles of seasoned practitioners, I needed to put my own opinions to one side and listen to the insights of others, so that researcher and participants could jointly explore the ethical basis of professional environmental practice. The research methodology adopted, with confidential semi-structured interviews followed by a rigorous interpretivist phenomenological analysis (IPA) process of thematic coding, allows the ethical principles and decision-making framework of interviewees to be analysed at ‘arms-length’ from my personal values and biases, as much as possible, while still being transparent about my own professional and ethical framework.
1.5 Thesis Structure and Outline

At the outset of this thesis (Chapter 1) the aims of the study are articulated, including the research question of how environmental practitioners construct meaning for their professional practices with respect to ethical principles, and the relevance and importance of this research. The introductory chapter also briefly outlines the methodological approach, and addresses my rationale for undertaking the study, my background as an ‘insider’ researcher, and the personal values and career influences which I need to bear in mind when interpreting research results.

The next section (Chapter 2) is a literature review, representing the current state of published knowledge in two broad areas. Firstly, the field of ethics is reviewed with particular attention to human morality, philosophy, applied ethics and changing ideas regarding ethical obligations. This review also compares the fundamental principles of professional ethics with those of environmental ethics, both of which are ascribed to in varying degrees by environmental practitioners.

In the second part of Chapter 2 the literature regarding the professions, how they have developed and are currently changing, is reviewed. This section explores the importance of ethics and integrity to professions in general, the way in which these mature and develop, and how individual practitioners construct their professional identity. The review moves from the general to the particular, describing the environmental profession in Australia and New Zealand and applicable codes of ethics.

A review of literature also opens Chapter 3 (Methodology) wherein a range of theoretical approaches to appropriate research methods are assessed as the basis for selecting interpretive phenomenology as the most appropriate investigative tool for this research. This chapter then presents the methods used in this research in sufficient detail for academic review and for later researchers to follow and adapt if and when (as is hoped) this topic is further examined in the future. A rationale is presented for basing this research on interviewing experienced senior practitioners, and for semi-structured interviews to explore their ethical principles. Interviews of this nature have been cited by many researchers as the most effective approach to understanding meaning through conversation and two-way interaction between participants and interviewer. This chapter also describes the formulation, trial and amendment of interview questions, as prompts for discussion and examination of personal case studies, and the process of obtaining ethical clearance from Griffith University. The questions were designed to elicit responses on three related topics – what each practitioner considers ethical for his
or her own practice, what they regard as unethical in others, and what they would advise a young professional regarding ethics. The intention was that the overlap or differences between these three lines of questioning would reveal underlying values and assumptions regarding ethics.

A description follows in this chapter of the process adopted for participant selection, invitation and recruitment. In summary, 32 professional environmental practitioners in Australia and New Zealand, each with more than 20 years experience, were approached in several rounds of invitations, and 14 agreed to be interviewed. These participants included both retired and practicing professionals, mostly EIANZ members, some (but not all) also certified practitioners, covering a range of sectors, disciplines and geographic locations, and a gender balance. The hour-long semi-structured interviews were digitally recorded and transcribed by a confidential transcription service. Post-interview impressions were also hand-recorded into a reflective diary.

Chapter 3 also reviews the research literature regarding analysis of interviews, and selection of interpretive phenomenological analysis (IPA) as the most appropriate approach to analyse themes and concepts on which ethical principles are based, and to understand meaning. A detailed description is included of the inductive and iterative process of coding and grouping used in this research to reveal themes and sub-themes, and to map and examine the relationships between patterns and concepts explored during interviews. Arising from this analysis, a typology of practitioner ethical concepts emerged (analysed in Chapter 5 as ‘professional identity perspectives’). This required a theoretical basis, hence a review of literature regarding identity theory was undertaken and included in Chapter 2, after the interviews had been completed and analysed.

The findings of this research, resulting from IPA of themes and sub-themes, cover 12 topics divided into six broad topic groups: the personal values and ethical principles of interviewees, how these had developed, the ethical issues they had encountered, their professional identity, ethics advice for early career professionals and recommendations. These results are presented in two parts in Chapters 4 and 5. Interview findings regarding the values and ethics of seasoned practitioners are in Chapter 4, including the early influences on development of their ethical principles and their career journeys, aimed at exploring the sources of their personal moral codes and the ways in which these principles have been applied in practice.
Chapter 5 reports and analyses interview results regarding the other four broad topic groups – the ethical issues and problems faced by practitioners and their decision-making responses, the criteria by which they judge other practitioners as unethical, how they define their professional identity, the advice they would give to young professionals regarding ethics, and any recommendations they may have made during interviews regarding professional ethics for environmental practitioners.

Chapter 6 (Discussion and Reflections) discusses the themes and topics emerging from the practitioner interviews and described in previous chapters. The relationship of the key ethical principles to ethical theory is explored, and their implications analysed in the context of professionalism generally and specifically for the environment profession in Australia and New Zealand, including a model for the role of ethics and identity in professional practice. Several distinctive characteristics and challenges of the environment profession, and its underlying values, are also examined for their relevance to ethical practice. In particular, this chapter explores whether ethical principles of practitioners, and the way in which generic codes of ethics are prioritised and applied to practice situations, are influenced by professional identity perspectives, external arbiters of ethical practice (such as regulatory agencies and courts) and codes of ethics. This chapter also proposes a conceptual spectrum of ethical decisions involving compromises, which is particularly applicable for the environment profession, but which may also be more widely applicable. The ethical principles on which seasoned practitioners broadly agree are identified, as well as principles on which there is disagreement, contradictions, rationalisations and notable omissions.

The final Chapter 7 presents conclusions regarding the ethical principles of this group of seasoned environmental practitioners, representing a cohort of professionals who have not only forged their own paths in a new field over the past 20 to 40 years, but have also influenced the direction and standards of this emerging profession. Accordingly, the ethical principles which they have developed and applied in their practices provide valuable moral guideposts for young and early career practitioners, and for the profession generally. Recommendations in this concluding chapter include suggestions for the profession and EIANZ with respect to ethical codes and guidelines, for training and education in professional and environmental ethics, and for further research in this important field.
1.6 Introduction Summary

The environment profession in Australia and New Zealand is relatively young, multi-disciplinary and unregulated, but is steadily growing in response to legislative requirements for environmental assessments. Regulatory agencies, development proponents and the community increasingly rely on the expert analysis and advice of environmental practitioners. All parties would benefit from an environment profession which is both highly competent and widely trusted, and yet the profession is fragmented and currently lacks a coherent and widely accepted basis for ethical practice. As a senior retired environmental practitioner, I considered that the profession’s credibility would be enhanced by clarification of ethical obligations. Accordingly, this thesis examines the theoretical basis and practical application of ethical principles adopted by other seasoned environmental practitioners in Australia and New Zealand. The first step in this research journey is a review of relevant literature in the following chapter.

CHAPTER 2: LITERATURE REVIEW

The research question regarding the ethical principles of seasoned environmental professionals initiated several lines of preliminary review into published research and other publications. Firstly, the broad areas of ethics and moral philosophy are reviewed in the first part of this chapter, addressing not only ethical theories and their historical development, including current perspectives of practical and applied ethics, but also two types of ethical obligations (professional ethics and environmental ethics) relevant to environmental practitioners. Secondly, the roles and responsibilities of the professions are also reviewed in historical context, both in general and with specific reference to the challenges facing environment professionals, as context for interpreting the ethical principles espoused by seasoned practitioners during interviews. This part of Chapter 2 also includes literature review of identity theory, especially in relation to the roles and identities adopted by professionals.

2.1 Ethics for the 21st Century

The inclination to goodness is imprinted deeply in the nature of man. (Francis Bacon, 1625, cited by Mackay (2013, p. 191))
2.1.1 Introduction to Ethics

The extensive literature regarding ethical theories is based on moral philosophy, with various lines of enquiry stretching over many centuries. One preliminary question, to be considered before delving into questions of right and wrong, is that of moral motivation - why do individuals aspire to be (and be seen to be) ethical? (Mathias, 2018). One answer, suggested by (Cohen, 2004) is that humans aim for consistency of thought and action where possible, trying to remain true to our deepest and most closely-held moral principles: “An aim in behaving morally is to avoid hypocrisy; that is, to have one’s behaviour appropriately exemplifying or operationalising one’s moral beliefs” (Cohen, 2004, p. 11).

This section reviews the broad field of ethics and moral principles generally and in relation to the role and situations of professional practitioners, and specifically to ethical principles of relevance to the environment profession now and into the future. Throughout this analysis, the terms ‘moral’ and ‘ethical’ are used interchangeably, and have equivalent meanings (Cohen, 2004), although some philosophers associate ethics more with character and morals with actions, duties and responsibilities (Grayling, 2019).

The term ‘ethics’ per se is defined in several ways, and the process of definition reveals some of the concepts involved. Grayling argues that ethics, as a field of philosophy is

… enquiry into the concepts and theories of what is good, of right and wrong, of moral choice and action’ but the term ‘ethics’ also ‘… denotes the outlook and attitudes of individuals or organisations regarding their values, how they act and how they see themselves …’ (Grayling, 2019, pp. xvi-xvii).

Cohen (2004) distinguishes between the theoretical foundation of ethics (metaethics), and the more practical activities of moral reasoning and applied ethics, which are the focus of this research. However all philosophical branches of morality and ethics are grounded in human nature as “Morality relates not only to practical situations but also to ideas about human nature and how ‘moral values’ fit into our scientific conception of the world …” (Law, 2016, p. 18).

The moral principles which underpin day-to-day ethical decisions involve both the theoretical and practical aspects of ethics. In a broad sense ethics “… can be defined broadly as reflecting upon – or thinking about – the organisation of life in accordance with our deepest norms …” (Wogaman, 2004, p. 7) and this concept of personal and societal ‘norms’ underpins normative ethics, the field of ethics associated with setting
standards for what is considered proper and fitting. This standard-setting approach is also referred to as prescriptive ethics, in that it prescribes how people should behave (Cohen, 2004).

The sources for the norms, standards and moral principles adopted by society generally, and by particular communities, vary widely and have changed through history. Religions teach that moral prescriptions are divinely ordained, conveyed to humanity in ancient times and representing immutable instructions regarding goodness. However in our pluralist and largely secularised communities, personal and group ethics may be based on a multitude of sources including social convention, professional codes of conduct, practicality and self-interest, altruism, political leanings and our aesthetic senses, as well as religious beliefs and the law. In a multi-cultural society ‘ … no one source or foundation can be universally accepted as the true basis …’ (Rowson, 2006, p. 36). Also, ethics are created, change, and evolve due to a number of factors, including significant historic events, scientific advancements that lead to new fields of research, ethical lapses that lead to creation of new safeguards, and changes in cultural values and behavioural norms over time (Weinbaum, Landree, Blumenthal, Piquado, & Gaviria, 2019).

2.1.2 Ethics in Human Development

History, theology, and philosophy, will show that every enlightened civilization has had a sense of right and wrong and a need to try to distinguish them. Now we may disagree over time as to what is right and wrong – but there has never been a disagreement in any philosophy about the importance of knowing the difference. (Josephson, 1989, p. 18)

The study of ethics has been a consistent strand in intellectual traditions for approximately 2,500 years, addressing key questions such as ‘What is good and bad? How should a person behave? Why should any person be moral?’ The ancient roots of human cooperation, altruism, morals and ethical standards have long been debated by evolutionary biologists, theologists and social historians. “Many features of human morality could have grown out of simple reciprocal practices...[such as mutual obligations]... between those who return favors and those who do not ...” (Singer, 2005, p. 336). A widespread theory in the field of evolutionary psychology is that altruism was a successful adaptation in warm-blooded social mammals “wired for love and affection” (Churchland, 2019) and in early human and pre-human hunter-gatherer groups (Cosmides & Tooby, 2004) because cooperative populations, with greater
capacity for empathy and trust, had greater capacity for social learning and thrived more in a world of finite resources than distrustful and internally competitive populations. It is likely that these successful attributes were subsequently established as morally acceptable behaviour (Baggini & Fosl, 2007). However many ethicists are uncomfortable with efforts to reduce ethics to biology and evolutionary survival advantage, noting that once humans had evolved the capacity for moral reasoning, societies developed ethical thought and rules independent of any competitive survival benefit (Smith, 2018, pp. 9-11).

One of the most comprehensive studies of human cultural evolution has been that undertaken by (Bellah, 2011) who traces the development of religion, fairness and ‘ethicisation’ as societies evolved from kin groups and archaic tribes through to more complex city-states. He argues that egalitarian hunter-gatherer societies engaged in play activities that had ‘incipiently ethical’ rules to ensure fairness, and this was an evolutionary building block towards group moral standards. According to Bellah, story telling probably provided a similar basis for development of ritual, myth and religion. These elements could all have been important for community cohesion, addressing tensions within groups and providing templates for collaboration, and ensuring cultural continuity (Churchland, 2019). Shared obligatory rituals and myths also extended the egalitarian concepts of fairness and obedience to broader notions of moral equality, such as generosity, respect for others and all things ‘good’, with benefits for the whole community (Bellah, 2011). However many early cultures, as they became more complex, sought divine explanations for inexplicable phenomena, and developed religions with capricious or vengeful gods who unpredictably controlled the fates of humans (Malik, 2014), or needed to be mollified and pacified. In stratified (class-divided) societies with hierarchical dominance, kings and priests generally enjoyed and stage-managed their special relationship with the gods and could, through rituals, intercede on behalf of the people (Bellah, 2011). Over time, as the roles and identities of gods and kings became intertwined, these divine figures developed more paternal and nurturing characteristics, and eventually transformed into or were replaced by kindly deities who personified all that is good and fair “… a single Creator who ruled with reason and judgement …” (Malik, 2014, p. 8), and who also legitimised the ruling classes and social structure.

Bellah’s historical analysis of four great civilisations (ancient Israel, Greece, China and India) focused particularly on the profound changes that occurred in the
‘Axial Age’ when new ideas in religion and philosophy emerged contemporaneously and independently across the ancient world in the middle of the first Millennium BCE. In several widely-separated regions around the globe, advances in agriculture and economies at that time “… allowed the civilizations to afford larger cities, a scholarly and priestly class, and a re-orientation of their priorities from short-term survival to long-term harmony …” (Pinker, 2019, p. 23). The term ‘Axial age’ was coined by philosopher Karl Jaspers, who also included ancient Persia in the list, as cited by Malik (2014). In these civilisations, within a few centuries of each other, universally egalitarian ethics first appeared, and “… a transformation [occurred in] the very way that people came to reflect upon morality …” (Malik, 2014, p. 12). Among the concepts emerging from this period, first expressed by Socrates, is that of a ‘social contract’ whereby all people accept certain restrictions and share certain obligations in return for the benefits afforded by society, as further enunciated much later by the 17th Century English philosopher Thomas Hobbes, and later by Locke and Rousseau (Grayling, 2019).

The evolutionary and historical basis for humans to judge behaviour as either ‘good’ or ‘bad’, whether based on human cultural evolution, religion or a social contract, provides a context for consideration of various strands of normative ethics. As Mackay (2013, p. 189) notes, all humans have a capacity for altruism and virtue, but it takes discipline, practice and courage to put aside one’s self interest, and these finer unselfish instincts can be nurtured by training, group rules and seeking inspiration from others.

Parallel to these perspectives on the development of ethics in human society is the broadening of ethical inclusion. “What is considered the province of ethical consideration … is continuously expanding … to reflect cultural and social changes” (Broome, 1996, pp. 21-32). This progressive widening of moral consideration included one’s neighbour, as in the Biblical parable of the Good Samaritan; and expanded to include slaves and prisoners, people of other races, colour and countries, and eventually animals and the natural environment. While it is now almost universally accepted that all humans are equally deserving of moral consideration, the extent to which animals are similarly deserving remains contentious. Some religions venerate all forms of life and some ‘deep ecology’ advocates argue that there is no morally relevant difference between humans and sentient animals (Nash, 1989; Varner, 2002). In many countries there is now widespread community expectation that animals, even when destined for
slaughter, will be treated humanely at all stages in the agricultural supply chain as a matter of biocentric justice (Wienhues, 2017). The moral dividing line between animals worthy or unworthy of ethical consideration is debatable, with some arguing for intelligence or sentience (awareness, responsiveness and capacity for feeling) as a reasonable basis (Varner, 2012), others considering that evolutionary proximity to humans (whereby all primates are closely related, and all mammals to a lesser extent) is a defensible distinction, or alternatively the capacity for happiness or an interest in their own welfare (Law, 2003). However distinctions based on what humans imagine animals think or feel are moral sentimentalism or invalid anthropomorphism, as pointed out by the 20th Century philosopher Nagel (Law, 2016). If moral consideration is to be rationally extended beyond humans, then a broad environmental stewardship ethic has greater validity and historical precedent than sentimentality, and is referred to by Preston (2014) as a bio-centric approach, and by others as eco-centrism.

However the progressive broadening of moral consideration to include ‘the other’ has been only partly based on rationalism – it has also depended on art, religion and narrative to develop empathy, and on individual reformists who have told or encouraged stories of disempowered groups, such that the dominant culture can see the world through the eyes of others (Onbelet, 2010).

2.1.3 Virtues and Actions

The first major division in ethical theory is between those moral considerations which apply to actions and those which apply to individuals (virtue theory). Mackay (2013, p. 166) refers to this distinction as between ‘out-there’ morality and ‘in-here’ virtue, although they overlap.

Virtue theory, as espoused first by Plato and Aristotle, addresses the issue of moral standards and norms by reference to personal virtues, which should be developed and instilled through education and good habits of moral character. A person is moral because he or she has certain virtues, and actions are merely reflections of this virtuous character. The five cardinal virtues in ancient Greek civilisation were courage, moderation, piety, wisdom and justice; although Aristotle expanded this list to include many more moral and intellectual virtues such as honesty and generosity (Malik, 2014). This approach to personal ethics remains enormously influential, especially in its ‘Christianised’ version that added the theological virtues of faith, hope and charity (love). Although virtue theory has limitations (Preston, 2007, p. 151) and had been
largely supplanted since the 18th Century by other moral theories (Malik, 2014), it has had a resurgence since the 1970s (Cohen, 2004). Virtue ethics remains relevant to the analysis of professional ethics (Preston, 2014) because the professions tend to place emphasis on personal virtues within their codes of ethics. The Aristotelian approach to virtue ethics also helps to understand the relationship between personal moral qualities and values, derived from one’s upbringing and reinforced by repeatedly making ethical choices, and the practical wisdom (phronesis) to know which choices to make in a range of variable situations (Malik, 2014, p. 37).

Moral considerations applicable to actions include several competing paradigms, based on two different philosophical approaches to deciding what is the right thing to do (Wogaman, 2004) as follows:

- Deontological or duty-based ethics based on a belief in some moral order (such as derived from religious traditions) or universal imperatives such as keeping promises or the ancient and widespread ‘golden rule’ ‘… do unto others what you would have others do unto you …’ (Malik, 2014, p. 62) which, as noted by (Josephson, 1989, p. 18) is predicated upon some level of caring for others; and

- Teleological or consequence-based ethics (What is a good outcome?), including the utilitarian approach of the English philosophers Jeremy Bentham and John Stuart Mill in the 19th Century (Grayling, 2019). Application of the utilitarian approach, which prioritises the greatest good or happiness for the greatest number of people, has the advantage of offering a readily understood principle capable of supporting socially progressive policies. However happiness and social wellbeing come in different forms, and any comparison of their relative ‘worthiness’ according to the number of beneficiaries and their degree of pleasure is largely subjective. Utilitarianism also has limitations and shortcomings with respect to the balance between short-term and long-term benefits, in comparing individual and community-wide benefits, and in addressing the happiness of minority groups (Wogaman, 2004).

The above dichotomy is also referred to consequentialism (focused mainly on the goals and end-outcomes of actions) and non-consequentialism (focused mainly on ethical principles and obligations), a distinction of particular relevance to both environmental ethics (see 2.2.8 below) and the professional ethics of environmental practitioners.
2.1.4 Kant and the Enlightenment

A number of intellectual and social developments in Europe through the Renaissance (from mid 14\textsuperscript{th} to the 17\textsuperscript{th} Century) challenged the traditions, authority, dogma and superstitions inherited from the Middle Ages in many ways, and ‘… reached their culmination in the 18\textsuperscript{th} Century with the Enlightenment …’ (Law, 2016, p. 37). This ‘Age of Reason’ developed the modern idea of individuals as rational agents, with capacity to be in control of one’s own destiny, each with a moral and ethical dimension which distinguished civilised humans from barbarity and from the divine (Malik, 2014, p. 191).

A towering figure of the Enlightenment, particularly with respect to moral and ethical theory, was the 18\textsuperscript{th} Century German philosopher Immanuel Kant (1724-1804), who proposed that the foundations of morality lie in the combination of free-willed action and duty, as directed by reason. This invokes the concept of agency as a necessary condition for morality – the ability and freedom of self-governing beings to act and distinguish between alternative courses of action, to understand the consequences, then to make choices on the basis of rational principles, not out of compulsion, fear or desire (Baggini & Fosl, 2007). A rational person decides which moral laws (imperatives) are applicable in particular situations, then chooses to act in accordance with those rules (Grayling, 2019, p. 264).

Kant expanded the concept of the biblical ‘golden rule’ (and similar principles in many religions), and resolved many of its potential inconsistencies, as a categorical imperative that a person of integrity ‘… ought never to act in any way other than according to a maxim which I can at the same time will should become a universal law …’ as cited by (Grayling, 2019, p. 265). Preston (2014) and others refer to this as a ‘universalising principle’. The deontological approach of Kant is in marked contrast to the various teleological strands of consequentialism, including utilitarianism. With respect to agency and the secular rational basis for morality, Kant’s categorical imperative builds upon Spinoza’s dictum that ‘Those who are governed by reason desire nothing for themselves which they do not also desire for the rest of humankind …’ as cited by (Pinker, 2019, p. 410). It is also a further development of several other principles of equality and impartiality (all persons are equal, and one’s personal interests should not be prioritised over anyone else’s) as previously enunciated by Hobbes and Locke; and subsequently re-interpreted by Rawls and Nagel(Pinker, 2019,
Kantian ethicists have characterised this principle as the simple adage “What would happen if everybody did this?” (Mackay, 2013, p. 176; Sack, 2005).

Several ethicists and other authors have tried to interpret or re-phrase the Kantian categorical imperative to include ethical responsibilities for animals, and for the natural environment more generally (Schönfeld, 2017; Svoboda, 2012), but the most satisfying approach to reconciling Kantian and environmental ethics has been to look at the categorical imperative through a sustainability lens (Mulia, Behura, & Kar, 2018), as discussed further below in Section 2.1.8.

2.1.5 Categorising ethics

According to Light and Rolston (2003), the field of ethics may be broadly subdivided into six parts, which have been combined with the definitions and categories of (Preston, 2007, p. 36) and the distinctions of Cohen (2004, pp. 1-11) to create eight categories as follows:

- The general study of goodness: what comprises a ‘good’ life, and what things are good in themselves;
- The general study of right action: the principles of right and wrong (moral codes) which govern our actions;
- Descriptive ethics: anthropological or sociological investigations into ethical behaviour (the ‘is’ question: what people actually do and think);
- Prescriptive or normative ethics: the ‘ought’ question (what people ‘should’ do, as applied to particular fields), including casuistry and moralising, duties and obligations, social ethics and distributive justice (as enshrined in law), personal ethics (Aristotelean virtue theory and feminist care theory), environmental ethics and professional ethics;
- Moral reasoning and ethical decision-making: applying reason to ethical issues:
- Metaethics: moral philosophy - the study of ethical beliefs and claims;
- Moral psychology: human behaviour and motivation in relation to moral questions; and
- Metaphysics of moral responsibility: the study of free will.

Among the many divergent opinions and philosophical debates in the field of ethics is the tension between ‘universalism’, ‘objectivism’ and ‘absolutism’ on one hand, for example holding that there is a universal sense of right and wrong (Rowson,
2006), and the pluralist concepts of ‘relativism’ and ‘particularism’ on the other (Preston, 2014). An alternative ‘communitarian’ approach includes both monist and pluralist elements by recognising cultural differences between groups, for example in the moral obligation of children to care for their elderly parents (Bell, 2010). Again, this distinction is relevant to professional ethics, because professional ethics include both universal values (e.g. truth-telling and promise-keeping) and group-related values (e.g. the interests of the client/patient/community outweigh personal interests). MacIntyre (cited by Preston 2014) considers that his modern iteration of virtue theory (including the ethics of professional groups) represents both a communitarian and a normative (applied ethics) approach. However as noted by Preston (2007), utilitarianism and egoism are not the only consequence-based approaches, and he has developed the ‘situation ethics’ of Fletcher (1966) into an ‘ethic of response’, as discussed further in 2.1.6 below.

These various debates and tensions indicate that ethical theories and their application continue to evolve in response to emerging issues, especially those that challenge fundamental concepts of right and wrong. Many of the moral issues which challenged normative ethics in the 20th century relate to technology, scientific advances and medical interventions, but some of the new approaches to fundamental moral philosophy have come from feminism and environmentalism, which have both questioned the basis of previous assumptions.

2.1.6 Practical and Applied Ethics

The rapidly-growing area of applied ethics, now also referred to as practical ethics (LaFollette, 2005), represents “… the effort to engage practically with ethical dilemmas thrown up by real life …” (Grayling, 2019, p. 457). It does not constitute a separate category to the eight listed in 2.2.5 above, but is a combination of normative ethics and metaethics, whereby various different approaches can contribute. This is particularly relevant to professional ethics, where each practitioner needs a ‘toolkit’ of moral principles and decision-making processes (Baggini & Fosl, 2007) in order to respond to a range of different situations which present ethical dimensions, especially when operating in contentious areas of practice. This is certainly the case with respect to natural resource managers in USA, whose practice ethics are reportedly derived from various sources of ethical theory (McNeil, 2016).
The ethical toolkit of most professionals is a mixed bag, and includes their personal values as well as the institute ‘rules of the game’ with respect to fees, discipline and the reputation of the profession, although these are not in the strict sense ‘ethics’ (Bayles 1988). It is not clear from the literature if the correlation between ethics, attitudes and personal values with respect to the environment, as reported in a public survey by Manning, Valliere, and Minteer (1999) is also applicable to environmental professionals, and this is explored in research interviews in this thesis.

Preston (2007, p. 60) has developed an ‘ethic of response’ as

… organised around the concepts of responsiveness and responsibility …

[taking into account] … the claims of duties, rights and principles as well as utility, together with the perspectives of virtue theory and the feminist care ethic.

Preston considers that this approach draws upon a bio-centric (rather than human-centric) proposition that life is interconnected and is ‘ … the only non-arbitrary ground for assigning moral standing’ (DesJardins, Joseph R, 2018, p. 256). This has obvious relevance to environmental ethics, while the emphasis on responsibility and ‘fitting’ responses is particularly important in relation to professional ethics. An ethic of response recognises the role of a moral agent as a ‘responder’ (to others, to life, to the past and the future, to the parts and to the whole) by developing a ‘best fit’ appropriate response to the situation, taking into account the likely outcomes (consequentialism), as well as duties and responsibilities, in a communitarian frame of reference. It also incorporates virtue theory in that it asks the question ‘how does this decision relate to the kind of person I aim to be?’, and a similar question can be asked of organisations.

Although related to situation ethics, which holds that morality is based on general norms of love, harmony and enriching human existence, but ethical decisions in each situation are otherwise context-dependent (Fletcher, 1966), an ethic of response also recognises the duties and obligations associated with roles (Alexandra & Miller, 2009).

The concept of role morality

… is helpful in professional ethics generally, for it reminds us that the ethical obligations of professionals stem from the role they are performing or the institution they are serving. According to role ethics, the test of professional or public ethics is not that of satisfying one’s personal conscience, but of acting in ways that are consistent with the duties entrusted to one in a public or professional role … (Preston, 2007, p. 164).
Preston’s ethic of response is relevant to social welfare professions in that it can also include a feminist care ethic based on interpersonal relationships (Preston, 2014), and is particularly applicable to the environment profession because it accommodates bio-centrism. The application of this integrated ‘ethic of response’ requires comprehensive assessment and consistency with three inter-related substantial values – the respect for life principle, the justice principle and covenantal integrity principle. The last of these, the principle of covenantal integrity, is further addressed under professional privilege in 2.1.7 below.

With specific respect to public sector environmental agencies, Goldman (2005, p. 238) notes that ethics has … three basic elements, which are specific and interwoven tightly … The first is "duty" … assumed obligations to do one's best and to put ahead all other interests than one's own. The second is "honesty" … as basic personal decency mixed with dignity of dealing with others. … The third is "integrity" which concentrates on individual honor and promise keeping. … all three terms in modern usage can fold neatly into any definition of ethics …(Goldman, 2005, p. 238).

With respect to ethical decision-making in response to day-to-day moral dilemmas, practical ethics, situation ethics and an ethic of response are all more flexible and adaptable than rule-based or virtue-based approaches, especially in their recognition of the different roles we all play and the associated obligations, but this does not mean that they represent moral relativism or ethical egoism. On the contrary, practical ethics is equally rigorous and demanding, if not more so, because it requires familiarity with applying a range of approaches in one’s ethical ‘toolkit’ (Baggini & Fosl, 2007), and using them with transparency and accountability without falling into the various self-serving or illogical ‘traps’ of rationalisation and fallacies. These are further explored in Chapter 6 Section 6.6.10.

2.1.7 Professional Ethics

An important element of a professional’s relationship with clients, and of the trust which the community generally place in professional expertise, is a pledge of service implied by the professions (Koehn, 1994). This includes not only that they act with fidelity (honesty and faithfulness) and do not act in their own self-interest, but also the ‘ideal of service’ that professionals use their knowledge and skills for community
benefit. These ‘promise-keeping’ pledges and other attributes of professions generally are discussed further in Section 2.2 below.

To the extent that professions exercise some form of cohesion and peer-group pressure to behave ethically and in the interests of the community, then they are consistent with some aspects of virtue theory. Although virtue theory had been largely overtaken by other moral theories, it has been revived among ethicists over recent decades (Grayling, 2012, p. 372) especially in relation to professional ethics. For example, virtue theory is considered to be a ‘… vital part of the mosaic in understanding ethics [because] virtues arise out of a community, a profession or a tradition … and hence are linked to the ‘story’ of each group’ (Preston, 2007, p. 55), paraphrasing the concepts of MacIntyre (2013). James (1981) also recognises the importance and contribution of moral virtue to professional ethics, and accordingly favours a mixed theory which integrates parts of an ethic of virtue into a moral framework which is otherwise role-utilitarian. This has evident relevance to professional practice in that “the essential nature of a profession is to provide high standards of service to individuals, but more importantly, to society as a whole” (Gibson, 2003, p. 22), and professions adopt codes of ethics and influence their members to provide such service. Andre (1991) considers that that professional occupations and other voluntarily-assumed roles carry complex moral obligations which vary according to responsibilities, behavioural expectations and circumstances, but that role morality largely depends on the extent to which others depend on the services being provided and and are vulnerable to the professional service-provider.

Several ethicists have addressed the question of whether or not professional ethics are a particular category, such that professionals have special ethical responsibilities that are different from, or in addition to, the ordinary moral obligations of others in the community. This goes to the heart of the moral legitimacy of professions, and some of the ethical quandaries. “The notion of role morality suggest individuals may adopt a different morality depending on the roles they undertake….professionals, because of their special status, may find themselves at odds with their best moral judgments” (Gibson, 2003, p. 17). Ellin and Lunch (1982) debate the topic with respect to the sometimes conflicting moral obligations of honesty and acting in a client’s interests, using as examples the responsibility of lawyers to defend the guilty, and hypothetical doctor-patient conversations; and also with respect to the fiduciary relationship between professionals and clients, and the ‘right to lie’ of senior public servants when acting in
the national interest. These authors conclude that there is no definitive answer to the ‘special-versus-ordinary’ debate with respect to professional ethics, as it depends on the situation and roles. Part of this issue is the power imbalance between professional and client (and others who may rely on expert advice and opinion), in that the expertise of the professional may be interpreted as ‘knowing best’ what is good for others, and in the case of the environmental practitioners, what is best for a sustainable environment. This implies that occasions when professional obligations appear to conflict with ordinary moral obligations (for example when ecosystem management requires poisoning of wild dogs) require special justification, accountability and transparency.

As pointed out by Koehn (1994, p. 7), it is not ‘special’ ethics which sets the professions apart, it is their special expertise and effectiveness – what they actually do, in relation to what their clients want: “… professional practices are morally legitimate because, and to the extent that, they are structured to merit the trust of clients …”.

Andre (1991) and Gibson (2003) adopt similar positions with respect to professional role morality, but recognise that the ethical dilemmas associated with professional obligations are complex.

Cooper (2004) discusses the ‘special-versus-ordinary ethics’ issue with respect to universal morality and the ‘moral point of view’, and largely resolves the debate by referring to professional roles (‘duty of station’) which society has assigned, whether explicitly or implicitly. For example, the integrity of the legal system requires that lawyer-plaintiff communication remains confidential, as enshrined in the relevant professional code of ethics, notwithstanding that there may be occasions where adherence to such a code may appear contrary to community ethical standards.

However Koehn (1994, p. 5) considers there are no separate professional ethics (atypical moral commitments), in that all the ethical norms and standards applicable to professionals are derived from (or identical to) ‘ordinary’ norms of morality, albeit with some elements intensified. She draws an analogy with parenting, in that professionals aim to help others, but are not allowed ethical lapses or abuses (such as lying) under the guise of helping others. Koehn considers that any ethic based on a promise to help another is normally based on that an acceptance of the assistance offer by the affected party, and similarly any ethics based on consent theory requires the willing consent of all rational parties. However, in most cases the offer of professional assistance it is not an explicit contract, but is implied by the pledge of service made by all professions, to assist those in need of particular expertise. This pledge is what professions ‘profess’
publicly, even in the absence of a client, it is brought into being by a client’s need, and is evidenced by action. Also, according to Koehn, professionals should not only abide by the same norms as everyone else, but “… professional ethics must be re-conceived as part of our general communal ethics if they are to re-gain legitimacy …” (Koehn, 1994, p. 4).

As part of such legitimacy, the integration of professional and environmental ethics needs to address the issue of ‘consent to assist’ – if the environment cannot agree to the intervention or assistance of professionals, how can it then be a legitimate ethical obligation? Under consent theory, the consenting agent and the affected party are both bound to recognise such consent, but so are all those who recognise consent as the basis of legal legitimacy (Koehn, 1994, p. 8). This implies that a guardianship role (where the affected party is unable to give consent), has moral legitimacy and ethical obligations apply, hence similar considerations apply to governments acting as proxies (through legislation) for environmental protection and management, and for environmental practitioners with respect to environmental ethics. However, environmental practitioners may have legitimate ethical obligations towards environmental values based on science, for example towards species known to be approaching extinction, irrespective of legislative designations of threatened species and professional ethics is therefore more than mere compliance with legal requirements. These and other environmental obligations are considered covered by the overall ‘pledge of service’ made by professionals, which is brought into being by need rather than by a specific consent or legislated guardian role.

Part of the professional’s pledge of service, and frequently formalised in codes of ethics, is a commitment to objectivity or impartiality when applying their expertise. While impartiality is not equivalent to objectivity (and different again to personal disinterestedness), they may be overlapping characteristics of a professional’s practice principles. An opinion or report can be impartial (free of self-interest and not favouring any party) but still based on subjective values, such as a belief that environmental values have equal status in decision-making to economic considerations. However, adherence to principles of scientific objectivity and evidence-based advice generally ensure that opinions are impartial, even when they are not entirely value-free.

With respect to the ethical principles of science per se, Weinbaum, Landree et al. (2019) reviewed the ethical codes applicable to research of scientific bodies in various countries, and list 10 ethical principles which are common across all scientific
disciplines: duty to society, beneficence (doing good), avoiding conflict of interest, informed consent, integrity, nondiscrimination, nonexploitation, privacy and confidentiality, professional competence and professional discipline. Although this review focused on research ethics, the list is indicative of ethical issues considered important to scientists.

As an example of ethical attributes considered important by professionals, Chorlian (2008) surveyed leading practitioners in the American residential mortgage business and reported that the top five most-mentioned ethical characteristics in mortgage lending were honesty, integrity, fairness, responsibility and reliability, and competency (including knowledge and accuracy). For professional psychologists surveyed by Pikoff-Mirwis (2011, p. viii), ethical alignment is demonstrated by being conscientious, following guidelines, flexible in integrating information, practicing the ‘golden rule’ when dealing with clients, seeking feedback and undertaking professional development.

A different but related approach has been to survey professionals with respect to issues which cause moral distress or ethical problems in practice, such as the survey of nurses undertaken by Ulrich et al. (2010, p. 2510) who reported that “… the five most frequently occurring and most stressful ethical and patient care issues were protecting patients' rights; autonomy and informed consent to treatment; staffing patterns; advanced care planning; and surrogate decision-making”.

The relationship between the ethical principles of individual professionals, derived or influenced by their professional codes of ethics, and those of their employing organisation has been explored by Valentine and Fleischman (2008, p. 663). They report that “… professionals represent an authoritative symbol of social responsibility …”, their codes of ethics influence the corporate social responsibility (CSR) expressed by organisations, and employees have more favourable opinions of organisational CSR when it reflects the ethical standards of their professions. Consistent with these findings, the authors recommend that professional codes institutionalise business ethics and CSR, and that such codes be enforced to enhance individual behaviour and avoid misconduct.

Conversely, professional ethics has been regarded by some critics as a fundamentally self-serving. Universal ethical egoism is a form of consequentialism, whereby “… everyone should always act in their own self interest regardless of the others, although their own interest may sometimes serve others' interests …” (Preston, 2007, p. 26); and it could be argued that environmental regulations and ethical codes are
ways of ensuring that the self-interest of professional practitioners can also serve the interests of the community and the environment. The market can also be a force for ethical egoism in that a practitioner’s reputation for being ethical, or awarding ethical clients with prizes and public recognition for sustainability excellence, represent smart recognition of changing community and consumer awareness, and may confer a competitive advantage. The drive to be ethical is part of a desire to be trusted, just as ‘virtue-signalling’ through compliance with religious moral rules was once considered an insurance to eventually gain entry to heaven. i.e. being ethical in one own’s self-interest (‘good ethics is good business’), or in the interests of one’s profession and institute (Mackay, 2013, p. 180). This author argues (as do many others) that any choices based on self-interest, in order to gain a benefit or reward, are not truly ethical decisions. However the argument can become circular – virtue theory is based on the principle that ethical humans act in a way consistent with their perception of themselves as virtuous, so in this sense all ethical behaviour can be characterised as doing good in order to feel good about one’s self. For example, Davis (1999) argues that ‘following the rules’ constitutes ethical conduct, provided the rules (such as a profession’s code of ethics) have been well written.

2.1.8 Environmental Ethics

Environmental ethics and professional ethics are both applied (normative) ethics, although environmental ethics also overlap into theoretical areas because this field includes moral consideration of the future generations, non-human living beings (although veterinary ethics also considers this) and the ‘right to exist’ of ecosystems.

A key issue in ethics, both theoretical and applied, that of ‘moral consideration’ i.e. whose interests should be taken into consideration? (Light & Rolston, 2003). Several philosophers have regarded the history and evolution of ethical theory as a progressive widening of such responsibilities, which, over time, has accorded moral rights to slaves, people of other races and future generations, to domesticated and wild animals, and more recently, in the case of ‘deep ecology’ (Fox, 2003) and the Gaia hypothesis (Lovelock, 2007), to whole ecosystems and the Earth per se (Naess, 2003). However ethical obligations to nature have been largely theoretical and applicable to personal actions, rather than practitioner-oriented, and rifts have developed between ‘deep ecology’ and various strands of environmental ethics (Minteer & Collins, 2008).
Despite their differences, all these fields are based on non-anthropocentric moral obligations.

Humanity’s ethical responsibilities towards the environment have a long history, from pre-literate societies where survival required respect for and management of natural resources, to the religions that promote mankind’s stewardship of a God-given world, and more recent philosophers and environmental writers. Minteer and Collins (2008) consider that the modern concept of environmental ethics started with the work of the New Zealand ethicist Richard Routley (Sylvan) in 1973, which included the ‘last man standing’ hypothetical scenario (Keller, 2010, p. 8). However the roots of environmental philosophy are the earlier writings which sparked the environmental movement, such as Aldo Leopold’s land ethic (Leopold, 1949/1969), Rachel Carson seminal ‘Silent Spring’ (Carson, 1962) and Garrett Hardin’s widely-cited ‘Tragedy of the Commons’ (Hardin, 1968).

The rise of environmental ethics marked a departure from the main Western traditions of ethics (including virtue ethics, Kantian ethics and utilitarianism) in that it questioned or rejected anthropocentrism i.e. that humans are the sole frame of reference, as both the effectors (ethical agents) and the affected (“the only actions that matter are those which affect human beings”) (Wogaman, 2004, p. 8). The idea that ethical considerations include respect for the broader environment (non-anthropocentrism) has gained widespread acceptance, notwithstanding debate amongst ethicists regarding its validity (Cahen, 1988; Vesilind & Gunn, 1998). Although some religious traditions have included the concept of stewardship, and although philosophers have long recognised the ethical dimensions of environmental care, these frameworks have been human-centred. For example, Wogaman (2004) considers that respect for the environment is derived from those religious beliefs that the earth and the material world are inherently good creations of the deity and therefore should be cared for. “… John Locke insisted that the natural world was humanity’s property, but he deplored wanton and wasteful exploitation of nature” (Opie, 2004, p. 199).

Various authors have suggested ethical frameworks that incorporate both religious traditions and more modern concepts of sustainability, social justice, deep ecology and feminist ethics of care. For example Janzen-Ball (2010, pp. ii-iii) has attempted to integrate Christian ecological ethics (‘the earth as God’s body’) and feminist theories in her “ecofeminist ethics of the common good” based on right relationships, eco-social solidarity and practices of embodied spirituality.
Distinctions and debates have emerged between various strands within environmental ethics, notwithstanding that they all reject absolute anthropocentrism to varying degrees, as reported by Varner (2002) and Minteer and Collins (2008). There are areas of incompatibility between environmental ethics and animal ethics, theoretical environmental ethics and pragmatic ethics, and between bio-centric and eco-centric strands of thought. Philosophical ‘outliers’ which have little widespread acceptance but which nonetheless influence environmental debates include the Gaian philosophy of Earth as a living organism which maintains a complex life-sustaining equilibrium (Lovelock, 2007); and a philosophical approach which recognises the Earth is now entering a new Anthropocene epoch where all natural processes are affected by, and must be responsibly managed by, humans (Hamilton, 2017).

A more practical and less ideological approach, ‘environmental pragmatism’, emerged in the 1990s as a better basis for informing policy, making “… the value dimension of ecology and conservation far more explicit” while at the same time “… bringing tools of ethical analysis into the decision making contexts faced by ecological field researchers and conservation managers” (Minteer & Collins 2008 p.490). They invoke Leopold’s 1949 ‘land ethic’ in recognising the importance of effective practical management of the environment, as does (Angeloni, 2019). Pinker (2019) also argues for ‘eco-pragmatism’, rather than the full agenda of deep ecology, which he regards as a counter-Enlightenment movement incompatible with the progress of humanism.

All the above ethical strands share a common theme of extending moral consideration beyond humans to other living beings, and are accordingly perceived in the public and political spheres as having a similarly subversive agenda. Moral consideration is also extended to future generations through the principles of inter-generational equity, and this incorporates justice-based approaches to global climate change (Svoboda, 2017).

Kant’s deontological categorical imperative, with its emphasis on universalisability (Baggini & Fosl, 2007), has been re-interpreted in environmental philosophy as the duty of everyone to act in such a way as to preserve the Earth for future generations, consistent with environmental ethics (Sack, 2005) and the sustainable development principles of inter-generational equity (Mulia, Behura et al., 2018). This is a surprisingly ancient ideal - in India, one of the Edicts of Asoka, emperor of the Mauryan Empire 268-232BC, whose inscriptions are among the earliest evidence of Buddhism, is ‘There is no better work than promoting the welfare of the
whole world’ (Bellah, 2011, p. 547). The Kantian categorical imperative is further developed in this thesis in Chapter 6 (Section 6.9).

2.1.9 Ethical Decision-making

The very concept of ethics implies agency as a necessary condition for moral responsibility of self-governing individuals, where ‘agency’ is the ability to exercise freedom, to act one way or another, and understand the consequences and make rational decisions (Baggini & Fosl, 2007). Underlying Kant’s basic premises of morality are the principles of autonomy and freedom “... the very possibility of morality depends on there being free-willed beings who obey laws of reason they apply to themselves …” (Grayling, 2019, p. 265).

The responsibility of environmental practitioners, and indeed for all rational humans, to distinguish between subjective emotional offensive repugnance and moral judgement requires moral reasoning i.e. a process to carefully think about and sensitively analyse situations and initial intuitive responses, to consider the effects of any action or decision on others (Mackay, 2013, p. 163). Murdoch (1970) advocates that ethical decision-making be based on two questions – the utilitarian consequentialist weighing up of whether an action will cause more harm than good to others, and the private virtue question of whether the action is consistent with one’s ideal of virtuous behaviour. This inescapably introduces personal values into ethical decision-making (Green, 1997).

Rest (1994) identifies four components of moral psychology which are relevant to ethical decision-making, the first being moral sensitivity which allows ethical issues to be initially recognised; then the other three components (moral judgement, moral motivation and moral character) influence a person’s decisions with respect to the identified issue.

Preston (2007, p. 60) in his ethic of response, also suggests that ethical decision-making starts with several simple but insightful questions: what is going on? what is appropriate and fair? and, what is one’s duty? These address both the consequential (what will be the result?) and non-consequential implications of one’s choices, in a contextual and communitarian frame of reference.

The cognitive process of ethical decision making, determining what is the right thing to do or analysing whether actions are good or bad, comprises a number of
sequential steps described by several authors, synthesised by Kolb (2018, p. 1227) as follows:

Step 1: Identify the ethical dimensions embedded in the problem …
Step 2: Collect relevant information …
Step 3: Evaluate the information according to ethical guidelines …
Step 4: Consider possible action alternatives …
Step 5: Make a decision …
Step 6: Act or implement the decision …
Step 7: Review the action, and modify it if necessary …

The first step (identifying the ethical problem) is critical, and although an intuitive response of moral discomfort may indicate that an issue has ethical dimensions, initial ‘gut reactions’ of this nature require further analysis.

The ethical guidelines referred to by Kolb in Step 3 of the above sequence depend on the ethical theories and perspectives adopted, which he describes as either utilitarian, justice-based or rights-based. However for environmental practitioners, relevant alternative perspectives are more likely to be consequential (utilitarian and deontological professional ethics), value-based (including environmental ethics) and non-consequential (virtue-based). The inclusion of personal values as a consideration in any ethical decision-making process is consistent with the diagrammatic model proposed by Preston (2007, p. 67) which also takes into account ‘dispositional or character factors’, including professional or public sector roles, virtue theory and values. Preston also includes two important questions to be answered when considering alternatives viz. the feasibility of the preferred action or decision (not just its desirability) and its justifiability in response to challenging questions (sometimes referred to as the ‘newspaper front page’ test).

In the hypothetical relationships between ethical ideologies and social context which affect ethical reasoning, Valentine and Bateman (2011) also introduce the concepts of ethical intention (the action or behaviour proposed in response to a moral judgment trigger) and ‘moral intensity’, the latter a combination of idealism or relativism, the consequences and probability of harm, immediacy or proximity of the problem, social consensus and competitive context, which influences one’s sensitivity to the moral implications of situations. Ethical intention, moral intensity and ethical
ideology can all be considered part of Preston’s dispositional or character factors referred to above.

A consideration in ethical decision-making, important in ethical training and advising early-career professionals, is recognising the importance of practical applications which test and help development issue recognition, evaluation of consequences and the implications of moral decisions. One prominent ethicist considers that

… the most significant period of ethical development is early adulthood, … until that time, people don’t have to test their ethics, ….. It’s when you first have to decide how important it is for you to keep your job that you decide how much the truth means to you. At that point it’s decision-making that’s critical, not merely character. ….whether people are willing to be ethical in a particular decision-making situation depends on a lot of things, including their ability to see the ethical issues, to work out the problems, to anticipate correctly the risks and burdens, and to implement their decisions in a way that doesn’t cause hazardous and dangerous consequences for themselves. (Josephson, 1989, p. 16)

The same author, discussing ethical training for students, comments …

… we should help them face these challenges from a problem-solving point of view and reinforce their values. But in the last analysis, what they do when they’re in the trenches is a question of how they prioritize those values. (Josephson, 1989, p. 17)

The components and steps in ethical decision-making, with particular reference to environmental professionals, are further explored in Chapter 6 (Section 6.6.8) below.

2.1.10 Professional Ethics as Applied to Environmental Practice

Considerable research literature and published commentary exists regarding professional ethics (how should those with specialised skills and knowledge behave towards other people who rely on their advice?), and over recent decades a great deal has also been written about environmental ethics and corporate environmental responsibilities (how should we all behave towards nature and the environment?). However there is little if any empirical research integrating these two types of moral obligations in relation to the role of environmental practitioners. Several authors have thoughtfully discussed the professional ethics of natural resource managers generally (Fox, 2005; Westra, 2000) or environmental professionals in particular (Thompson, 2012; Wogaman, 2004), and some have specifically addressed the relationship between
environmental and professional obligations (Angeloni, 2019), but most such articles have comprised essays, literature reviews, case studies and ethical advice rather than research. One essayist on this topic is T.R. Cuba, whose perspectives on ethics include hypothetical case studies, for the journal *Environmental Practice* (Cuba, 2000, 2001, 2002, 2003, 2010). Cuba invites reader responses, consistent with the concept of ethics as a conversation (Jordan, 2002). Cuba (2004) also examines the relationship between science, policy and environmental practice, and poses an ethical challenge. He asks:

> Are we professionals in the trade that is the environmental industry, or are we scientists employed as the market allows – as consultants, agents, witnesses, educators, NGO officers? This ethic raises a second one, that of simply knowing who we are and where one’s allegiance lies (Cuba, 2004, p. 10)

The issue of primary ethical responsibilities, of knowing where one’s allegiances lie, is addressed in more detail in Chapter 6 Section 6.10.

One of the few researchers who surveyed environmental consultants (Owen, 2019b) focused his investigation on their role as facilitators of public regulation, although he also touched on ethical issues related to environmental values.

Minteer & Collins (2008) support the emergence of a new branch of applied ethics that they call “ecological ethics” as a pragmatic but normatively pluralistic ethic that addresses the practical dilemmas faced by ecological researchers and environmental managers. This shows promise as an effective framework for consultants, field researchers and other environmental professionals. However the current lack of published research into the ethical principles of practicing environmental professionals is a gap addressed by this thesis, albeit in a preliminary manner.

Irland (2007, p. 4), in his suggested guidelines for natural resource and environmental managers, summarises the ethical issues facing many environmental practitioners as follows:

1. Life in the market, in administrative, political, advocacy, social change, and consulting settings, can be messy. Get used to it.
2. Awareness of potential ethical problems, leading to early detection, is critical.
3. Problems can be avoided or dealt with if detected early enough.
4. Legitimate personal loyalties often conflict. Not all of these conflicts are ethical problems.
5. Mandates in agency rules and professional society ethics codes often conflict.
6. Many ethical dilemmas have more than one right answer.
7. Developing skills in ethical reflection can help.
8. Keep learning: treat ethics as a lifelong study, not a onetime curriculum requirement. (Irland, 2007, p. 4)
2.2 Professions and Identity

A profession is a disciplined group of individuals who adhere to high ethical standards and uphold themselves to, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to exercise this knowledge and these skills in the interest of others. (Australian Council of Professions, 2003)

2.2.1 The Role and Legitimacy of Professions

The term ‘profession’ derives from the act of ‘professing’, meaning to ‘testify on behalf of’ or to ‘stand for something’ that defines one’s fundamental commitment (May, 1989). In that sense, ‘profession’ is more than a career it is a vocation or calling, linking one’s destiny with a whole-of-life mission. Rowson (2006, p. 37) defines ‘professions’ as ‘ … organisations and associations whose members deploy their expertise and powers to promote objectives that are valuable for the individuals who receive their services and for the societies in which they operate.’ There are many alternative definitions, and some would disagree with Rowson’s equating of a profession with an association, but the key attributes in his definition are useful viz. that professionals have particular expertise and powers that are deployed to benefit their clients and the wider community. “Professionals exercise authority if [and as long as] their actions promote a particular human good desired for its own sake by persons before and on behalf of whom the professional has promised to serve this particular good …” (Koehn, 1994, p. 88). Larson (1977) interprets the commitment to the public good as an ‘ideal of service’ whereby the professions subscribe (at least in theory) to the notion that they earn the trust of the community and gain ‘social credit’ by performing useful services, being ethical and having a level of personal disinterestedness.

It should however be noted that the image of professions as trustworthy gatekeepers of specialised knowledge and standards is not the only framework for analysing the history and current role of professions. Critics claim that professions are little more than restrictive guilds of highly-paid experts (Namazi, 2018) or ‘power elite’ monopolies based on occupational self-interest (Newton & Paulshock, 1982). Larson herself considers that the ideal of service, whereby professions serve the public as a whole, is more ideological than performed in practice, and much of the professionalisation project undertaken by engineering and other professions since the 19th Century has been aimed at social status. She also characterises many of the professions as being more colleague-oriented than client-oriented, although she
recognises that professions such as medicine perform such a clear and important service that they have accumulated considerable social credit (Larson, 1977).

However “...a portrayal of professional associations purely as interest groups and not as moral communities, misses the mark … [and] … fails to take seriously the special nature of professional services” (Sack, 1998, pp. 1-2).

Notwithstanding this debate, professions and the concept of professionalism appear entrenched, with roots in the concepts of expertise, trust and selfless service, and professional associations impose on their members a set of moral obligations related to these attributes (Cooper, 2004; Mackay, 2013). Professionals have skills that others lack, and clients rely on them in a relationship of trust, not only in the skills and capabilities, but “… also on the assumption that a true professional will always place the client’s interests ahead of their own” (Mackay, 2013, p. 201).

Similarly, Preston (2007, p. 165) characterises professions as having “… an intrinsic commitment to the public good, including a willingness to provide services gratuitously beyond the call of duty … professional ethics will place a strong emphasis on community service informed by the idea of responsibility”, and considers that they have the following attributes:

- University level professional preparation
- Vocation and status in the community
- A professional association and code of ethics
- A trust on behalf of clients seeking specific services, and
- A commitment to the public good

Bayles (1986) emphasises that another distinguishing feature of professional work, compared to trades, technical or artistic work, is that it comprises intellectual rather than physical work. This distinction arises partly from the history of professions, based in mediaeval craft and trade guilds, which then gradually and separately evolved into trade unions, industry association and professions (Beaton, 2010).

With respect to their education levels, vocation and status, Kultgen (1988, p. 115) considers that professional obligations are at least in part based on ‘noblesse oblige’, the standards of behaviour expected of those with privileges to conduct themselves in certain ways, to ‘do the right thing’ and recognise moral obligations to others less fortunate. Although the classist implications of that concept are now out dated, is remains valid with respect to power imbalances between experts and those in need of
such expertise, and Wolters, Pas, and Vriens (2013) call for accountability mechanisms to uphold these professional obligations.

Another characteristic of professions is that of their collegiate nature whereby practitioners with shared interests meet and undertake activities that benefit the profession, and early-career professionals are mentored by senior colleagues. Mentoring, socialisation, networking and learning by association are among the benefits of membership of professional institutes, although not exclusive to the professions as similar arrangements exist in scientific and trade associations.

Larson’s sociological analysis of the rise of professionalism distinguishes between the old ‘ancien regime’ professions of law, medicine and the priesthood (characterised by individual ‘free professionals’) and the later salaried professionals, such as engineers. She notes that many of the professional associations formed in the USA and Britain in the 19th Century, particularly engineering, were part of a ‘professionalisation project’ (Larson, 1977, p. 18) linked to social reform and scientific progressivism to legitimise expertise and competence, and in opposition to unregulated ‘quackery’ (Larson, 1977, p. 73).

In historical context the ‘ideal of service’ of professions and their gaining of social status are complementary and linked, rather than contradictory. When the European ancien regime professions first created a merit-based structure of social status, as an alternative to that of inherited power and wealth, their rise was helped both by their usefulness to the established elite and by their service to society generally. In both spheres, the professions gained the trust of their clients and that of the wider community (Fannin & Hill, 1988).

Koehn (1994, p. 48) invokes the concept of a professional’s pledge of service. To trust a professional, their clients must be satisfied they are both committed to and capable of helping them. Koehn argues that these “… pledge-generated expectations … constitute a role. Swearing the pledge and occupying a role are therefore for all practical purposes one and the same thing in the case of the professions …” (Koehn, 1994, p. 63).

The linked issues of trust and social status partly answer the key question of why ‘ought’ a professional be ethical, to any greater extent than any other (non-professional) person? Professions are generally trusted because they are perceived to be experts who pledge to deploy their skills impartially and without conflicts of interest, they subscribe
to an ideal of service and they behave ethically. Compliance with an agreed code of ethics is part of this pledge of service, and is necessary to gain and maintain that trust.

Koehn (1994, p. 5) also discusses the grounds for the legitimacy of the professions and proposes that clients’ trust in professionals is justified by a ‘legitimating ethic’, representing not just expertise and competence (which do not *per se* legitimise trust) but a combination of the commitment to act in the client’s interests, a sustained willingness to help and an internalised sense of responsibility. This relationship of trust enables clients to divulge information and allows professionals to exercise judgement (Koehn, 1994, p. 55).

However, this legitimating ethic raises difficulties when considering the ethical obligations of professionals towards the Earth’s environment, in that the pledge of professional service (explicit or implied) places the interest of a client above self-interest and personal values. Furthermore, the professional-client relationship is considered moral only when the professional is empowered to act on the client’s behalf, by a contract which implies that clients know they need help, but not exactly what kind of help (Koehn, 1994). The tension between these ethical obligations has been explored in 2.1.7 above.

Several professions with high standards of caring and competence, such as nursing, perform valuable service to the community (and accordingly enjoy public respect and trust), with little or no training or knowledge of ethics *per se*, with the result that nurses rely on their strong personal and shared values (Fonville, 2002). While shared values and a supportive ethical climate, such as among nurses or among environmentalists, are likely to create a professional culture within which ethical conversations and behaviour can flourish, they require additional ethical infrastructure to ensure a consistency of ethical issue-recognition and decision-making. A professional code of ethics based on such shared values, combined with appropriate ethical training, are required to earn the trust of the community (and the ‘buy-in’ of graduates) as an ethical profession.

### 2.2.2 Codes of Ethics

Codes of ethics are “… written, distinct and formal documents which consist of moral standards used to guide employee or corporate behaviour …” (Valentine & Barnett, 2002, p. 191) and which guide members “… on the responsibilities that arise from the vulnerability of clients to misrepresentation of professional advice or misuse of
professional privilege” (Sack, 1998, p. 5). With respect to the codes of ethics of professional associations, Wogaman (2004, p. 7) considers that these generally have a narrow focus, partly linked to self-interest plus “… fairly obvious rules of honesty and avoidance of conflicts of interest…” because professionals in every field must be able to trust each other and gain the trust of the community. However Wogaman supports professional codes, such as those of the US National Association of Environmental Professionals (NAEP) which combine prescriptive ethics, which combine “… a statement of what one should or should not do as an environmental professional, including the usual principles about honesty, avoidance of conflicts of interest, recognition of professional limitations, conformity to existing laws, and so forth…” with teleological ethics regarding the pursuit of good environmental outcomes. He considers that “… the work of environmental professionals can draw upon both of these traditions in ethics … To be an environmental professional is also to have objectives going beyond personal or professional integrity: it is to be concerned about the protection and enhancement of the environment and, indeed, to safeguard the long term future of the Planet Earth…” (Wogaman, 2004, p. 7).

The issue of whether or not codes of ethics influence the behaviour of individuals has been examined by several researchers, including Valentine and Barnett (2002) who note that organisations strongly influence the ethical decision-making of individual employees. Although their review indicates that previous studies have had mixed results regarding the influence of codes, their surveys showed that employees have a higher perception of ethical behaviour by organisations with codes of ethics than of organisations with no such code. Considerable work has been undertaken by researchers in the social work profession, which places a high priority on ethical practice, ethics risk management (McAuliffe, 2005) and the support and training for practitioners facing ethical dilemmas (McAuliffe, 2007).

Dunbar (1992) reviewed the historical development of codes of ethics by professional organisations and reported that they regard codes of ethics as ‘… regulatory devices which are intended to protect recipients of services from incompetent and unethical practices by certified members of the profession’. However, Dunbar continues that

… code production also plays a central role in the professionalization process and in the development of politically powerful professional associations. It is hypothesised that, depending partly on the specific historical context of professionalization, code production functions as adjunct strategies to more general strategies of professionalization. (Dunbar, 1992, p. vi).
This hypothesis appears to be valid when considering the recent history of the EIANZ in focusing on ethics criteria in its certification process, and identifying shared values as part of its review of the Codes of Ethics and Professional Conduct. Congress and McAuliffe (2006) have also reviewed codes of ethics in the social work profession in Australia and USA, with particular emphasis on practice standards, ethical dilemmas and decision-making. They concluded that such codes require regular revision as the context and consequent dilemmas in practice change. Again, this has particular relevance to the rapidly changing environmental sector.

Despite the widespread adoption of codes of ethics, many of those which apply to diverse professions (such as the environmental profession) are general broad statements of intent, encompassing multiple values, with little guidance regarding the weighting or selection between alternatives when these various values are in conflict (Wogaman, 2004). Mabry (1999) notes that broadly applicable codes must state principles and aspirations in general terms, because they cannot anticipate all the particular circumstances faced by professionals. She proposes ‘circumstantial ethics’ for professionals to interpret, adapt and apply as necessary “… prioritizing standards according to situation-specific hierarchy of values” (Mabry, 1999, p. 199).

2.2.3 Professionalism under Challenge

The broad context for considering the ethics of environmental practitioners, and variations in ethical principles that may be attributable to their particular roles, is the growth and increasing specialisation of environmental practice and its relatively recent recognition as a profession, at a time when the nature of professionalism is changing. The changes are being driven, not so much from the largely theoretical challenge from those who consider professions to be power elites, but from social, technical and economic trends which are altering the way we all work and obtain knowledge. In many professions and in many countries, these changes are blurring the distinctions between professionals, managers and skilled technical experts, and reducing the individual autonomy, direct client relationship and reliance on experienced judgement which were once the hallmarks of a professional (Bayles, 1988). Public trust in the authority of professionals is being weakened by changing from a collegial to a competitive model (Fannin & Hill, 1988), a ‘democratisation’ of knowledge through the internet, and the rapid spread of uncorroborated or ‘alternative facts’; and. At the same time as these changes have threatened to undermine professionalism, the demand for environmental
expertise and the ‘green’ professions has been growing (Connection Research, 2009) but the field of environmental practice struggles for credibility especially when community opinion is divided on issues of development versus conservation (Fox, 2005; Meijaard & Sheil, 2019). Under these circumstances, the professionalisation of environmental practice, with an emphasis on the ethical obligations and professional responsibilities of individual practitioners, is one way to enhance community trust in their expertise and pledge of service (Koivumäki, 2013).

The complex needs of modern society place reliance upon skilled specialists, and the community trusts that they are well-trained, ethical and dedicated to their vocation rather than to their own self-interest, and thereby provide excellent service. As discussed above in Section 2.2, professions generally share a commitment to these principles, as well as a code of ethics, autonomy in decision-making and goals of contributing to the common good (Daly, Cobb Jr, & Cobb, 1994) i.e. an underlying belief that their specialised knowledge benefits their clients and the community generally, in return for the degree of trust and privileged position which they enjoy (Ozar, 2014).

The professional ideal of decision-making autonomy is relevant to any discussion of practice ethics, because ethical choices between alternative courses of action implies and requires the freedom to choose (Baggini & Fosl, 2007). The restrictions placed on the autonomy and agency of corporatised professionals by procedures, standards and company codes, and similarly on public sector professionals governed by probity protocols, challenge the concept of individual responsibility by professionals.

Related to professional decision-making is the concept of practice wisdom, a term widely used in social work to describe the knowledge, training, personal values and case study evidence that experienced professionals draw upon to make decisions (Fook, 2019; Klein & Bloom, 1995; Samson, 2015).

A range of other traditional characteristics of professionals, and their one-on-one client relationships, are fracturing in the face of managerialism, standardisation, knowledge democratisation and productisation of their services (Bellini & Maestripieri, 2018), as well as the need for multi-disciplinary teams and pressure from activists for professions to adopt more advocacy roles (Nelson & Vucetich, 2009). Professionals may no longer be the sole custodians of technical knowledge and the key ‘gatekeepers’ of practice standards, but their combination of specialised expertise and ethical principles position them to be trusted interpreters and advisers regarding the application
of such knowledge. This means that they are most effective when they are trusted to do a good job, investigate impartially and report honestly. Trust and credibility remain the cornerstones of professional relationships with clients, and also in society more broadly; and professionals are more satisfied with their role when they feel trusted and respected. Complex issues requiring expert assessment generally need input from professionals with high and accountable standards which can be relied upon by all parties including clients, governments, young and early-career practitioners, courts, industry, media and the community. In this context, the term ‘client’ is interpreted broadly in this study to be any proponent of change where professional assessment and advice is required, any audience relying on professional opinion, and any person or organisation to whom an environmental practitioner has a fiduciary (trust) relationship. This broad interpretation covers not only private sector practitioners with paying clients, but also public sector officers providing environmental opinions and recommendations to senior bureaucrats and political ‘clients’, and those teaching environmental students. When any of these types of clients engage or rely upon professionals, there is an implied ‘pledge of service’. The concept of pledge of service includes the ideals of contribution to community wellbeing, and hence is broader than, and preferred to, the concept of ‘fidelity’, which implies faithfulness only to a client’s interests.

Historically, professional institutes in each specialised field offered the community assurances regarding the standards of service and ethics of practitioners who met their criteria of qualifications, competence and experience. In industrialised nations, governments became increasingly involved through regulation of professional standards and registration of practitioners, mainly for the long-established professions such as law and medicine, and where professional work affects public safety, such as architecture and engineering (Barry & Ohland, 2009). However, with respect to the proliferation of newer professions (those which have emerged post World War II), governments have generally preferred to leave professional standards to the marketplace rather than directly regulate practitioners through appointed registration boards. In these fields (including the environment professions), the responsibility for setting and upholding practice standards has become the province of professional institutes and associations, albeit with varying degrees of government support. For example, where governments perceive that there may be public or environmental risk from shoddy work, legislation may require that assessments be undertaken, submitted and audited by a ‘suitably qualified person’ (or similar term), defined as being a member of or eligible for
membership of the relevant professional institute. This change in professional service industries from a collegial to competitive mode of operation poses ethical challenges, in that there is increased pressure to standardise procedures rather than customise services (Fannin & Hill, 1988).

2.2.4 The Environment Profession in Australia and New Zealand

... environmental expertise is important in defining and handling environmental problems. ... hardly any claims about environmental action ... are made without reference to expert knowledge. This has resulted in an enormous increase in environmental experts meant to provide recommendations and advice for decision makers. (Lidskog and Sundqvist 2018 pp 309-310)

As mentioned in Chapter 1, the environment profession in Australia and New Zealand (and elsewhere) is relatively young, and many practitioners aspire to professional status. This aspiration led to the formation of the Environment Institute of Australia (EIA, now EIANZ) in 1986-87. This was within 15 years of the first university environmental degree courses, which commenced in 1971 in Australia and 1973 in New Zealand, so the need for a professional institute ‘home’ for environmental practitioners had been recognised at a relatively early stage of growth.

Chapter 1 also outlined that data on the ‘green professions’ are difficult to obtain. Notwithstanding the lack of detailed data, the number of employed practitioners in Australia appears to have expanded until 2005-10 then slowed down, although overall the number of people employed in the broader category of ‘Professional Scientists and Technical Services’ increased by 33% between 2001 and 2011 (Australian Bureau of Statistics, 2019); and generally the number of employed people who categorise themselves as ‘professional’ (21.3%) became the single largest group in in the 2011 Census. The figures analysed in Chapter 1 indicate that at least 50,000 and possibly more than 300,000 scientists and technicians could be employed in environment-related jobs in Australia and New Zealand, and assuming that the proportion of these who consider themselves ‘professional’ is also approximately 20%, there may be between 10,000 and 60,000 environmental professionals in the two countries.

When EIA was formed 33 years ago, members were drawn from a variety of fields ranging from the biological sciences to water quality engineering, policy, resource management and law. There was no single educational qualification or training course which equipped a practitioner to be an environment professional, and this state of affairs continues, notwithstanding that EIANZ has introduced accreditation of university
courses with core environmental management curriculum elements (EIANZ, 2018). In this respect, the environment profession differs from other professions that exercise more control over educational standards and training of their practitioners.

The environment profession is growing and becoming professionalised, mirroring the historical trajectory established by the engineering profession in the decades following the mid-19th century (Larson, 1977). Like the engineering profession, environmental practice adopts a dominant epistemology of ‘technical rationality’ (Schon 1995). Also like the engineering profession in its early establishment years, environmental practice is currently characterised diversity, with multiple areas and standards of competency which defy uniform academic accreditation, and is beset by community distrust and rival claims. However unlike engineering during its ‘professionalisation project’ decades, the growth of the environmental profession has been in response to increasingly complex regulations, initiated not by the profession, but driven more by community demands for conservation and sustainable development.

New branches, disciplines and sub-disciplines are emerging regularly, including the parallel field of industry environmental managers, which is developing as the environmental health and safety (EHS) profession (Snyder, 1993). The multiple specialised strands and wide diversity of competencies in the environment profession had until recently inhibited the accreditation of university programs, and the establishment and success of the Certified Environmental Practitioner Program represents one response to this situation by offering quality control, but not through testing competencies. High reliance is placed on referee statements regarding technical competence and ethical practice, followed by panel interviews. The criteria assessed during such interviews emphasise ethics as a common testable and unifying attribute. Another response has been to base the EIANZ Codes of Ethics and Professional Conduct on the shared values of environmental professionals, relating to both environmental ethics and professional ethics.

Professional environmental practice, notwithstanding that it encompasses policy, planning and law, is heavily influenced by science and accordingly places considerable emphasis on rigorous investigation and evidence. In this context, the implied pledge of service is that environment professionals will assist clients by providing best-practice technical advice, meet all regulatory requirements, act in the client’s interests and seek to reduce harm to the environment.
While the lack of a single educational pathway into practice distinguishes the environment profession from most other professions, there is a more significant difference with respect to the focus of professional ethics. The ethics of most professions are anthropocentric (concerned with behaviour of humans towards each other), and only a few (notably the veterinary profession) accord status and moral consideration to animals. In contrast, the environment profession extends moral consideration to future generations, to living non-human biota and all environmental processes on Earth in a distinctly non-anthropocentric ethical framework (Shrader-Frechette, 2005). Part of the value-base of the environment profession, ‘borrowed’ from the broader field of environmental ethics (DesJardins, Joseph R., 2018), is that practitioners in these disciplines are ‘stewards’ or guardians of the environment to the extent that they are qualified and experienced to understand and communicate the long-term environmental impacts of human activities. The principles of intergenerational equity and biological diversity are both enshrined in the goal of ecologically-sustainable development (ESD), as written into the first part (‘Promote environmental principles’) of the EIANZ Code of Ethics and Professional Conduct (EIANZ, 2012, p. 6).

However my experience in mentoring younger and early career practitioners, such as graduate scientists entering the profession, indicates concern and confusion regarding the lack of connection between workplace professional ethics and their personal environmental values.

Other clauses in the ethical codes of EIANZ include professional responsibilities for improving environmental quality and raising practice standards throughout industry and environmental practice generally, not just for EIANZ members. Environmental practice encompasses many disciplines, and most practitioners operate within teams to address the multi-disciplinary and interacting issues affecting the environment. Practice in these areas raises complex ethical issues, in part because a high proportion of controversial environmental issues are subject to a polarised discourse of development versus conservation. This polarisation affects debate and decisions at all levels including media, education, community attitudes, regulatory agencies and politics. In the USA, “… the word ‘environmentalist’ and even the expertise of the environmental professional have been plagued by misunderstanding and deliberate abuse” (Opie, 2004, p. 197). Environmental professionals in Australia and New Zealand do not refer to themselves or their profession as ‘environmentalist’ because it implies an activist or non-objective perspective, although that term is used in relation to professional
certification (Chartered Environmentalist) in Britain (Society for the Environment, 2020).

The environment profession’s progress towards trust and respect may be hampered by the adversarial nature of analysis and approval processes. Many environmental specialists are engaged by one ‘side’ or the other, and come to public attention when perceived to be an advocate, or subject to cross-examination in Court. This is not conducive to community trust, but perhaps even more disturbingly, the profession per se is challenged and could possibly be ‘captured’ by the adversarial nature of environmental practice, and may lose sight of the core precepts of professional obligations. In Australia, constant environmental conflict over many decades has created an adversarial battleground with respect to environmental and natural resource management (ENRM) in general, in which the voice of the profession is rarely heard. Indeed, Colvin (2020) reports that ENRM conflicts in Australia have only four participants – industry, government, conservationists and community. Colvin, Witt, and Lacey (2016) also report that such conflicts can be more usefully analysed by a social identity approach to understanding the motivations of various participants and stakeholders.

The EIANZ claims that the environment profession should have a voice in environmental policy issues and decisions, separate from industry, government, conservationists and the community i.e. be considered a fifth ‘participant’ in national discourse. A social identity approach is also likely to be useful in analysing the ethical perspectives of environmental practitioners, and accordingly identity theory and its applicability to professionals are reviewed in the next section.

2.2.5 The Relevance of Identity Theory

The importance of self-identity associated with being a professional, and its correlated ‘narrative’, is succinctly expressed as follows:

In general, professionals understand themselves as having responsibilities connected with the specific function they perform, a function which they alone have been entrusted by the community to fulfill. Koehn (1994, p. 48)

However in addition to this functional role, the construction of professional identity (those meanings that individuals attach to themselves in the professional role) is an important cognitive mechanism with many other layers and purposes; and is partly constructed by seeing themselves through the eyes of others, and their expectations
Identity-construction relies on socialisation into a profession, with various mechanisms and strategies actively employed by those entering a profession (becoming professionalised), including obtaining feedback from more senior practitioners (Caza & Creary, 2016, p. 16). Importantly, the moral decision-making of practitioners is influenced by their professional identities, and requires ongoing ‘identity-work’ as personal projects to not only enact but also act upon their professional identities (Lepisto, Crosina, & Pratt, 2015). The Caza & Creary study provides a research basis and terminology for the professional typologies analysed herein for the environment profession, although the experiences of practitioner pioneers in Australia and New Zealand are likely to be somewhat different in that (in general) they did not enter an existing profession, but helped create a new one.

Various studies have identified the links between personal values and environmental attitudes, and the behaviour that arises from such beliefs. One such is Schwartz’s Theory of Basic Human Values, originally proposed in 1992 as 10 motivationally distinct values (later revised to 19), with ‘Nature’ (preservation of the natural environment) grouped along with concern, tolerance, caring and trustworthiness under the higher order value of ‘Self-Transcendence’ (Schwartz, 2012). Schwartz’s emphasis on values as guiding principles for behaviour, for individuals and groups, has since been validated in many countries and cultures, and has been the basis for a range of related theories relevant to environmental practices. Values, attitudes and beliefs are reliable predictors of ‘pro-environmental’ behaviour, consistent with the Theory of Planned Behaviour linking attitudes to behaviour through a causal chain that includes an individual’s intentions, perceptions of norms and conventions, and perceived behavioural control i.e. whether or not a particular behaviour will achieve desired goals (Oreg & Katz-Gerro, 2006). These authors cite and extend Schwartz’s work to derive three different value-orientations (egostic, altruistic and biospheric) that influence awareness of environmental consequences and pro-environmental moral obligations. However these value-orientations may not be a strong influence on ethical decision-making by business managers (Issa & Pick, 2010), who propose the concept of ‘ethical mind-set’, the components of which are identified as being aesthetic judgment, spirituality, optimism, harmony and balance, contentment, truth telling, individual responsibility and professionalism.

This is similar in some ways to a ‘world view’ (Alawad & Kambal, 2019; Mackay, 2013; Peterson, Riley, Busch, & Liu, 2007) and has some parallels with the
concept of ‘ethical mindset’ (Issa & Pick, 2010), but with the added dimension of a professional role identity (Caza & Creary, 2016; Stets, 2006)

Magee Robert (2019, p. 381) defines ‘worldview’ as:

… a set of assumptions about physical and social reality that shapes the way a person perceives and interprets surrounding events and information .... Humans’ relationship with the environment is one of the core dimensions of a cultural worldview … [which] ...forms a mental context in which that person receives and processes information that has an environmental component.

This thesis argues, however, that the concepts of worldview, ethical mindset, value orientation and Theory of Planned Behaviour do not adequately address the links between the values and moral decisions of professionals. Of greater relevance and applicability to practice ethics are concepts of professional identity, and their influence on personal values for example Onaran (1996) with respect to architects, and Hensel (2014) with respect to graduating nurses. The three professional typologies which emerged from Hensel’s 2014 study of young nurses (‘champions’, ‘collaborators’ and ‘individualists’) may be useful in analysing attitudes and team roles, but is not particularly helpful in analysing their professional ethics.

Social psychology studies based on identity theory (Hogg, 2006) indicate that, in situations which involve role expectations, people ‘enact’ an identity, whether it be a role identity, person identity or social identity, depending on their perception of the situation, their commitment to an identity and the opportunities to express it. Stets (2006, p.96) makes the point that the “… meanings that individuals have for their identities affect how they will behave...”. The role of professionals in society is a prime example of identity theory operating in practice, both in terms of community expectation and individual practitioner perception of appropriate roles. Identity theory indicates that people adopt and act in accordance with their personal identity, social identity and role identity simultaneously. Accordingly, identity theory provides a framework for interpreting, reviewing and attributing meaning in practice, especially where professional conduct involves role expectations.

While professional role identities are based largely on a combination of individual person identity (Stets, 2006) and the ‘collective self-construal’ of social identity of a group or a profession (Hogg, 2006), they may also be influenced by cultural or group worldviews (Peterson, Riley et al., 2007), or by mental attitudes and personality traits such as optimistic or pessimistic, judgemental or inclusive, and so on. Hence professional identity reflects both social identity (wherein a practitioner may identify as
a member of one or more professions) and a more personal set of values and underlying beliefs about how people behave towards each other and their environment, in a work practice setting.

Stetts in Hogg (2006, p. 96) also reports that an individual’s commitment to an identity depends largely on personal networks (the number of people one relates to through that identity, and the strength or depth of those ties) and that people ‘perform’ in accordance with role expectations, according to which identity is called for by particular situations.

There has been little research to date regarding the professional identities assumed or constructed by environmental practitioners in relation to ethics. The investigations of (Gluch, 2009) and fellow researchers in Sweden into the identity of environmental professionals in the construction industry were focused on their effectiveness, not on their ethical principles. An approach to typologies among environmental professionals that builds on the theories of role identities is likely to be more appropriate for analysing the ethical principles of practitioners.

2.3 Literature Review Summary

This review of literature regarding ethics generally, and in relation to the professions, indicates that professionals share the moral standards and obligations of the wider community. Although professions in general are under challenge in the modern era, there remains a need for those with expertise and experience in specialised fields to be trusted by those who rely on their investigations and advice, and for those experts to share a commitment to use their knowledge and skills for the benefit of the community. These obligations and expectations are central to professional ethics. The special roles assumed by professionals and their relationship of trust with clients require emphasis on certain ethical obligations, and their role-identities may require specific additional ethical commitments (as addressed in ethical codes), but these do not exempt professionals from normal standards of moral behaviour. In the case of environmental practitioners, the additional considerations largely derive from environmental ethics, the relatively recent field of moral philosophy which deals with moral responsibilities towards nature and a sustainable future. Published research indicates that professionals in various disciplines adopt ethical principles and codes as part of their self-constructed professional identities, and these influence the way in which personal values are reflected in practice ethics and decision-making. The two broad strands of this literature
review, ethics and professionalism, are linked through the concepts and application of role identity.

There has been little if any research evidence to date that practitioners in the relatively-new environment profession adopt ethical principles and integrate their personal values through self-constructed identities. Nor has there been research into how environmental practitioners address the sometimes-conflicting obligations of professional and environmental ethics. These issues were explored in the semi-structured interviews and interpretive phenomenological analysis detailed in Chapter 3 below, with the findings discussed in the following Chapters 4 and 5.

3. METHODOLOGY

This section reviews published literature regarding various approaches to research into professional ethics, and more specifically the techniques and theoretical bases of relevant qualitative research methods, before detailing the methodology adopted for this thesis.

3.1 Review of Theoretical Approaches

3.1.1 Research into Professional Ethics

Previous research into the ethical principles and practice of professionals has adopted a wide range of approaches. The following broad lines of enquiry are discernible, although researchers and authors have often combined two or more of these:

(a) Descriptive assessments, literature reviews and document analyses, including comparisons of applied ethics and ethical codes in various professions e.g. Irland (2019) and Barry and Ohland (2009) and historical reviews of code development in a range of practice disciplines e.g. Larson (1977) and Dunbar (1992);

(b) Non-empirical articles, case-studies (real or hypothetical) and their analysis, essays and practice-based opinions, including the ethical concerns facing several professions, the application of theories and practices in response to such issues, and the teaching of such principles e.g. Alexandra and Miller (2009) and Bowden (2012). This category includes recommendations and reviews of the values and ethics of forestry and natural resource management.
e.g. Fox (2005), Batavia and Nelson (2019) and Angeloni (2019), and the ethics of large scale Environmental Impact Assessments (EIAs) in relation to community values (Taebi, Cuppen, Correljé, van de Grift, & Pesch, 2016) as well as ethics recommendations for environmental professionals (Wogaman, 2004).

(c) ‘Positivist’ survey questionnaires with quantitative analysis e.g. Arthur, Earl, Thompson, and Ward (2019) who profiled 2,340 professionals across five discrete professions with respect to personal character qualities and judgment of professionals, taking into account both virtue ethics and positive psychology to ‘… take a holistic account of professionals’ valuation of qualities that pertained to character and judgement …’ (Arthur, Earl et al., 2019, p. 9). In health-related professions, the relationship between ethical issues and occupational stress among nurses in the USA was surveyed by (Ulrich, Taylor et al., 2010) who statistically analysed 422 survey returns reporting ethical issues and related stress among nurses in USA. In business-related fields (Engelhardt, 1984) had probed the descriptive and normative ethics of 900 insurance agents and 800 insurance executives, and reported that both groups had a generally similar genuine but practical view of consumers’ rights and their own business needs, that their understanding of and opinions regarding industry ethics was fairly uniform, and that the ethics of their industry could be improved.

Several researchers have surveyed ethical attitudes among students in profession-related university courses, including Valentine and Bateman (2011) who examined the relationship between ethical ideology, moral intensity, ethical intentions, social context and ethical reasoning, and statistically analysed responses from 387 undergraduate business students to an ethical scenario specifically designed to test these relationships.

Quantitative research undertaken to date also included structured interviews with industry leaders such as those undertaken by Chorlian (2008), who interviewed 26 leaders in the residential mortgage lending industry to explore the ethical principles that they believe are most important to their profession, in the context of the then recent financial crisis in the industry in the USA. Of greater relevance to environmental professionals is the empirical investigation of professional ‘enviroresponsibility’ among Canadian engineers in three Canadian provinces (Gaudet, 2010), although the ‘Ecological
Modernisation Theory’ adopted as a framework in her study (Sonnenfeld & Mol, 2002) has not yet gained traction in professional ethics research and has attracted criticism from environmental activists (Cohen, 2006).

Qualitative research into the manner in which professionals address and resolve ethical dilemmas, the problems they face in dealing with these issues in an organisational context, and the training and support they need (McAuliffe & Sudbery, 2005). Comprehensive bodies of literature in professional ethics are found in nursing (Burston & Tuckett, 2013; Ulrich, Taylor et al., 2010), in medicine (Hurst, Hull, DuVal, & Danis, 2005) and social work (Congress & McAuliffe, 2006; McAuliffe, 2014; Reamer, 1998). A number of studies discuss the relevance of codes of ethics, the nature of professional ethics in social work and, most directly related to this study, studies of how social workers use ethics in their practice, and the development of ‘practice wisdom’ (Samson, 2015). McAuliffe (2005) reports on the impacts of ethical dilemmas on social work professionals and recommends professional support and training, both in their initial education and placements, and on an ongoing basis throughout their careers.

Other qualitative approaches have included concept mapping e.g. Pikoff-Mirwis (2011) who modelled the ethical alignment of psychologists, and discourse analysis e.g. Ryan (1999) \ who adopted a postmodern critical interpretation approach to the discourse of two outdoor leaders and scholars with respect to environmental ethics. However discourse analysis, while offering a powerful deconstructive tool, is ineffective in linking discourse to ‘real world’ actions (Reid, Flowers, & Larkin, 2005).

Phenomenological studies, where phenomenology is “… concerned with revealing the ‘essence’ or ‘essential structure’ of any phenomenon under investigation …” (Morrow, Rodriguez, & King, 2015, p. 643). Reid, Flowers et al. (2005, p. 20) promoted Interpretive Phenomenological Analysis (IPA) for psychological research because ‘ … the participant’s ‘lived experience’ is coupled with a subjective and reflective process of interpretation, in which the analyst explicitly enters into the research process’. Tapson (2016) described her approach to studying ethics among counselling professionals as:

IPA is committed to the exploration of meaning and sense-making … placing great emphasis upon the structure of experience. The focus is upon idiographic interpretation, therefore IPA favours small samples ….and
exploratory work, where there is a paucity of literature into professionalism in counselling (Tapson, 2016, p. 152).

Troesch (2015), exploring engineering ethics pedagogy, considers that the central question of “What is it to be an ethical engineer?” is a phenomenological question, requiring interpretation and understanding of practitioner experience, and her insight applies equally to other professions.

Using IPA, DiPasquale (2010) explored the lived experiences of professionals in relation to ethics and concluded that ‘… the behavior of professionals and how they perceived ethics, communicated ethical expectations, … influenced ethics in their company, with their customers, or broadly within the industry’ (DiPasquale, 2010, p. 148). Similarly, Baghdasarian (2007) investigated perceptions of ethics among certified practicing accountants in USA using an IPA approach.

However a review of the literature has not revealed any empirical research, qualitative or quantitative, undertaken to date into the ethics of practitioners in the environment profession. The reasons for this ‘gap’ are unclear, but could be related to the relative newness, diversity and low public profile of environmental practice and environmental management as professions (Snyder, 1993).

The developing field of environmental ethics has also largely overlooked the role and moral responsibilities of the environmental profession to date, focusing instead on the attitudes and practical action options of individuals, business, government and society in general. Only recently have conservation groups directed their protests towards multidisciplinary consultants serving the coal industry, for example, by picketing the offices of consultants for the Adani coal mine in Queensland (Friends of the Earth Australia, 2018), but even in this case there was no distinction between the engineering and environmental roles of the consultancy firm, so there has been little specific scrutiny of the role and ethics of the environmental profession.

3.1.2 Qualitative Research in General

Qualitative research is an empirical approach which:

… consists of a set of interpretive, material practices that make the world visible …. qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (Denzin & Lincoln, 2011, p. 3).
It differs from quantitative approaches in that qualitative research aims to understand that “… meaning is socially constructed by individuals interacting with their world. The world, or reality, is not the fixed, single, agreed upon or measurable phenomenon that it is assumed to be in positivist, quantitative research …” (Merriam, 2019, p. 3). In analysing qualitative, rather quantitative data, “drawing conclusions ….often becomes a challenging task” (Oliver-Hoyo & Allen, 2006, p. 42).

When reviewing the epistemological approaches to qualitative data interpretation, analysis and representation Denzin and Lincoln (2005) also note that evaluative criteria are based on one of three basic positions: foundational (relying on objectivity, validity and reliability), non-foundational (wherein all knowledge is relative and uncertain) or quasi-foundational (relying on plausibility, credibility and relevance). Of the three alternatives, quasi-foundational criteria is most appropriate for constructivist rather than positivistic analysis, as discussed in further detail in Section 3.1.3 below.

### 3.1.3 Theoretical Approaches

The role of theory in qualitative research is pervasive but is often under-rated or limited to methodology. (Anfara & Mertz, 2006) notes that abstract theories are the highest-order level at which we categorise and make sense of events, sensations or phenomena. The role of theory in qualitative research may be summarised as follows:

… It must be clear, have structure, coherence, scope, generalizability and pragmatic application. It must be relevant and useful. It must also build upon what is already known. The key indicator is, does it provide a better understanding? Kelly (2009, p. 289)

Not all theoretical frameworks carry the same weight. Some are ‘grand’ theories which attempt to explain a broad range of phenomena while some are mid-range and applicable to a narrower range (Anfara & Mertz, 2006; Crotty, 1998). Several authors, including Reason (2008, p. 1373) consider that good theoretical frameworks “… don’t nail things down too firmly …” but provide just enough structure to help think through a methodological issue i.e. they are part of the inquiry rather than part of certainty.

Selection of an appropriate theoretical framework is not regarded as a ‘top down’ process which progressively funnels down to reveal the best techniques to be used, but is more often a ‘bottom up’ or iterative process. Crotty (1998) suggests a four step approach in developing a research proposal:
• selection of methods (techniques or procedures) such as case studies, interviews and theme identification;
• justification of these methods within a broader methodology (the strategy or process which link the methods to desired outcomes) such as ethnography or action research, sometime referred to as a research tradition (Anfara & Mertz, 2006)
• identification of the theoretical perspective (philosophical stance) underlying and informing the methodology, such as positivism or interpretivism; and
• locating these within a general epistemology (understandings of knowledge and truth, embedded in the theoretical perspective and methodology) (Somekh & Lewin, 2005), such as constructionism.

Other authors (e.g. Mackenzie and Knipe (2006)), have used the term ‘paradigm’ when referring to epistemology representing theoretical perspectives that influence the researcher’s questions. For Tracy (2013, p. 38):

Paradigms are preferred ways of understanding reality, building knowledge, and gathering information about the world. A researcher's paradigm can differ on the basis of ontology (the nature of reality), epistemology (the nature of knowledge), axiology (the values associated with areas of research and theorizing), or methodology (strategies for gathering, collecting, and analyzing data).

Somekh and Lewin (2005) consider that paradigms also represent ‘clubs’ of researchers who share common assumptions, and who tend to work as research communities within the same recognisable frameworks.

The approach adopted to the selection of an appropriate theoretical base for this research has been iterative, reviewing literature which provided:

• A ‘top down’ approach, starting with epistemological alternatives and progressing to theoretical perspectives then methodology;
• A ‘bottom up’ approach, starting with selection of appropriate techniques (such as interviews) then fitting these within relevant methodology and theoretical perspective; and
• Examples of qualitative research into professional ethics, especially those which explicitly presented their basis in theory, such that the theoretical perspective adopted by the researchers could be probed.
In terms of the four broad approaches to the use of theory in qualitative research (Tracy, 2013, p. 49), the type of theory considered to be most appropriate for research into the ethics of professional practice is one which deals with how individuals who are part of an identifiable group construct meaning within that culture. As detailed below, this type of research embodies the following characteristics:

- Qualitative
- Theory-based
- Ethnographic
- Constructionist/Constructivist
- Interpretivist and Phenomenological and
- Concerned with Social Identity

These are described and explored in more detail as follows:

(a) **Qualitative:**

Investigations into the motivations and practices of a group of people (such as those within a profession) are qualitative, in that there is no objective truth ‘out there’ to be discovered in a mechanistic manner; but the reality is “… complex, multi-faceted and constructed by individuals …” (Grbich, 1999, p. 24). In this sense, qualitative research is within a ‘naturalistic’ paradigm (Lincoln & Guba, 2007), which may be distinguished from quantitative research within a ‘positivist’ paradigm. This is not to imply that qualitative/naturalistic research lacks rigour or reliability because it is not objective, but it does require the researcher to take steps to overcome subjectivity and ensure ‘trustworthiness’ (Maggs-Rapport, 2000).

(b) **Theory-based:**

The research has been cautiously based on established theory and well-tried methods rather than attempt to generate new theories or apply postmodern/post-structural or feminist approaches.

(c) **Ethnographic:**

Although not a theoretical framework per se, ethnography (‘writing about people’) is a research tradition which investigates a selected culture which has a shared system of beliefs and attitudes (Grbich, 1999). Ethnographic studies of senior professionals and their ethics have been undertaken e.g. Fonville (2002), but not in the environmental field. While ethnographic research increasingly uses a range of techniques, all need meticulous data collection and analysis e.g. by collecting quotes
and stories (primary data), with no preconceived hypothesis (Grbich 1999). The same author considers ‘classical’ ethnography to be by neutral reflective researchers seeking participants’ view of reality through recorded interviews, in order to interpret an existing culture. However the ethnographic research for this thesis is as an ‘insider’, not as a neutral observer, as discussed in the introductory chapter.

(d) Constructionist/Constructivist:

Constructionism involves the making of meaning through interactions between humans and their world (Crotty, 1998). He distinguishes between constructionism (the making of meaning by groups) and constructivism (the making of meaning by individuals). Adopting this distinction, research into the development of a code of ethics by a professional institute (and the role which such a code may play in group coherence) would be within a ‘constructionist’ epistemology, whereas research into how individual practitioners construct meaning in their practices through their own ethics could be considered ‘constructivist’.

At the commencement of this research, it was unclear whether experienced professionals had developed their ethical principles within the socially-constructed concept of ethics of a professional association and its corresponding Code of Ethics (‘constructionist’), or developed their personal ethical principles as individuals (‘constructivist’).

However the terms appear to be interchangeable, and many authors use the term ‘constructivism’ as the epistemological framework for research into the socially constructed perceptions of the people being researched, where “... the perceptions of the researcher and other participants in the ‘socially constructed’ world are intricately interwoven …” (Grbich, 1999, p. 5), citing Kellehear (1993). For example, an interpretive study by Fonville (2002) examined how nurse executives acquired and used ethics knowledge, using a constructivist paradigm which involved probing a personal critical incident followed by semi-structured interviews. However adopting Crotty’s (1998) definition, this research may more appropriately be identified as ‘constructionist’.

(e) Interpretivist and Phenomenological:

The theoretical perspective of interpretivism “.... looks for culturally derived and historically situated interpretations of the social life-world …” (Crotty, 1998, p. 67). In his categorisations, phenomenology is one of several forms of the interpretivism theoretical perspective.
Phenomenology is based on the reality of a ‘lived experience’ (Reid, Flowers et al., 2005) wherein certain truths are accessible through inner subjectivity (Flood, 2010) and phenomenological methods aim “… to describe, understand and interpret the meanings of experiences of human life …” Grbich (1999) considers that phenomenology and ethnography are different qualitative research traditions, and regards phenomenology as a ‘theory-generating’ type of research based on a ‘transcendental or existential’ approach to consciousness and the experience of reality. This is supported by Crotty’s (1998) description of phenomenology as an approach which sets aside (as much as possible) prevailing culturally-derived concepts. In interpretive phenomenological analysis (IPA):

The participant's 'lived experience' is coupled with a subjective and reflective process of interpretation, in which the analyst explicitly enters into the research process. …. the analyst is still on familiar territory, in terms of the inferences that can be made from 'data' (often interview transcripts) to 'persons' … IPA makes these inferences cautiously, … to make interpretations that discuss meaning, cognition, affect and action. These interpretations … are developed around a central account of the participants' experiences (their phenomenological world) … (Reid, Flowers et al., 2005, p. 5)

Although phenomenological and ethnographic research are similar in that they “… both use interviews, both use a combination of open-ended and structured questioning methods and both look for meaning in the narratives …” (Maggs-Rapport, 2000, p. 220), there are significant differences as follows:

**Table 1: Distinguishing features of ethnography and interpretive phenomenology**

<table>
<thead>
<tr>
<th>Research method and definition</th>
<th>Distinguishing features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnography: concentrating on the descriptions people give to their routine and practices; the researcher can concurrently explore several views.</td>
<td>The ethnographer is an observer...Meaning is cultural</td>
</tr>
<tr>
<td>Interpretive phenomenology: concentrating on the phenomenon being studied; the researcher discovers and interprets meaning embedded in the words of participant narrative.</td>
<td>The phenomenologist is the data interpreter, empowered by an understanding of participant experience … Meaning is what the researcher understands it to be</td>
</tr>
</tbody>
</table>


Several qualitative studies into the ethics of professional groups are titled ‘phenomenological studies’ (e.g. DiPasquale (2010)), notwithstanding that they include
ethnographic elements, representing methodological combinations as envisaged by Maggs-Rapport (2000).

As an example of phenomenological studies relating to ethics, Zmuda (2009) explored the essential meaning which students attributed to the shared experience of an ethics course, through semi-structured interviews with 10 students followed by reductive data analysis using a modification of van Kaam’s phenomenological methodology (Moustakas, 1994, pp. 120-154) and NVivo7 software. While the students believed that the course had heightened their awareness of moral issues, they did not believe that it would affect their behaviour when facing ethical dilemmas. Zmuda’s research concluded that “The participants unanimously attributed their conduct in situations with ethical dimensions to the influences in their youth by significant role models …” (Zmuda, 2009, p. iii)

IPA has also been used to explore the construction of emerging physician professional identity in Canadian medical students, as reported by Konkin and Suddards (2012).

A combination of an ethnographic approach and IPA therefore appears suitable for investigating ethical principles and practice as they are understood by and frame the behaviour of professionals, in that:

- their descriptions of childhood and early-career influences on values are appropriately addressed by an ethnographic approach; while
- the participants’ interpretations of their ethical behaviour, their review of how and why they had responded to certain situations and conversations, and the advice they would give to juniors, are questions regarding lived experience (‘What is my experience of something?’ ‘How do people talk about something?’), and hence appropriate for phenomenological analysis.

(f) Concerned with Social identity

The ethical principles developed by practitioners, and the associated obligations, are largely derived from certain conceptions they have regarding their profession (Ellin and Lunch 1982). Social identity theory is a ‘mid range’ theoretical approach based on “… social psychological analysis of the role of self conception in group membership, group processes and intergroup relations …” where groups are defined cognitively “… in terms of people’s self-conception as group members …” (Hogg, 2006, p. 111). It appears to have particular applicability to professions, and the way in which members define themselves as part of a professional group distinct from other professions or non-
professionals; for example workplace colleagues with different training and roles. Several researchers have undertaken semi-structured interviews of professional practitioners (or professionals-in-training) and identified sub-categories, such as:

- the three professional identity perspectives, or typologies described by Hensel (2014, pp. 128-130) as distinguishing factors among graduating nurses (viz. ‘the champions’, ‘the individualists’ and ‘the collaborators’),
- the three ideological constructs of media professionals (‘professionalism’, ‘journalist as Good Samaritan’, and ‘objective reporting’), as described by Harless (1990, p. 217) and
- five ‘self conceptions’ of professional architects and landscape architects (as master designer, researcher designer, communicative designer, political designer or as negotiator), as described by Onaran (1996, p. vii).

The concepts of ‘world view’, personal values and ‘ethical ideology’ also appear relevant to analysing professional identities and practitioner frameworks for ethical decision-making. For example, the experience of ‘moral distress’ among Queensland nurses is reported to be correlated with individual character traits, experiences and personal attributes, including their ‘world view’ which is “… understood to encapsulate, for example, personal values, role perceptions and culture …” (Burston & Tuckett, 2013, p. 315) Their analysis indicates that a nurse’s world view, which contributes to the moral distress experience, includes “… expectations of standards of care, moral sensitivity and individual ethical perspectives … the nurse’s value perspective will likewise contribute …” (Burston & Tuckett, 2013, p.315)

The related concept of ‘moral intensity’ influences ethical decision-making, as does world view and ethical ideology:

... ethical ideologies prominently influence ethical decisions at the individual level of influence … while moral intensity presents a set of issue-contingencies that impact ethical reasoning at the situational level. (Valentine & Bateman, 2011, p. 156)

Their quantitative analysis of survey data from 387 business students in the USA indicated that idealism, moral intensity, social consensus, and work experience combine as predictors of ethical issue recognition, whereas “… recognition of an ethical issue, relativism, moral intensity, social consensus, and competitive context worked together to predict ethical intention” (Valentine & Bateman, 2011, p.155).
Similarly, a positivist survey of 147 business students in the USA, reported “…
religion, upbringing, certification, and profession to be highly predictive of students’
perceptions of their own moral choices” (Bell, Guyot, Martin, & Meier, 2011, p. 1).

3.1.4 Conclusions regarding Theory and Approach

The above review of relevant literature regarding approaches and research
methods provides the basis for presenting the methodology adopted for investigating the
ethics of a particular profession, and the rationale for selecting this approach.

The core research question ‘How do leading environmental practitioners construct
meaning for their practices with respect to ethical principles and codes?’ has been
addressed through interviewing seasoned practitioners and analysing their responses and
stories. As I am a senior member of the environment profession and had been closely
involved with both the 2012 revision of the EIANZ Code of Ethics and with
certification of practitioners, as detailed in Chapter1, this investigation of fellow
practitioners is ‘insider research’ (Taylor, 2011). Accordingly, it is particularly
important to demonstrate the validity of the research framework, theory base, a rigorous
credible method and interviewee selection (Teusner, 2016).

A positivist approach, with surveys and quantitative analysis to determine a ‘true’
set of answers to the research question, was unlikely to explore the nuances and
individual narratives of seasoned practitioners who had developed their own
professional ethics, with or without the assistance of Institute codes, during a period
when the environmental profession was developing. A qualitative approach is more
appropriate, and in particular an interpretivist phenomenological approach (within a
constructionist paradigm) and a social identity perspective, in order to analyse the
meanings which experienced environmental professionals attach to their practices, with
respect to ethics.

This investigation comprised semi-structured interviews of senior professionals in
private and public sectors across Australia and New Zealand, exploring their
perceptions of how ethics have influenced their practices and vice versa. The study
adopted an interpretivist phenomenological analysis (IPA) approach, in that it seeks to
describe and understand how people make sense of what is happening (Bloor & Wood,
2006), in this case how environmental professionals construct meaning within their
practices, with respect to ethics. DiPasquale (2010) adopted a similar
phenomenological approach to studying the perceptions of ethics in the title insurance
industry in Florida, and IPA was also the basis for an investigation by Welton (2014)
into part-time academic staff in the USA and their construction of identity within universities.

3.2 Research Interviews

3.2.1 Interviewing as a Research Tool

The one-on-one interview is the most widely used research tool in social science investigations, making a substantial contribution to research and knowledge (Morris, 2009), especially in qualitative investigations (Perakyla, 2005). Broadly, interviews are categorised as structured (providing responses to set questions), unstructured conversations suitable for discourse analysis, or semi-structured (or ‘depth’ or ‘ethnographic’ interviews). Bloor & Wood suggest that the semi-structured approach has “… a more informal, conversational character, being shaped partly by the interviewer's pre-existing topic guide and partly by concerns that are emergent in the interview” and that, compared with formal structured interviews, which can be analysed quantitatively, semi-structured interviewing:

… sacrifices standardization and repeatability between interviews in order to grasp more fully the social meanings of the respondent's world … seeking …. an inter-subjective bridge between themselves and their respondent to allow them to imaginatively share (and subsequently describe) their respondent's world (Bloor & Wood, 2006, p. 105).

When outlining methods of collecting and analysing empirical material, Denzin and Lincoln (2011, p. 415) note that “… the socially situated researcher creates, through interaction and material practices, those realities and representations that are the subject matter of enquiry.” This is, in essence, how the interviews were undertaken for this study. Asking questions within such a framework established a one-to-one collaboration in an ethical discussion and conversation with seasoned professionals.

3.2.2 Participant Selection and Recruitment

Interviews for interpretivist phenomenological analysis (IPA) are generally not randomised, but interviewees are selected because they have certain experiences in common with each other, they share certain perspectives and understand certain terms and approaches (homogeneous sampling); and can offer meaningful insight into the topic (purposive sampling) (Battaglia, 2008; Smith, Flowers, & Larkin, 2009). Research for the current investigation sought the participation of senior practitioners within the
environmental profession (those with at least 20 years experience) because it was considered that:

(a) senior practitioners are more likely to have developed, tested and refined their own practice ethics through cases and examples of ethical dilemmas faced and resolved, and more likely to have been in situations where they have influenced or imparted ethical principles to others, than have more junior colleagues;

(b) environmental practitioners with considerable experience are likely to have worked for, with and in competition with, other environmental professionals over the years, and hence be aware of and have opinions regarding the ethical practices and reputations, such that they could comment on questions such as “how do you judge whether another practitioner is ethical or unethical?”;

(c) the narratives of senior practitioners, in the form of examples, career journeys and practice wisdom, can provide valuable lessons and ethical ‘guideposts’ for young and early career professionals;

(d) they are likely to have developed their professional identity and practice ethics while the environmental professions and institutes (such as EIANZ) were still maturing, and to have influenced the values and ethics of others, whether as an employer, consultant or mentor, or of the developing profession more generally; and

(e) in the years when these senior professionals commenced practice (20–40 years ago), the environment profession in Australia and New Zealand was a relatively small group, compared to longer-established and larger professions. Accordingly, a limited number of interviewees has potential to reflect generalisable outcomes, notwithstanding a small sample size.

While several of the interviewees were currently or formerly in leadership roles within their fields or in the profession more generally, this was not a criterion for participant recruitment. Accordingly, the interviewees did not constitute an ‘elite’ group in the sense discussed by Empson (2018), although as with ‘elite’ group interviewing, the focus on senior practitioners reduced any power imbalance between researcher and participants, an issue which requires addressing in ethnographic research (Harvey, 2010; Morris, 2009). However, to reduce potential confusion regarding the use of the term ‘senior’, which could allude to age, experience or leadership, the term ‘seasoned practitioners’ has been adopted for this research.
A preliminary recruitment strategy, tested in pilot interviews but then rejected, was ‘snowball sampling’ which ‘… relies on referrals from initially sampled respondents to other persons believed to have the characteristic of interest …’ (Johnson, 2014, p. 1). During the three pilot interviews, respondents were asked to provide names and contact details of environmental professionals they regarded as ethical practitioners. At that stage, it was intended that a process of sampling triangulation would allow invitations to participate in subsequent interviews to be sent to practitioners whom two or more respondents regarded as ethical.

However, three problems emerged with this ‘snowball sampling’ strategy. First, it became apparent that the interviewees would probably each identify different ethical practitioners, with little or no sampling triangulation, because the environmental profession is so diverse (most of the ‘seasoned practitioners’ in Australia and New Zealand practice in different fields); and second, because a sampling triangulation strategy (if successful) would be counter-productive for purposive sampling. It was concluded that it could potentially provide a non-representative sample of respondents, rather than a range of locations, disciplines and sectors, and an appropriate gender balance. The third problem, as identified by the Griffith University Human Ethics Review Committee (see 3.2.6 below) was that it could compromise confidentiality, as some respondents’ names and contact details would have been provided by other respondents.

The primary criterion for identifying ‘seasoned practitioners’ for interview invitations was a minimum of 15 years in environmental practice. In the case of those practitioners who were certified under the EIANZ Certified Environmental Practitioner scheme, this information was publicly available on the CEnvP web site. Most CEnvPs are listed on the web site register, which lists their certification details. A minimum prerequisite for certification is five (5) years practice experience, allowing the register to be used for selecting practitioners according to approximate number of years in practice.

Additional criteria for recruitment were:

- Location: Invitations were sent to practitioners in each Australian State & Australian Capital Territory (ACT), and New Zealand;
- Gender: A balance was sought between male and female practitioners;
- Industry sector: A cross-section was sought across disciplines (technical/science-based, management, planning-based, compliance auditing
and impact assessment) and sectors (government agency, consulting and industry); and

- ‘Arms-length’ professional relationship with the researcher: Apart from the three respondents for the initial pilot interviews, practitioners with whom I had worked closely (in consultancy or on committees and boards in the past 15 years) were not invited.

Participants were not restricted to EIANZ members because:

(a) A high proportion of environmental practitioners in Australia and New Zealand do not belong to EIANZ (Connection Research, 2009) although many of them may belong to other professional and/or technical associations; and

(b) One of the semi-structured interview questions probed whether or not leading environmental practitioners perceive themselves to be part of a profession, and this question was anticipated to be consistently answered in the affirmative by practitioners who have chosen to belong to EIANZ.

In order to sample views across a representative cross-section of the senior ranks of the profession, several lists of suitable interviewees were prepared. If acceptances arising from first round of invitations lacked diversity with respect to location, gender or sector, then this was addressed in the subsequent round of invitations, selected from a second or third list. For example, several ‘rounds’ of invitations were required to avoid over-representation by Queensland-based male private consultants, consistent with respondent selection by nonprobability ‘quota sampling’ (Battaglia, 2008).

This study focused on seasoned practitioners in Australia and New Zealand, rather than a more international sample, for both practical (cost and time) and legal reasons. Letters of invitation to potential participants included a warning that they should not identify people or cases that carry legal responsibility to notify instances of environmental damage. Environmental legislation and case law precedents regarding the responsibility to notify authorities of unlawful activities, and the penalties involved, differ between jurisdictions, so it was concluded that interviews with practitioners in a range of overseas countries would have the potential for extra risk.

Participants were selected for invitation via personal professional networks within EIANZ (for the three pilot interviews in South-east Queensland) and subsequently by using the publicly accessible CEnvP database. However, the CEnvP Register includes contact details for only some practitioners (listing such information is optional) and
additional contact details were accessed where necessary through the social media platform ‘Linkedin’.

By focusing on certified practitioners, the recruitment strategy targeted mainly professionals who are currently practicing. Retired practitioners often relinquish their certification, due to the annual cost of renewal or other factors. However, three retired senior practitioners were also invited as representatives of the senior ranks of the profession, because their experience and perspectives on ethical practice were likely to be worthy of consideration in this study.

The above recruitment strategy is biased towards practitioners who are certified under the EIANZ Scheme, and also towards practitioners who are members of EIANZ, although many CEnvPs choose not to belong to that Institute (membership is not a prerequisite for certification (EIANZ, 2019)). To ensure that other non-Institute viewpoints were also represented, several senior professionals who were neither EIANZ members nor CEnvPs were invited, in order to provide a different perspective (a respondent selection strategy also consistent with ‘quota sampling’), and two such practitioners were interviewed.

Three pilot interviews of Queensland-based practitioners were conducted in in December 2014 and January 2015, in order to test the structured interview questions (see 3.8 below). Subsequently letters of invitation to participate in this research by agreeing to interviews were sent to twenty-nine (29) other senior practitioners between October 2017 and April 2018, resulting in eighteen (18) rejections or lack of replies and eleven (11) acceptances. The semi-structured interview questions were not significantly changed following the three pilot interviews, hence the three 2014/15 interviews were included in the research data, resulting in a total of fourteen (14) participants, out of a total of thirty-two (32) invitations. This number is considered appropriate for in-depth interpretive phenomenological analysis (IPA) where the number of interviewees usually ranges between three (3) and fifteen (15) (Reid, Flowers et al., 2005; Smith, Flowers et al., 2009).

3.2.3 Participants Interviewed

The following Table 2 summarises the demographic characteristics and interview location of the 14 respondents, together with their pseudonyms and professional associations.
### Table 2: Characteristics of Interviewees (alphabetical)

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>No of years practice experience &amp; (Age at interview)</th>
<th>Position/Role; Sector (&amp; field) + previous roles</th>
<th>Location* (Interview type) &amp; transcript length (minutes/pages)</th>
<th>Professional Institutes, Associations &amp; Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Alex’</td>
<td>&gt;40 yrs exp. (age: 69)</td>
<td>Consultant/business owner (Rural planner) + previously a Council officer / regional development manager</td>
<td>Place ‘C’- Regional (phone) 117 min/31pp</td>
<td>EIANZ, CEnvP</td>
</tr>
<tr>
<td>BA, Dip Ed, PG Dipl Planning, PhD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Cameron’</td>
<td>21 yrs exp (age 45-50)</td>
<td>Consultant / Business Owner (environmental approvals)</td>
<td>Place ‘D’-Metro (phone) 54 min/13pp</td>
<td>EIANZ, CEnvP, PIA</td>
</tr>
<tr>
<td>BA(Env &amp; Geogr) + Masters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Chris’</td>
<td>&gt;35 yrs exp. (age:55-60)</td>
<td>Consultant + business owner (Resource Approvals &amp; Training)</td>
<td>Place ‘A’-Metro (face-to-face) 83 min/16pp</td>
<td>EIANZ, CEnvP</td>
</tr>
<tr>
<td>Bsc Biol + Grad Dip Nat Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Dallas’</td>
<td>&gt;40 yrs exp. (age 65-70)</td>
<td>Retired consultant / business owner (Extractive industries)</td>
<td>Place ‘A’-Metro (face-to-face) 67 min/32pp</td>
<td>AIMM, Inst of Quarrying Austr, Austr Inst Geoscientists formerly QELA</td>
</tr>
<tr>
<td>BSc (Geol)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSc(Zool), PhD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Finley’</td>
<td>&gt;35 yrs exp. (age 72)</td>
<td>Retired government officer (primary industries)</td>
<td>Place ‘A’-Metro (face-to-face) 74 min/35pp</td>
<td>EIANZ, Soil Science Soc, AustInstAgrSc Former CPAg</td>
</tr>
<tr>
<td>B Agr Sc, Masters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Jesse’</td>
<td>20-25 yrs exp (age 45-50)</td>
<td>Consultant /business owner (Rural Waste water)</td>
<td>Place ‘G’- Regional (face-to-face) 67 min/18pp</td>
<td>EIANZ, CEnvP, AHSI, CPAg, Soil Soc + 2 other certifications</td>
</tr>
<tr>
<td>B Agr Sc + Masters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Jordan’</td>
<td>&gt;25 yrs exp (age 55-60)</td>
<td>Senior consultant multidisciplinary firm + previous government agency director</td>
<td>Place ‘B’-Metro (phone) 58 min/13pp</td>
<td>EIANZ,</td>
</tr>
<tr>
<td>BSc (Maths) + PhD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Lennon’</td>
<td>&gt;25 yrs exp (age 66)</td>
<td>Activist (Community resources advocate / climate change campaigner) + previous academic, local government, consultant &amp; facilitator</td>
<td>Place ‘A’-Metro (face-to-face) 73 min/22pp</td>
<td>Now Nil</td>
</tr>
<tr>
<td>BA(Geogr) + Masters (2)</td>
<td></td>
<td></td>
<td></td>
<td>Former EIANZ &amp; Austr Facilitators Network</td>
</tr>
<tr>
<td>‘Logan’</td>
<td>38 yrs exp. (age 55-60)</td>
<td>Govt officer (conservation agency)</td>
<td>Place ‘C’-Metro (phone)</td>
<td>EIANZ CEnvP, ANZ Soc of Ecological</td>
</tr>
<tr>
<td>BAppSc, Grad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In summary, the above 14 seasoned practitioners have the following characteristics:

- Each has >20 years practice experience, representing a combined total of more than 400 years experience;
- The sample includes eight (8) male and six (6) female practitioners, although Table 2 avoids listing gender in order to minimise potential identification;
- Six (6) were interviewed face-to-face and eight (8) by telephone;
- Six (6) were Queensland-based, two (2) in New South Wales and one each in Victoria, Tasmania, New Zealand, South Australia and Western Australia;
- The sample included 12 based in metropolitan locations, and two (2) in regional centres;
- 11 are still actively practicing, the remaining three (3) are retired;
Six (6) are private consultants (4 as owners, 1 as employee, 1 in large multidisciplinary firm) and a further two (2) are retired consultants

Three (3) are government officers (2 State/Territory, 1 local Council) and a further one is a retired public service officer;

All but one have post-graduate qualifications: four (4) with PhDs, six (6) with Masters and five (5) with graduate diplomas.

Eight (8) are Certified Environmental Practitioners (CEnvPs), 12 are EIANZ members, and eight (8) have multiple (>3) professional or technical association memberships

This variation is indicative of the profession in Australia and New Zealand, and EIANZ membership. EIANZ membership is currently 42% female but a higher proportion of women amongst younger members, and the Institute has always had strong support in Queensland where it originated, and a disproportionately high number of private consultants (EIANZ, 2018). Also, a high proportion of certified practitioners hold multiple qualifications, affiliations and certifications (Certified Environmental Practitioner Scheme, 2018).

3.2.4 Pre-Interview Communication

Initial contact with practitioners identified for recruitment was by letter on Griffith University letterhead, with accompanying Information Sheet and Informed Consent Form (Appendix A) for them to complete and return. The Information Sheet included an explanation of the purpose and intended outcomes of the research, plus assurances regarding ethical clearance and other safeguards as discussed below in 3.2.6.

The letter also asked participants to think about a personal ethical decision case of their choice, to be discussed at interview. It was intended that discussion of a ‘personal ethical decision case’ would involve an ethical dilemma that they had faced and which had helped them develop or refine their practice ethics.

Techniques for initial contact and consent adopted some of the ‘tips and tricks’ suggested by Grbich (1999) and some of the detailed protocols of O’Brien, Forrest, and Austin (2002). Interviews commenced with a short explanation of the purpose of the research and how the researcher came to undertake it (as a non-recorded ‘settling in’ chat – Grbich 1999). The first stage of the interview was largely descriptive of the practitioner’s career and early influences, and usually provided a context for subsequent
discussion of ethical principles and practice. Some interviewees also availed themselves of the invitation to nominate and discuss personal ethical decision cases, as an appropriate way to explain their approach and responses, as suggested by Grbich (1999) for ‘elite’ interviews, and similar to the ‘personal critical incident’ topic as used by Fonville (2002).

3.2.5 Semi-Structured Interview Rationale

For reasons discussed above, semi-structured interviews (Brinkmann, 2014) were the chosen method for this study. Semi-structured interviews are the preferred approach for ‘elites’ according to Odenhahl and Shaw (2002) who reported that issues associated with elite interviewing include locating and contacting respondents, the importance of preparation, confidentiality, pre-interview interpretation and interview dynamics, the last of these also reported by Empson (2017).

Qualitative research interviews are often described as “a conversation with a purpose” (Smith, Flowers et al., 2009, p. 57). The rationale for selecting semi-structured interviews as appropriate for this exploratory study is as follows:

(a) Semi-structured interviews can discuss examples from the experience of each participant, and elicit responses to pre-determined questions and issues, but still include non-directive discussion which valorises the respondents’ experiences and allows other issues to emerge, with no pre-conceived hypothesis. The structure can be ‘… flexible enough for interviewees to be able to raise questions and concerns in their own words and from their own perspectives …’ (Brinkmann, 2014, p. 14);
(b) Semi-structured interviews can allow the participants’ stories and responses to be recorded and transcribed for thematic analysis;
(c) Compared to semi-structured interviews, formal structured interviews allow statistical analysis, as do questionnaires and on-line surveys (which have additional advantages of greater sample sizes and cost-effectiveness), but present only ‘short-hand’ options pre-designed by the researcher – they do not allow discussion regarding the respondent’s context and meaning, nor the nuanced voices of seasoned professionals to emerge; and
(d) Also in comparison, unstructured (open-ended) and non-directive interviews are not appropriate where the purpose of the research requires responses to specific questions.
The interview structure was designed, and tested through pilot interviews, to be conversational viz. questions requiring straightforward descriptive answers could lead into follow-on questions and responses regarding reasons and motivation, then discussion regarding the underlying principles. Brinkmann (2014, p. 11) refers to this sequence as a “… common choreography that is inherent in much qualitative interviewing …”, and also notes that effective interviewing techniques are largely based on guidelines widely used since the 1930s. These include the interviewer taking responsibility for the direction of the conversation, expressing empathy, asking open-ended questions, pausing to allow respondents to elaborate, clearly stating the purpose and explanations for a particular line of questioning, and differentiating between descriptive, structural and ‘contrast’ questions (Bloor & Wood, 2006).

On reflecting on the types of interviews listed by Roulston (2010), the hour-long semi-structured interview also proved sufficiently flexible to be ‘neo-positivist’ in structure (wherein the interview data reveals some truths regarding the interviewee’s experiences), while still allowing a ‘constructionist’ conversation where the interviewer and participant jointly examine ethical principles underlying particular practice situations, such as the personal ethical decision cases raised by participants. These were not intended to be justifications of the decisions made by the respondent when faced with an ethical dilemma or problem, nor the implications and fallout from their decisions, but rather a trigger for discussion and exploration of the following aspects:

- the process(es) they followed and the principles adopted or found useful when dealing with that situation;
- any Codes of Ethics which they referred to or found to be helpful (or not particularly applicable or helpful);
- lessons learned which they have subsequently adopted as guidelines or precedents; and
- how they would advise a younger colleague if faced with a similar situation.

3.2.6 Ethical Clearance

An application for ethical clearance for the current research was made to Griffith University Human Research Ethics in January 2013 (Reference ENV/50/11/HREC), including details of the research objectives and proposed participant recruitment procedures, letters and consent forms, interview questions, safeguards and protocols.
The application also expressed the intention to send a small ‘thank you’ gift to each participant, a Griffith University pen or similar, not as an inducement but in appreciation of their time and collaboration.

Following submission of additional details as requested, the Griffith University Expedited Review Panel granted provisional approval on 13 March 2013 but requested revisions or further information to:

(a) clarify potential conflicts of interest associated with the researcher’s (then) position on the Certification Board of EIANZ. This was addressed by detailing the CEnvP Board procedures for decision-making and dealing with conflicts of interest regarding biennial re-certification (Board decisions regarding applications for initial certification are not relevant, because most ‘seasoned practitioners’ are either already certified or have decided not to seek CEnvP status);

(b) provide further details regarding safeguards for respondents if they reveal instances where unethical behaviour by others may have caused environmental harm (non-disclosure of such evidence is an offence liable for prosecution, under environmental protection legislation in most jurisdictions). This was addressed in a revised consent form (see Appendix B) and by redacting from the interview transcripts any information which identify persons or organisations referred to in personal ethical decision cases;

(c) safeguard against potential identification (by third parties) of interviewees in ‘snowball sampling’. As explained in 3.3 above, the ‘referred’ practitioners during pilot interviews were not followed up, and the snowball sampling strategy was abandoned;

(d) safeguard against inclusion of other information which could possibly identify interviewees, given that the participants would be drawn from a relatively small pool of experienced practitioners. This was partly addressed by de-identifying all transcripts and analysis by gender-neutral pseudonyms, and also by ‘scrambling’ the locations (see Table 2 above), and

(e) ensure participants agree in writing to the electronic recording of interviews. This was addressed by specific reference to electronic recording in the Information Sheet (Appendix B) which participants were sent, prior to their email agreement to participate; and was also restated verbally at the commencement of interviews by asking if the participants agreed to being recorded.
Following clarification of the above matters, final ethical clearance was granted in October 2013, and extended in May 2017.

The Griffith University Human Ethics application and approval process is consistent with the American Sociological Association Code of Ethics (1997). The ethical standards based on this code and its principles include confidentiality of information, informed consent (including recording technology) and appropriate inducements (Miller & Salkind, 2002).

3.2.7 Interview Questions and Pilot Interviews

A pilot set of questions was developed and amended several times through the processes of literature review and research ethical approval process. Version 5 of the questions was subsequently used in three face-to-face semi-structured interviews with three senior practitioners (‘Clint’, Eddie’ and ‘Ian’) in December 2014 and January 2015 to test the interview questions, the process and length of time, and to seek feedback from the perspective of the interviewee. The pilot interviews also provided an opportunity for the researcher to develop a stance and tone appropriate for interpretive phenomenological research viz. curious and facilitative, rather than challenging and interrogative (Larkin, Watts, & Clifton, 2006).

Following this feedback and analysis, the questions were amended slightly (see interview questions dated 12/10/17 in Appendix A) but still covered the same 12 topics as the previous 2015 version. The questions addressed the following topics:

- Description of personal practice;
- Career history (‘practitioner journey’);
- Motivation for practicing in environmental fields;
- Personal values regarding the environment;
- Personal values about right and wrong;
- Frequency and Importance of ethical issues in practice;
- Membership of professional institutes and/or certification;
- Reliance on Codes of Ethics or personal ‘rules of thumb’;
- Recognising and dealing with ethical dilemmas;
- Criteria for judging others as ethical or unethical;
- The degree to which ethical practice is subject to scrutiny; and
- Advice to early career professionals regarding ethics.
A further 11 practitioners were interviewed using Version 6 of the questions giving a total of 14 ‘seasoned practitioners’, including the three pilot interviews. Although the questions had been slightly amended, the 11 ‘new’ interviewee responses were capable of being coded and analysed in the same categories as those of the three pilot interviews. Of the total number of 14 participants, six (6) were interviewed face-to-face and eight (8) by telephone. The interviews were intended to be 60 to 90 minutes in duration to allow comprehensive coverage of the issues, but ranged from 50 to 117 minutes (Table 2) (Brinkmann, 2014) depending on practitioner availability and conversation flow, with an average of 67 minutes. Both face-to-face and telephone interviews were recorded with an Olympus WS-852 digital recorder, then transcribed and reviewed as described below in 3.3.

3.2.8 Reflection and Research Diary

A research diary (Bloor & Wood, 2006) was maintained throughout the research, including my personal reflections and responses to the interviews, as one of the ways to address researcher biases and opinions, and thereby enhance ‘trustworthiness’ of the research (Lincoln & Guba, 2007).

The seasoned practitioners interviewed for this research may or may not have consciously considered the ethical dimension of their practice for some time. The respondents were asked to shine a light backwards and review the moral basis of their actions and opinions. For some (but not all) participants, the Griffith University letter of invitation had caused them to reflect on their practice and ethical principles, and several commented that they had welcomed the opportunity to do so. While some had thought about these issues in advance, others gradually warmed to the topic during the hour-long interviews. It is likely that the seasoned professionals who agreed to be interviewed are those willing to critically review their practices in this manner, and that some of the 18 ‘rejections’ (or ‘no replies’ – see 3.2.2 above) may have been people less comfortable with such self-reflection. With respect to the 14 participants, the insights which they provided into their own principles and how these had developed, and into the profession and its ethical dilemmas more generally, are reflected both in the data and in the research diary. In interviews, they presented the practice wisdom of reflective practitioners (Schon 1995) and their thoughtful collaboration is appreciated.
3.3 Analysis of Results

3.3.1 Transcription and Review

Interviews were recorded and transcribed verbatim by a confidential transcription service (‘Pacific Transcription’), and the transcripts personally checked by the researcher against the recording to ensure accuracy, especially where words may have been unclear. The transcripts were sent back to the interviewees for checking, accuracy and opinions (as recommended by Grbich (1999), together with appropriate thanks and a small Griffith University pen as a gift. Only two interviewees returned their interview transcript with marked changes, both of which involved only minor grammatical corrections.

Although both the recruitment letter and the returned transcripts also included an offer for a second meeting to clarify any issues or responses, or add further material, no interviewees requested such follow-up.

The amended transcripts were then de-identified to substitute interviewee names with non gender-specific pseudonyms, and redacted to hide any information which could identify persons or organisations referred to in ethical decision cases. Respondents were not informed of their coded pseudonyms.

3.3.2 Data Analysis

The interview transcripts were subject to thematic analysis (Boyatzis, 1998) to allow meanings to be drawn from the data and analysed to shed light on the research question (‘How do leading environmental practitioners construct meaning for their practices with respect to ethical principles and codes?’).

The techniques adopted for data review were those of interpretive phenomenological analysis. However, IPA is not a prescriptive methodology, but:

… there should be flexibility in being able to return to the data to focus on meanings throughout the process of analysis. Analysis commences during the interview process, … The audio-taped interviews are transcribed and the researcher then engages ….to realise themes and ultimately achieve an interpretation of the experiences. …. the role of the researcher is to endeavour to make sense of the participant trying to make sense of what is happening to them … (Roberts, 2013, pp. 216-217).

This ‘bottom up’ approach, whereby the researcher generates codes and themes from the data (rather than applying a pre-existing theory to the data) requires intensive
review and annotation of the transcripts, in effect ‘mining’ the data iteratively and in considerable detail.

Thematic analysis involves reading and re-reading of the transcripts, reflecting on it as a whole and then determining the key ideas and themes that emerge. Interview transcripts were coded and themes identified by bringing together fragments of meanings, ideas and experiences as identified in the data. The process of generating and testing codes was iterative, and the framework was amended several times to achieve a best fit between interviewee narratives and emerging themes.

… skills in data collection need to be matched by skills in analysis. …. the requirement is for comprehensive recording of the interaction, for it to be rigorously indexed, and for systematic … analysis. Analytic induction … to search systematically for ‘deviant cases’ …. and modify the hypothesis so as to accommodate the previously deviant case … (Bloor & Wood, 2006, pp. 105-106)

This approach allowed the relationships between themes, ideas and concepts to be explored in relation to the research question, as well as the development of sub-themes, searching for patterns related to ethical principles.

Given the exploratory nature of this study, the approach to coding was inductive (arising from the data per se) and the analysis is similarly inductive. A ‘good’ code is one that captures the qualitative richness of the phenomenon. Codes were then examined and consolidated or split, so as to develop themes and sub-themes. Boyatzis defines a theme as “… a pattern in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon …” (Boyatzis, 1998, p. 161).

Themes and sub-themes were then ‘mapped’ according to the relationships between concepts, as interpreted from participant responses. Mapping themes by nodes and trees in this way has allowed relationships in and across the data to be visualised. In particular, the description the step-by-step process for analysing interview transcript data described in IPA literature, such as Collaizzi’s 7-step method (Morrow, Rodriguez et al., 2015) is particularly useful with respect to clustering of themes, as follows:
Table 3: Collaizzi’s 7-step descriptive phenomenological method

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarisation</td>
<td>The researcher familiarises him or herself with the data, by reading through all the participant accounts several times</td>
</tr>
<tr>
<td>2. Identifying significant statements</td>
<td>The researcher identifies all statements in the accounts that are of direct relevance to the phenomenon under investigation</td>
</tr>
<tr>
<td>3. Formulating meanings</td>
<td>The researcher identifies meanings relevant to the phenomenon that arise from a careful consideration of the significant statements. The researcher must reflexively “bracket” his or her pre-suppositions to stick closely to the phenomenon as experienced (though Colaizzi recognises that complete bracketing is never possible)</td>
</tr>
<tr>
<td>4. Clustering themes</td>
<td>The researcher clusters the identified meanings into themes that are common across all accounts. Again bracketing of pre-suppositions is crucial, especially to avoid any potential influence of existing theory</td>
</tr>
<tr>
<td>5. Developing an exhaustive description</td>
<td>The researcher writes a full and inclusive description of the phenomenon, incorporating all the themes produced at step 4</td>
</tr>
<tr>
<td>6. Producing the fundamental structure</td>
<td>The researcher condenses the exhaustive description down to a short, dense statement that captures just those aspects deemed to be essential to the structure of the phenomenon</td>
</tr>
<tr>
<td>7. Seeking verification of the fundamental structure</td>
<td>The researcher returns the fundamental structure statement to all participants (or sometimes a sub-sample in larger studies) to ask whether it captures their experience. He or she may go back and modify earlier steps in the analysis in the light of this feedback</td>
</tr>
</tbody>
</table>

(Morrow, Rodriguez et al., 2015) adapted from Morrow, Rodriguez & King p.644

This process is similar to that recommended by Moustakas (1994) in his modification of a van Kaam method, and adopted by DiPasquale (2010) when examining the ethics of the insurance industry in Florida. The modified van Kaam sequence comprises a series of iterations, going back and forth between analysis of individual transcripts and various versions of a thematic summary table.

The analysis sequence adopted for the current investigation comprised the following steps, consistent with both the modified van Kaam method and Collaizzi’s 7-step method:

(a) Analysis of each full interview transcript to list every response or expression relevant to each topic e.g. under the topic “Motivation for practicing in environmental fields”, one respondent (‘Ursula’) expressed that “I like to make
a difference & influence good outcomes on projects, making them more sustainable”;

(b) After analysing all transcripts, the concepts were subject to an initial grouping (e.g. Helping people achieve outcomes) as preliminary statements or themes;

(c) Each transcript was then revisited to code all responses or expressions relevant to each of the topics - a process referred to as ‘horizontalization’ in the modified van Kaam method (Moustakas, 1994)

(d) Each phrase was then tested for relevance (is it necessary and sufficient for understanding the respondent’s experience of the topic?); discarding those which do not meet this criterion; then summarising and labelling the remaining invariant constituents as ‘horizons’ of the respondent’s experience. It should be noted that there was no elimination of expressions or quotes from respondents who express ‘outlier’ opinions or concepts - the criteria for selection or discarding of expressions are applied only within each transcript, as a means of ‘zeroing in’ to understand the experience of each particular respondent;

(e) The concepts were then re-clustered into final themes (common and variant) which concisely summarise the range of core concepts expressed regarding each topic, and sorted into five topic groups (formative influences, professional identity, values and ethical principles, ethical issues and advice for young professionals);

(f) A draft typology was developed, with several broad ‘professional identity perspectives’ proposed, similar to those of Hensel (2014), and each respondent inductively allocated to one or other type, based on apparent world views, self-conceptions, practice paradigms and ethical ideologies which emerged during interviews as underlying and repeating themes. While this typology in some ways resembles the individual textural-structural description of respondent experiences described by Moustakas (1994), iterative re-analysis of transcripts indicated that some respondents adopted dual ‘professional identity perspectives’ depending on their roles, and the situation and context;

(g) Themes and sub-themes, extracted quotes and professional identity perspective were then checked to ensure that they comprehensively captured the essential meaning and all the nuances expressed by each respondent regarding each topic. For example, that every relevant opinion, recollection and expression has a ‘place’ (thereby avoiding potential selection bias); and
The complete transcript of each respondent was then re-checked (validation) to ensure his or her ‘story’ had been expressed explicitly (with verbatim quotes) and was compatible with, and adequately represented by, the themes and concepts.

3.4 Methodology Summary

The methods adopted for this research are based on a review of qualitative research approaches suitable for an interpretivist phenomenological approach and their theoretical foundations., as indicated in Section 3.1 above. Fourteen (14) seasoned environmental practitioners from Australia and New Zealand were interviewed, each with at least 20 years experience. The semi-structured interviews, with questions addressing 12 broad topics ranging from formative influence to ethical dilemma cases, were consistent with the generally constructionist paradigm. This allowed thematic analysis of the meanings which experienced environmental professionals attach to their practices with respect to ethics, and also allowed findings to emerge in relation to professional role identities.

These findings are presented (with illustrative quotes from interviewees) in the following two chapters, organised according to the interview question topics. Chapter 4 presents participant responses with respect to their professional ‘journey’ and formative influences on their ethical principles, and responses regarding professional identity, values and ethics. Chapter 5 addresses participant responses in a similar manner with respect to ethical issues and decisions, and the advice which they would give to juniors and early career practitioners regarding ethics.

CHAPTER 4: IDENTITY, VALUES & PRINCIPLES

This chapter describes the study’s findings with respect to values, principles and development of practitioner ethics. The following chapter (Chapter 5) analyses the application of these principles to issues and dilemmas in practice, their professional identity perspectives and how they would now advise young and early career practitioners.
4.1 Analysis Themes

The 14 seasoned environmental practitioners interviewed for this research have all been in practice for at least 20 years, and in the case of three, more than 40 years. The semi-structured interview format included standard questions (Appendix A) regarding their ethical principles and professional identity, how these influence their practices, and the formative influences that had led to their ethical frameworks. A wide range of themes emerged from practice ethics conversations with these practitioners, corresponding to (and sometimes ranging beyond) the 12 topics posed as interview questions as outlined in Chapter 3. These 12 topics are now broadly grouped, for the purposes of analysis, into the following topic groups, corresponding the analysis themes, which are later subdivided into sub-themes.

**Topic Group 1:** Practitioner ‘journeys’ towards their ethical principles - when, how and why had they developed their values and practice ethics? *(Formative Influences Theme)*;

**Topic Group 2:** How does each respondent define his/her professional identity and practice, especially in relation to these principles and values? *(Professional Identity Theme)*;

**Topic Group 3:** What are the personal values & ethical principles that are important to them in their practice? And how are these principles manifested or applied in practice? *(Values and Principles Theme)*;

**Topic Group 4:** What ethical issues, problems or dilemmas have each of them faced, how have they responded and what lessons have they learned? This includes ethical decision-making, case studies and their criteria for identifying other practitioners as unethical. *(Ethical Issues and Decisions Theme)*; and

**Topic Group 5:** What would he or she advise young practitioners regarding ethics? *(Ethical Advice Theme)*.

In several cases, a sixth topic group emerged from ethics conversations with participants *viz*.

**Topic Group 6:** Recommendations regarding professional ethics for environmental practitioners *(Participant Recommendations)*.
The first three of these topic groups, regarding formative influences, professional identity, values and ethics are addressed in this chapter. The remaining topic groups relating to applied ethics (issues faced and their responses), advice to younger professionals and recommendations, are addressed in the following chapter.

4.2 The Shaping of Personal Ethics

This section explores the formative influences on the ethics of seasoned environmental practitioners interviewed, in the belief that “the background shapes the foreground” (Cooper, 2004, p. 2). The moral precepts of experienced professionals have generally built on values and principles which pre-date their adult careers, and which have formed the basis for subsequent development of professional ethics and identities. The moral guidance of parents and teachers, the reasons for choices of university courses and careers, and the influence of mentors and early career experiences have been analysed, based on semi-structured interview questions regarding practitioner journeys, from childhood to senior professional status.

Interviews with the 14 practitioners indicate that there are three strong similarities in most of their career trajectories, notwithstanding that their initial motivations for entering the environment profession may have differed, as have their specific disciplines. The three most-widely shared similarities are addressed below under the headings of ‘early values’; ‘self-motivation’ and ‘opportunities’. The analysis showed that even those who reported having ‘stumbled’ into the environmental field shared at least one or more of these characteristics.

4.2.1 Early Values

Most of the senior practitioners interviewed revealed that their environmental values (such as an affinity with nature), orientation towards science and truth and their sense of ethics (what’s right and wrong) had their genesis early in childhood or adolescence, at home, at school or at University, generally through one or more mentor figures:

I was ... influenced strongly by a teacher at school .... a keen bushwalker ... my best experiences in life.... have been associated with some interaction with the natural environment. I've really valued that. (‘Danny’, an ecological consultant, retired after more than 40 years experience).
... it was ... geography teachers .... also, my father was a teacher. So anywhere we drove, he'd talk about .... what was around us ... [He] ... suggested that if I did biological science with earth science and geography ... I could start to create what might look to be an environmental degree. They did not exist at the time. Having had a love for the environment and having seen the impact ... on the coastal dunes, it seemed to me to be a good idea at the time ... (‘Chris’, a veteran consultant with more than 35 years experience).

While a passion for nature, outdoors or science influenced their choice of qualification and career, these broad principles and values were not the only factors that subsequently influenced their ethical principles in practice. Parental values and family conversations, a religious upbringing, the scouting movement, overseas travel and even children’s books all played their part:

... you can't beat the way you've been bought up ... your inner ethics. I don't know where that comes from, but my old man was a Presbyterian elder... a community person ... I got from him and my mother a very good set of ethics.
(retired quarry consultant ‘Dallas’)

Scouting.... I had a strong attachment to the natural environment through that. Camping, I did a lot of camping with the scouting and really enjoyed that. So it caused me to be interested in the land. (‘Finley’, a retired government agency officer)

... early influences were Dr Seuss's ...[children’s book] ... ‘The Lorax’ and then after that, there was a sort of a choose-your-own-adventure thing ... what kind of car you'd like and what sort of house you'd like to live in ....Then it multiplied that out in terms of, if everybody made those same decisions, ...... it had pictures of what the world would look like if everybody chose that, and I found that incredibly profound as a 12 year old. It really resonated ... (‘Taylor’, an energy and sustainability policy officer with more than 25 years experience)

4.2.2 Opportunities

Another common thread in this cohort was that most seasoned practitioners had developed their practices during a period when the community’s environmental awareness and concerns were being translated into legislative requirements. These new laws and regulations created demand for ‘green’ experts in a range of environmental sciences, planning and design, and the resulting opportunities led to the emergence of a new environmental profession. Many of the practitioner interviewees considered themselves fortunate to have started their careers at this time, even if it meant writing
their own rules to some extent, learning from their mistakes, and staying flexible
even to adapt to a changing field. For example one reports:

... we’ve all been very fortunate ... able to make a living out of stuff that we ... 
in most cases, feel very good about having done ... I’ve had the biggest public 
projects ... given the responsibility of delivering ... a number of major and public-
good type programs .... problems no one else could solve, solved them, and then 
... got another one ... (‘Riley’, a site contamination and water expert with more than 
25 years experience in a variety of roles).

Similar fortuitous circumstances were gratefully acknowledged by two other 
veteran practitioners:

I’ve always been in a rising market. ... I was dead lucky when I started my 
business in ’86. I was in the middle of a gold rush. .... (‘Chris’).

... I was really lucky that everything I ended up in ... was worth doing. Because 
I can’t stand still in a job I don’t like, so I was just really lucky that everything 
kept opening up ... (‘Lennon’).

In effect, many of them had been in the right place at the right time, and had 
seized the expanding opportunities which presented themselves during their careers. 
Several also recalled that they had first gained employment doing what they enjoyed 
and/or believed in. Many were conscious (and grateful) that they had started 
professional life just as new environmental legislation generated demand for their skills, 
and as winds of change were sweeping the western world:

[an incoming pro-environment State government had promised] ... to do an 
investigation into the ... timber industry. Someone I knew ... rang up and said 
we’re putting out a number of consultancies; one of them is to look at the 
ecological impacts and environmental impacts of forestry ... ‘would you guys be interested in tendering?’, which we did and we won that. That really made our 
name. (‘Danny’).

Most of the senior practitioners interviewed are entrepreneurial and opportunity-driven. 
Two of the more senior consultants, each with more than 35 years experience, are self-
starters who had become frustrated and constructed their own careers, rather than 
following an established pathway or being mentored into a planned career:

... I was one of those people who was always going to be [my] own boss. ... 
couldn’t always cope with ... some of the management practices I saw around me 
... So I ... went out and started my own practice (‘Chris’).
I'm always a bit of a self-starter ... a pretty independent sort of person and always had confidence in myself. But I guess it came after working for a large company for seven years and seeing some of the stupid decisions that were made ... ('Dallas').

4.2.3 Career Trajectories

The above similarities in early influences should not however, obscure the significant differences in pathways to environmental practice that characterise this cohort of practitioners. Many have been pioneers in their fields, graduating initially with broad science or engineering-related degrees then acquiring the skills, experience and additional qualifications necessary to create their own career niches in the emerging environmental professions as opportunities arose. Some progressively specialised into a practice niche, while others started out as specialists then broadened their skills to become multi-disciplinary or managers.

... I started as a specialist in soil conservation ... led to mine rehabilitation, [that] led to environmental management of mining, then ... the management of exploration of mining tenements ... That led into power, pipelines, ports etc. so ... most of the work we did was in the approvals process ... we would coordinate the EIS [Environmental Impact Assessment]... in the end I became a general practitioner, managing a team of 30 people ('Chris').

Several had stepped back from management responsibilities at some stage during their careers in order to be more ‘hands on’ with fieldwork and/or with clients.

... I ended up managing the science team, so there was about 30 odd staff, and they were scattered in about 12 offices ... not doing what you wanted to do, which was hands-on ... I think I spent three days a week on a plane or travelling somewhere, and it gets a bit tough ... so I pulled the plug and said ... I'm going to work from home ('Jesse', a regionally-based owner and director of a consulting firm).

In Australia and New Zealand, only a small proportion of practitioners appear to have had experience in private sector consultancy followed by a subsequent career in the public service, or vice versa. One practitioner interviewee who made the switch was ‘Jordan’:

..., I was the Director of Environmental Management in ... what's now the EPA. I came out of government as a senior regulator and into consulting ... a multidisciplinary sort of environmental engineering consultancy with 200 people ('Jordan').
Another had switched from academia to local government to consultancy then community advocacy. ‘Lennon’s’ unique perspective, seeing the processes and controversies involved in development and conservation from all sides, led to a decision to no longer accept environmental impact statement (EIS) commissions:

... I got out of doing EISs because they were such hotbeds, and there was a sense that you served up the client's answer because the client paid the bill. Instead of it being a government document to make a decision on, it was more, 'we want this to look favourably' ... I left EISs ... (‘Lennon’).

Several other experienced consultants have, at some stage in their careers, drawn the line at accepting certain types of work or clients:

... this one industry here has still not answered the question about waste ... it’s too hard ... If we have to back an industry ... where we knew what's going on, it wasn’t Coal Seam Gas ... for us it created too many dilemmas for too many staff, so we made the call ... no more CSG (‘Chris’).

... I found it very, very challenging ... actually seeing what happens on the ground, and being so discouraged by that, I thought that I would never work in the oil and gas industry again. I haven't. (‘Cameron’, the owner of a consultancy practice, with 21 years experience mainly in environmental approvals).

We had a small number of areas that as a firm we wouldn't work on anyway ... we wouldn’t do anything in the uranium or nuclear industry for instance. That was just my personal view.... my hard limit ... (‘Danny’).

However, from what can be considered an objective scientist perspective (see 4.3.4), one experienced practitioner does not consider it professional to pick and choose industries and clients:

... if someone ... said that they wouldn't work on any coal projects, well they're not working for the right organisation ... you've got to bring in the work and do the jobs that are going to pay the money ... You can't pick and choose too much about what you're going to do. (‘Morgan’, an experienced environmental auditor)

4.2.4 Context and Trends

The careers of some of these pioneering practitioners, especially those with 30 or more years of practice experience were initially carved out in the 1970s and 1980s, a period of great advances in environmental sciences, legislation and community attitudes. The seminal ‘Brundtland Report’ (Our Common Future) (Brundtland, 1987) introduced the concept of ‘sustainable development’ into society’s lexicon and
consciousness, with ethical concepts of intergenerational equity; and at the same time ecology and other environmental sciences were breaking free of their reductionist roots and embracing a more holistic approach (Hundloe, 2008). New environmental legislation, regulations and agencies, including Environmental Protection Agencies or similar, required development proponents to address the likely impacts of proposals, spurring the growth of environmental practices formed a decade earlier. The number of specialist environmental practitioners and the diversity of disciplines mushroomed (Pope, Bond, Morrison-Saunders, & Retief, 2013) broadly grouped as ‘green’ (ecology-related), ‘brown’ (site contamination, air quality, noise and waste) and ‘blue’ (water quality and marine biology).

Several of the practitioners interviewed had been students in the 1970s, influenced by the wave of optimism and change of that era, as enthusiastically recalled by one interviewee:

... change was within our grasp ... the moratoriums and then black rights, we were in every demo ... change was ... something that you felt you needed to participate in ... in some ways we were catalytic ... nothing had existed before in some of the things I stood in ... I wonder now if you were entering the profession what would be the opportunities? (‘Lennon’).

However, for several seasoned practitioners, the heady promise of those early days has waxed and waned through economic and political cycles. Retired ecologist ‘Danny’, looking back on more than 40 years in consultancy practice, has this overview:

... I don't think there's a long term trend ... six years ago I would have said there was a long term trend to improve environmental legislation and enforcement at the state and federal level, but I think even that's gone backwards now ... Ministers are no longer supporting their own portfolios ... They just weigh politics with everything ...[But] we'll get into a different political cycle and the environment will maybe come back to the fore ... I hope so (‘Danny’).

One professional practitioner, who is also an environmental advocate, has a more pessimistic opinion regarding development of environmentally sensitive areas, arguing that developers always have a significant advantage in conflicts between private interests and those arguing for the public good:

... the developer will always have a financial incentive that the others lack, and then that gives them rights in court and a budget and a long timeframe. So you find that the fight has to be fought again and again and again and you get a process of attrition of environmental values (‘Taylor’).
4.2.5 Summary of Practitioner Ethical Development

In interviews, most seasoned practitioners recalled an early interest in nature and/or outdoor enjoyment as the beginning of their professional journey, or in some cases an interest in science more generally. Many looked back thoughtfully to their childhood to recall the source of the passion and moral principles which they then carried throughout their careers. However, in the 1960s and 1970s, when many of these pioneers of the profession were finishing secondary school, there were no clear career paths and role models for environmental practice, and several described a period of indecisiveness before stumbling into relevant university courses. Several also describe, as a revelation, realising that they could be employed and have a career doing something they love and enjoy. This paints a picture of this cohort as self-motivated ‘go-getters’ eager to carve out their own niches, career paths and reputation. As a generalisation, these pioneers are grateful for (and took advantage of) the opportunities which were presented to them in a newly emerging field, at a time when community environmental awareness, new legislation and requirements for industry and regulatory agencies to employ or engage environmental professionals.

As previously discussed, the scientific basis of the environmental profession provides the foundation for many of the ethical principles espoused by these seasoned practitioners, in particular those regarding truth, honesty, technical competence and accuracy, rigour and evidence-based opinions. Other widely shared ethical principles (such as client confidentiality and the ideal of service to the common good) are associated with the professionalisation of environmental practice, exemplified by the establishment and growth of EIANZ.

Despite these similarities, the tendency for these self-starters to create their own rules and develop their personal practice wisdom and ethical principles during their long carers led to a variety of approaches. The way in which practitioners’ early moral influences and pro-environment values were translated into the ethical principles of environmental practice appears to have been influenced strongly by early working experiences, when young professionals are socialised into accepting (or rejecting) workplace norms. These formative experiences include the role of mentors (often employers), intense pressure from vested interests, bullying or male dominance, exposure to corrupt practices but also to principled professionals who ‘did the right thing’, the presence or absence of professional competitors, and economic or political cycles. One of the biggest influences in development of ethical principles appears to be
the differences between public and private practice, as perceived by those (unfortunately few) practitioners who have switched senior roles between the two sectors during their careers.

Not surprisingly for a group of professionals representing a total of more than 400 years experience (see Table 2 in Chapter 3), these seasoned practitioners express cynicism regarding many of the processes and factors influencing government environmental decisions, particularly with respect to controversial issues, although in general they personally stick to their principles in responding to such challenges.

Caution is advised, when generalising from these practitioner responses to the wider environment profession, because the cohort of professionals with 20 or more years of experience represents only the ‘survivors’, those with the resilience and professional toughness to have lasted the distance. In addition, the research methodology process involved identifying and inviting potentially suitable practitioners, fewer than 50% of whom indicated a willingness to participate. Accordingly, this study reports interviews with only those who were available and wanted to reveal something about themselves through interviews, and to reflect upon their ethics.

4.3 Professional Identity

4.3.1 Professional Identity Perspectives

The 14 practitioners interviewed comprise a cross-section of the senior ranks of the environment profession in Australia and NZ, as discussed in Chapter 3 (Table 1). In responding to questions regarding the source of their principles and values, most interviewees referred back to early pre-career influences such as parents and teachers, and/or childhood or adolescent interactions with nature. Analysis of interview transcripts indicated that their ‘practitioner journeys’, and especially the early formative influences on moral principles, provide context for understanding their approach to ethical practice. While their professional identities (Loui, 2005) and personal paradigms (Chenoweth & McAuliffe, 2017) may have developed later, through university and early career experiences, their ethics appear to have been influenced by these underlying values and principles.

This combination is referred to herein as ‘professional identity perspectives’, combining elements of worldview, identity theory (construed person, social and role identities), mental attitude, personality traits and ethics. These concepts and relevant research literature regarding identity theory were reviewed previously in Chapter 2.
Analysis of interview transcripts reveals that practitioner responses generally correspond to the following five professional identity perspectives, as dominant paradigms affecting their opinions and decisions:

**Table 4: Professional Identity Perspectives (and the number of interviewees so categorised)**

<table>
<thead>
<tr>
<th>Professional Identity Perspective</th>
<th>Broad defining characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Objective Scientist (2)</td>
<td>Uses particular skill set to provide specific information as required by the brief</td>
</tr>
<tr>
<td>The Problem-solver (3+3*)</td>
<td>Applies technical skills and collaborative approaches to help solve defined problems</td>
</tr>
<tr>
<td>The Balance-seeker (1+2*)</td>
<td>Seeks to balance competing interests, or to help groups find their own balance</td>
</tr>
<tr>
<td>The Environmental Advocate (2+1*)</td>
<td>Uses professional capabilities to protect and enhance the environment</td>
</tr>
<tr>
<td>The Practice Manager (1+4*)</td>
<td>Is responsible for maintaining a viable practice, in this case environment-related</td>
</tr>
</tbody>
</table>

* Dual perspectives, either concurrently or situation-dependent

Five practitioners expressed interview responses consistent with dual professional identity perspectives, generally that of ‘Practice Manager’ in addition to either ‘Problem-solver’ (2) or ‘Balance-seeker’ (2); while one combined ‘Environmental Advocate with ‘Problem-solver’.

These professional identity perspectives do not appear to be associated with particular environmental disciplines, nor do they appear (with the exception of the Environmental Advocates) to be particularly associated with practice in the environmental profession. On the contrary, as discussed below, several interviewees revealed that their motivation for a career in scientific investigation or technical problem-solving coincidentally matched opportunities in the environmental field.

The characteristics of these professional identity perspectives are discussed in detail below, with relevant quotes from practitioner respondents. However, it should be noted that these types are not mutually exclusive. While the ethical principles and opinions of some seasoned practitioners appear to be consistent with one or other perspective, others appear to more adaptively adopt alternative frameworks appropriate to different situations, similar to the six decision-making ‘hats’ of Edward de Bono (De
Bono, 1987), a concept which has also been innovatively applied to ethical decisions (Hooker, 2007).

4.3.2 The Objective Scientist

For environmental practitioners trained in one or other of the sciences, the role of ‘objective scientist’ is almost second nature. If a problem can be defined in such a way that a hypothesis can be tested, then the scientific method can be employed to undertake appropriate investigations, describe the methods so they can be repeated by others, collect and analyse the data, and describe the findings and their implications. Many aspects of environmental practice, ranging from water quality monitoring and modelling to fauna surveys and compliance auditing, conform more or less to this model. Perhaps not surprisingly, practitioners with this professional identity perspective place high value on technical accuracy and honesty, but do not consider environmental values or other ethical issues particularly relevant, for example an experienced environmental auditor noted:

I'm not a greenie. People say... you're an environmental consultant, you're a tree hugger or something like that ... but ... my job is to assess compliance ... to make sure that the company can demonstrate their compliance (‘Morgan’).

The objective scientist’s perspective is focused on technical quality, such that any ethical issues which might arise are capable of resolution by referring to appropriate standards or regulations, as revealed by one response:

... I find it hard to find a link between ethical values and my work, apart from ... needing to do things of high quality and ... approached the right way. ... But to me that's ... a standard you need to perform by ... just doing things properly ... (‘Pat’).

4.3.3 The Problem-solver

Practitioners with a problem-solving perspective are motivated primarily to apply their professional capabilities to finding technical solutions to problems presented to them, and several have an engineering or non-biological science background. Neither problem-solvers nor objective scientist advocate for or against any particular outcomes, preferring to let the results speak for themselves. They generally welcome scrutiny and challenge as part of the truth-seeking process, as specifically mentioned by an experienced practitioner:
[Referring to scrutiny by Courts] ... it's not a pleasant experience ... so ... I don't look forward to it but ... basically if ... my report and ideas can't stand up to scrutiny, then they're probably wrong. I don't like having wrong ideas. It's always a challenge ... to have all the information you need ... so there's always room for improvement (‘Jordan’).

‘Jordan’ is a mathematical modeller who rose to become the director responsible for environmental consultancy in a multidisciplinary engineering-based firm, and expresses a problem-solver perspective in staff selection:

....because we're doing work for mining companies ... we needed technical people to answer these questions ... with a lot of mining experience ... [or] ... the chemistry expertise to... [solve the] very technical problems they have ... either engineers or people with experience in the hard, brown side of environmental management ... (‘Jordan’).

Others who construct the problem-solver perspective, often in combination with their role as a practice manager, are environmental scientists such as ‘Cameron’ who regards solving problems for clients as part of a consultant’s job:

... we're trying to solve people's problems and trying to fix things for people ... [we] take the lead heavily from ... clients around what they want to achieve, and really push the boundaries. Which we all do ... that is part of our remit (‘Cameron’).

Often associated with the ‘can-do’ approach of practitioners who identify with the problem-solver identity, is the attitude that development is desirable and inevitable, and the associated problems can and should be reduced by expert professional intervention, both expressed by one participant:

I have a natural inclination to support development ... to lean towards the developers because they are the people who are trying to do something, as long as they do it properly ... I like people who are positive and want to achieve things ... That's just inherent in my mindset ... It's not necessarily a scientific point of view (‘Jordan’).

Also typical of the problem-solver perspective is the belief that their professional capabilities and involvement will lead to better environmental outcomes than would be the case if they chose not to be involved, for example one participant offers the following:
... if you can influence so that there's a better outcome than had you not been there and the project being [given] to someone who doesn't care about [it], well then you can justify that to yourself ('Pat').

However, that approach was criticised by one experienced practitioner, referring to one of several widespread types of rationalisations (discussed further in Chapter 6 Section 6.6.10):

... That is the archetypal response. If I don't get this project approved with all my stringent conditions some other bugger will just do it and it'll be much worse, therefore - and my analogy ... is if I don't supply the slaves, someone else will ... but I treat my slaves much better ('Riley').

4.3.4 The Balance-seeker

The role of a professional practitioner acting in accordance with this ‘balance-seeking’ perspective is primarily to find a solution, or allow a solution to emerge from a process of consultation and mediation, that best balances environmental effects against various other considerations, such as costs, competing interests and stakeholder expectations. This may be a balance decided personally by the practitioner, or in consultation with others, weighing up the pros and cons of alternatives, as exemplified by the following three quotes:

I try and find a balance that ... I think is ethical, .... correct for everyone ... Every time I designed something I would be ... thinking ... of things like buffers, water treatment ... clearing land, staging ... the natural environment ... or the community interest. I actually enjoyed that aspect of the profession, of thinking that I was doing something sensible and fair... ('Dallas').

... you're trying to balance a commercial need around getting a good outcome and providing a good service ('Cameron').

... you're trying to get a good outcome for the client and you're trying to get a good outcome for the environment, and the best project is one where you get both. Sometimes you're going to have to compromise one to get the other, but sometimes you won't ('Danny').

The role of a balance-seeker is similar to that of a town planner, although environmental practitioners must sometimes put aside or rise above their expertise in a particular field in order to see the big picture and balance a range of issues, as one participant explains:
... people ... get so focussed ... that they forget to actually look at the bigger picture around them ... it's the awareness and being very careful and think through things ... taking that systems approach and taking everything into account, which I've always done, both environmentally and with my dealing with people (‘Logan’).

4.3.5 The Environmental Advocate

Practitioners who adopt the environmental advocate perspective are in some ways at the opposite end of the spectrum from the dispassionate and objective scientist, in that their ‘green’ values and personal objectives are openly displayed. For example a participant with a particularly varied career trajectory reflected:

... I always carried advocacy. It was just whether you were in the system doing it, working with people's constraints within the system, or you were outside. Recently, I've moved outside (‘Lennon’).

While few environmental practitioners follow ‘Lennon’s’ career trajectory into full time activism, many consider advocacy as part of their professional responsibilities, and choose to ‘wear that hat’ and adopt the identity perspective where appropriate and when they feel comfortable doing so. For example, retired agency officer ‘Finley’ considers it an obligation to express his expert opinion in submissions to State and local governments on policy and planning issues, while rural planning consultant ‘Alex’ contributes to local debate through a newsletter:

I feel sufficiently passionate that I put in objections to town plans if I think they're inappropriate developments ... from a point of view of 'do you realise you're going to screw things up if you do it that way?' You should do it this other way ... (‘Finley’).

... I do a monthly free newsletter to hundreds of people ... People know that I'm passionate about what goes on and I don't do a lot of editorial comments, I'll just report ... I do get called ... a bit of a greenie. Well, you know, is that a compliment or is it a sting or what is it? (‘Alex’).

However, there are increasing opportunities, particularly in the sustainability field, where professional environmental practitioners are expected to be passionate advocates, or expand their job description to do so, as, for example, experienced practitioner ‘Taylor’:

It's the central purpose of my life ... to promote and enhance sustainability in the world. I'm ... deeply committed to it on a personal, spiritual and ethical ...[level] .... my guiding path ... [is] to be an advocate and an actor in
sustainability. ... it’s a wonderful combination of it being something that I care deeply about, enjoy greatly and I'm personally connected to, so I maintain a kind of daily connection with the planet in various ways ... (‘Taylor’).

4.3.6 The Practice Manager

The role of managing a professional practice, and particularly the responsibilities of owning a private consultancy business, requires focus on commercial or political realities and month-to-month survival, so it is not surprising that this role affects the professional identity perspective of senior environmental practitioners. Ideally, environmental practice consists of matching environmental constraints, community impacts, regulatory requirements and client expectations; and experienced professionals aim to balance these conflicting demands. When discussing some of the formative influences on practice ethics, one interviewee reflected on the influence of two consultancy practice managers:

... I had ... two good bosses... who ... loved what they did and they wanted to make it the best outcome and they could see the triple bottom line. They could see what the local community wanted, they could see what the environment needed but they also understood ... how to treat the client, how to try and make sure the client understands what all the options are (‘Pat’).

However, achieving this balance is rarely easy, and the environment profession undergoes boom and bust cycles largely coinciding with those in the resource sector. Retired ecologist ‘Danny’, like many of the seasoned practitioners interviewed, sees the effects on ethical behaviour caused by the Global Financial Crisis of 2008-09 and other cycles:

... There have been times when the environment was very ... ‘in’, and everybody was wanting to get a good environmental outcome ... then that was completely lost. The big engineering firms were totally focused on just getting every project built and .... all their staff were told you do that or you're out... (‘Danny’).

‘Cameron’ juggles the need to respond to client requirements with the desire to maintain an ethical reputation with regulatory agencies. Keeping a business afloat and maintaining employment for professional staff sometimes means gritting one’s teeth and working with recalcitrant clients who resist appropriate environment protection measures:

... the market is so competitive ... everyone has to compete in this kind of a market ... We're still a commercial enterprise. We still need the work. So if we're
working for those kind of people there's a way that we ... make sure that the regulator realises we're ... providing information, we'll do what we can. But we are ethical. If they [the regulators] ask us a question, we will answer (‘Cameron’).

4.3.7 Summary of Professional Roles and Identity Perspectives

In general, professional practice involves assuming a role, wherein clients and the community have certain expectations of the services to be provided, the manner in which these services are delivered, and standards of behaviour (Koehn, 1994). In addition, the role of a professional requires ethical conduct which has an external dimension (common to all in the community) and an internal dimension (specific to each profession), with some overlap (Alexandra & Miller, 2009). While the external ethical dimension of professional ethics (such as trustworthiness and non-maleficence) is although not markedly different from community principles, the obligations are held at a higher standard for professionals (Coady, 1996). The environment profession is similar to other professions in this regard, differing mainly in the scientific basis of the profession (with emphasis on evidence, honesty and rigour) and the additional moral obligation to value and reduce harm to the natural environment. However, within this broad similarity, there are discernible differences in attitude among the seasoned practitioners interviewed, mainly with respect to their professional identity perspectives, whether that of a problem-solver, objective scientist, balance seeker, environmental advocate or practice manager. These perspectives affect their decisions and responses to ethical issues and dilemmas, but to varying degrees, the seasoned practitioners interviewed appear to adopt alternative perspectives (‘swapping hats’) appropriate to each situation.

These professional identity perspectives also correlate broadly with ethical theories discussed in Chapter 2, in that the objective scientist and problem-solver perspectives appear to be mainly deontological (emphasising duty and process), the environmental advocate perspective is akin to communitarianism and those of balance-seekers and practice managers are distinctly utilitarian. These relationships to theory are explored in more detail in Chapter 6.

4.3.8 Tensions between Roles and Values

While the 14 environmental practitioners interviewed profess a wide range of values towards the natural environment (see 4.4 below), most thoughtfully examine the relationship between their values and their professional role, especially when called
upon to approve or facilitate approval of development with potential to cause environmental harm.

An environmental approvals consultant explained it in more detail, referring to the concerns expressed by junior employees:

... it’s a clash of values when you work in this type of industry, whether you work in consulting or for industry or government... you're always thinking about that line ... Most of the tension comes around that they are good environments and ... [junior staff] ... don't want to get approval, for example, for a land developer to clear vegetation. They feel like that they're just enabling ... that. It comes down to I guess their personal values, and also ... they don't reframe what they're doing (‘Cameron’).

The issue of reframing, as a way to address tensions between the role of environmental professionals and their values, is further addressed in Chapter 5 (Section 5.1.1) below.

For conservation activist ‘Lennon’, the discrepancies between environmental values and role as a consultant, and the commercial dependence of the environmental profession on developers, led to a ‘fork in the road’ and a decision to withdraw from the professional association:

... the main reason why I left EIANZ was that I became [an] ... advocate ... I couldn’t do both ... For me, EIANZ has to be ... careful about advocacy ...
There's a tension .... I didn’t quite fit, and I completely understand why that tension exists. Don’t get me wrong. I'd been on that side and I was on this side now, but it was more this is what I wanted to do (‘Lennon’).

4.3.9 Integrating Values, Principles, Roles and Identity

All 14 environmental practitioners interviewed share a respect for investigative rigour, accuracy, evidence, truth and honesty, and regard integrity as an important part of their professional identity. Most express a genuine love of and respect for the natural environment, although there is some variation in their position on the pro-conservation to pro-development spectrum, with outlying attitudes ranging from admission that only ‘special’ places should be off-limits to development, through to holistic linking of nature with social justice and spiritual dimensions.

Similarly, most participants recognise and think about the ethical dimensions of their professional practice. However, the participants may not be a representative sample of experienced environmental practitioners in Australia and New Zealand, in that practitioners who accepted invitations to participate may be those who regard ethics
as important. For those practitioners who consider themselves ‘guardians’ of the natural environment, and who think about ethics, there exists a tension between their values and their professional roles, similar to that reported by Zemansky (1996). Practitioner values towards the environment as expressed in interviews are reported in the next section (4.4).

The manner in which these seasoned practitioners deal with this fundamental tension appears to relate less to their underlying values and ethical principles, and more to differences in their professional identity perspectives.

4.4 Values and Ethical Principles

4.4.1 Values regarding the Environment

Professionals contribute to the well-being of society and benefits to others by achieving certain objectives specific to the shared values of their profession, which in the case of ecologists is to ‘… value the well-being of the natural environment …’ (Rowson, 2006, pp. 45-46), and this statement is likely to accord with the environmental profession more widely. The values of environmental professionals with respect to the environment have been investigated by Hull et al (2003), who reports that such values affect their understanding and assessment of environmental quality. All professions aim to benefit others, and in the case of environmental practitioners this ‘other’ includes not only clients but also the wider community and the natural environment (Molesworth, 2012). For most seasoned practitioners interviewed, the concept of ‘public interest’ extends beyond the utilitarian concept of ‘greatest good for the greatest number’ (Malik, 2014, p. 209) to now include the environment as a common good. One participant states this simply as:

*I was encouraged to be someone who wanted to make the world a better place.*

(‘Taylor’).

This is fundamental to the professional ethics of one conservation agency officer who places importance on his role as providing a service to the public:

*… without environment we don’t exist. It supplies our life support system, so ... takes a priority in most things I do, but also with regard to people in the environment ... trying to get people to do the right thing ... realising the importance of environment and pushing that in all the ways I can* (‘Logan’).
A wide range of values towards the environment were expressed by respondents ranging from the neutral stance of scientists and the ‘balanced sustainable development’ position of planners, to environmental advocates committed to sustainability. For example, one interviewee prefers to stick to science and technical expertise in order to remain balanced and objective:

... conservation groups ... who’ve been opposing projects I’ve been working for ... have different values that they are trying to protect. My response to them is just stick ... with the science and [to] not take a political or a subjective view ...(‘Jordan’) 

Whereas consultants dealing mainly with extractive industry clients are more focused on reducing environmental impacts through effective management:

I’m probably not the purest of ‘saving the environment for saving itself’ ... to me it’s more about now how to manage, and without that significant managerial input then I see there’s a lot of shortcomings in what we do ...(‘Chris’).

I could see ... that quarries interact with the landscape severely and also there were techniques and methods to manage that and that quarries, by their very nature, have to be close to people. They are part of cities (‘Dallas’).

For ‘Danny’, the values attached to the natural environment deserve at least equal consideration to those normally associated with economic and social factors:

... I’ve always greatly valued the natural environment ... as equal consideration along with cultural, economic and social - all those other values ... the environment isn’t just one patch of bush. You’ve got to be protecting the whole thing, so there is a desire to help things work out on a global basis (‘Danny’).

Other respondent professionals bring an openly pro-environment set of values to their practice, regarding themselves to varying degrees as defenders of the environment:

... I have sustainability as my underpinning value set ... or philosophical approach to it ... I would certainly be at a green ... end of the spectrum, not necessarily preservationist ... people do regard my practice as being consistent, and people do use the word passion about me (‘Alex’).

In terms of personal values regarding the environment, it's something that ... is of massive value. The natural environment is certainly something that's ... important to me not only as a recreator, but just as an important piece of society ... the environment belongs to everyone and ... it's something that you have to be more of a guardian of on behalf of society, rather than just doing what the client wants or just doing what you think you can get away with (‘Cameron’).
Despite the above ‘environmental guardian’ sentiments, ‘Cameron’ has a more pragmatic and nuanced attitude, distinguishing between special places deserving of protection and those parts of the environment which may need to be sacrificed in order for development to proceed:

...some things are more special than others,... we need to save what's important and what's special, and people still need somewhere to live. So there are things that have to be given up... unfortunately. While the greenie in me might like to think that every tree is sacred ... it's just not a reality (‘Cameron’).

The global dimension of environmental sustainability and the multidisciplinary nature of environmental practice are also aspects of ethical responsibilities for several practitioners, and for two respondents, this holistic thinking also extends to spirituality and indigenous values:

... coming back to the passion, ....that ... has shifted more in my mid years to ... looking at sustainability in a holistic sense around communities. Because a large part of our work is around small communities ....whether they can afford it.... we can better manage our waterways, .... looking after our communities, so it's all sustainable (‘Jesse’).

... the philosophical question ultimately in spiritual terms is ‘why be good’? ... [and] .. sustainability can be one of the answers... leave the world a better place than when you came into it, then that hooks back into stewardship ... of the world ...and it's reflected in a lot of Indigenous thinking ... So there's a whole lot of philosophical-cum- spiritual stuff which is hooked into that (‘Alex’).

While few practitioners specifically refer to environmental ethics as a moral philosophy affecting their professional practice, all participants define their principles in relation to the premises of environmental ethics viz. respect for nature, protection of the environment and the goal of long-term sustainability; and this is also reflected in their attitudes regarding environmental constraints on economic development.

... issues of environmental ethics arise from the field of knowledge with which environmental professionals have been entrusted. Two issues of ethical importance unite the range of disciplines in supplying specialist environmental professionals. Firstly, the vulnerability of the environment to human actions. Secondly, the evident value that people in the community place on the environment (Sack, 1998, pp. 6-7).
4.4.2 Integrity and its Sub-Themes

... the capacity to act with integrity is vital to the professional; it cannot be replaced by the strict adherence to codes of conduct ... Integrity has a situational and communal subtlety that rules and codes cannot reproduce.” (Pattison & Edgar, 2011, p. 82)

With respect to the Principles and Values theme, responses which explored personal attitudes, values and ethical responses are categorised in this study into ethical principles, several of which correspond to expressions of integrity (professional, technical and process integrity) as detailed below.

The distinction and links between professional and personal integrity have been described by several authors e.g. Korsgaard (2009), and various other types of integrity have also been identified such as identity, authenticity, alignment, and accountability (Watts, 2012). Some (but not all) of these are encompassed in the term ‘probity’ (proactively demonstrating ‘evidence of ethical behaviour in a particular process’), commonly used in relation to public sector procurement (Queensland Government, 2019, p. 5). The interview responses analysed in the current study indicate that seasoned practitioners describe their integrity-related principles in various ways, which are grouped for the purposes of analysis under three broad headings (professional, technical and process integrity), as detailed below. In overview, the sub-themes revealed through interpretive phenomenological analysis (IPA – see Chapter 3) of respondent interview transcripts are summarised in Table 5:

<table>
<thead>
<tr>
<th>Integrity Principle</th>
<th>Integrity Sub-Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Integrity</td>
<td>Truthfulness (Principles regarding honesty and truth-telling)</td>
</tr>
<tr>
<td></td>
<td>Objectivity and advocacy (Principles regarding impartiality)</td>
</tr>
<tr>
<td></td>
<td>Pledge of service (Principles regarding fidelity)</td>
</tr>
<tr>
<td></td>
<td>Transparency and confidentiality (Principles regarding use of information)</td>
</tr>
<tr>
<td></td>
<td>Persistence, courage and consistency (Principles regarding agency and resolve)</td>
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<tr>
<td></td>
<td>Ideal of service for the common good (Principles regarding mission and contribution)</td>
</tr>
<tr>
<td>Technical Integrity</td>
<td>Accuracy and quality standards, based on science &amp; evidence (Principles regarding rigour and accountability)</td>
</tr>
<tr>
<td></td>
<td>Scope of practice (Principles regarding competence and representation)</td>
</tr>
</tbody>
</table>
Holistic integrated and multidisciplinary approach (Principles regarding collaboration and context)

<table>
<thead>
<tr>
<th>Process Integrity</th>
<th>Communication, consultation, persuasion and listening (Principles regarding respect and influence)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Balancing environment, economic and community outcomes (Principles regarding fairness and sustainability)</td>
</tr>
<tr>
<td></td>
<td>Practice wisdom and prudence (Principles regarding judgement)</td>
</tr>
<tr>
<td></td>
<td>Practice management (Principles regarding effectiveness)</td>
</tr>
</tbody>
</table>

Each of these principles is now discussed in further detail.

4.5 Professional Integrity

The responses of interviewees which are discussed below under the heading of professional integrity include ethical principles of honesty and truthfulness, impartiality and related concepts, transparency and confidentiality, agency and resolve (including persistence and courage), and the professional ideal of service for the common good.

For many seasoned practitioners, the concepts of professionalism, ethics and integrity are inter-related and allied to intentions to ‘do the right thing’, as strongly expressed by one owner of an environmental consultancy:

*We have the values of our organisation and we talk about that we're ethical practitioners ... It's about integrity ... we have a culture of not doing the wrong thing here. We've got to do the right thing ... we're a professional organisation .... we need to be seen ... to have integrity* ('Cameron').

For the practitioners interviewed, the ill-defined principle of ‘doing the right thing’ is fundamental to both personal and professional behaviour, and being seen to do so by staff, clients, agencies and colleagues is equally important. There appears to be considerable variation in what this concept means, although honesty and truth-telling (being a ‘straight shooter’, ‘telling it like it is’) are common threads.

For some respondents, ‘doing the right thing’ also means performing to the best of one’s abilities and/or adopting the correct appropriate procedures:

*... I've got very strong values about doing the right thing, doing things well - as well as I can. I'm not a perfectionist but I try to do things best I can ...* ('Finley', retired government agency officer).
However, the terms integrity, ethics, professionalism and ‘doing the right thing’ have overlapping and somewhat circular definitions, hence the following sections clarify the meanings which experienced professionals attach to these concepts.

4.5.1 Professional Integrity – Principles regarding Honesty

The issue of trust is at the heart of professionalism (see Chapter 2.3), and the disparity in knowledge between experts and those who rely on their expertise (Wueste, 2013) makes honesty particularly important. Regulatory agencies, decision-makers, the community, clients and colleagues all rely on science-based professionals to tell the truth (Friedman, 2002; Schön, 1995), including environmental practitioners (Pittman, 2008).

As has been discussed previously, the environment profession is largely science-based, in that a high proportion of practitioners have initial science qualifications, and much of the technical expertise which is called upon in their professional services relies on obtaining, analysing and interpreting scientific information. In common with the ethical codes of most science-based professions, the EIANZ Code of Ethics (EIANZ, 2012) (Appendix C) emphasises evidence-based practice:

**DEMONSTRATE INTEGRITY**

(a) Be honest and trustworthy, avoid misrepresentation or obfuscation, distinguish between fact and opinion, and state opinions which are honestly held;

**PRACTICE COMPETENTLY**

(f) Be diligent in practice, providing accurate, up-to-date, objective, impartial and unbiased advice;

(g) Acknowledge data and information sourced from others, and be accountable for data collected, analyses performed and conclusions drawn or plans developed as part of an assignment;

(h) Be prepared to explain work and conclusions drawn, and provide the evidence on which the work is based; (EIANZ 2012)

Most seasoned practitioners identify truth telling and honesty in reporting as central to their ethical principles and a key component of professional integrity. This includes an ethical requirement to ‘tell it like it is’ and advise their audiences (clients, agencies and the community) of the truth. For example one interviewee adopts a simple ethos:

... the basic principle to just tell the truth. People will try and pressure you ...

So you have to tell the truth and stick with it (‘Danny’).
Similarly, a senior environmental consultant with previous government agency experience states:

... there's nothing to be gained by trying to help someone out by twiddling the facts a bit. It's always best to just be straightforward, objective, because you get a reputation for being just that from the public and from regulators and from potential clients. They know when they come to us, they may not like what they hear, but we always give them the best technical advice (‘Jordan’).

‘Alex’, an environmental and rural property planning consultant with more than 40 years experience, uses the term ‘honest up-frontness’ when referring to initial meetings with potential clients:

... we can be honest with each other, and there may be some difficult conversations along the way, particularly if there's some bad news for a reason. But right now you're asking me to give you an opinion and I'll do some research and I'll give you that opinion and I will tell you the way I see it and what I think I can and can't do for you. So it's like an honest upfront-ness right at the beginning, and I don't ever change from that (‘Alex’).

Several seasoned practitioners report that their reputation for honesty has been the cornerstone of their long and successful practices, for example one comments that:

... over the years people within government have come to me when they’ve felt that they needed something done in a way that they knew would be honest ... people always felt that they would get the true story (‘Riley’).

The high value placed by environmental practitioners on factual evidence as the basis for professional opinions is emphasised by at least two participants:

If you're forming an opinion, it has to be based on some facts … back it up (‘Jesse’).

... you should make certain that you actually don’t form opinions without having good grounds for forming those opinions (‘Finley’).

One of the ethical issues associated with truthfulness and honesty is the responsibility for providing relevant advice beyond the immediate scope requested, where ‘speaking up’ is appropriate and necessary for prevention of environmental harm. This is similar to the ‘duty of care’ and ‘duty to warn’ obligations of health care and social work practitioners (McAuliffe, 2014, p. 124). One interviewee considers it a professional responsibility to draw attention to potential problems which they may be
aware of as a result of their expertise, but which may not have been appreciated by other parties:

... your knowledge and things you've learnt could be useful to other people ... I tend to have my two bob's worth because other people mightn't have had the experience I've had in an area and therefore are not aware of shortcomings in what they're proposing (‘Finley’).

This obligation to report on all relevant matters within one’s field of expertise is a particularly important ethical consideration for practitioners in court, as specifically addressed in guidelines and/or codes of conduct for expert witnesses in Australia. For example, the Australian Administrative Appeals Tribunal (AAT) Guidelines include, as clause 3.1:

A person giving evidence based on his or her special knowledge or experience in an area (a) has an overriding duty to provide impartial assistance to the AAT on matters relevant to the person’s area of knowledge or experience; (b) is not an advocate for a party to a proceeding;

and as clause 4.5 that any report … must include the following declaration:

I acknowledge that I have an overriding duty to provide impartial assistance to the Tribunal. No matters of significance have been withheld from the Tribunal (Blok, Gremmen, & Wesselink, 2015, p. 3).

Other Courts and jurisdictions in Australia have requirements for similar declarations that experts have not withheld any matters of significance or relevance.

4.5.2 Professional Integrity – Principles regarding Impartiality

All interviewees address issues of impartiality and absence of bias as important ethical principles related to honesty and truth-telling. Impartiality implies absence of bias or advocacy, where an impartial opinion is one:

… held at an appropriate arm’s length, and that it is not biased or prejudiced. One represents that the viewpoint that they have adopted for the purposes of arriving at the opinion is one that does not favour any particular interest … (Cohen, 2004, p. 150).

Ethical principles of impartiality are central to tribunal and court rules, and to public service ethics and probity requirements, but is only a sub-clause in the EIANZ Code of Ethics and Professional Conduct (Appendix C) under the heading of ‘Practice Competently’ (f: Be diligent in practice, providing accurate, up-to-date, objective,
impartial and unbiased advice). The Code of Conduct for the Queensland public service (Queensland Government, 2010, p. 5) enshrines impartiality as part of its first principle (“1. Integrity and Impartiality”), whereby public officials “b. accept and value their duty to provide advice which is objective, independent, apolitical and impartial”. The related concept of probity, as usually applied in government procurement and expenditure of public funds (but more widely applicable as an ethical principle) … “means more than just avoiding corrupt or dishonest conduct … Probity requires acting in such a way that there can be no perception of bias, influence or lack of integrity” (Queensland Government, 2019).

This is fundamental to the ethical principles of one public sector practitioner:

*It's being aware of all the different issues … and not having a bias one way and being very open in the way I deal with things …* (‘Logan’).

The emphasis on impartiality in the public sector may lead officers to question the objectivity of consultants who are paid by applicants for development or licences:

*It's very difficult for a person who is funded by a body to be completely value neutral. Fortunately, with the public service, that wasn't an issue for me* (‘Finley’).

Demonstration of impartiality and lack of bias, as part of professional integrity, includes avoiding or addressing conflicts of interest. Avoidance or declaration and management of conflicts of interest (both real and perceived) are fundamental to most codes of ethics, in both the professions and the public sector. For example, the EIANZ Code under the heading of “Demonstrate Integrity”, includes “(d) Avoid or manage conflicts of interest, and make all relevant parties aware when there is such a conflict”. (Appendix C).

Environmental auditors are normally required to demonstrate a high level of independence from the organisations or operations being audited, as specified by regulatory agencies and international standards. This is emphasised by an auditor with 25 years experience across a wide range of industries:

*... independence is a principle of auditing and you shouldn't be auditing something … where you can't demonstrate independence … I'm independent, I'm impartial, I will just call it as it is ...* (‘Morgan’).

However, environmental practitioners are often required to provide in addition to technical reports and audits, expert advice and recommendations which may have
elements of interpretation and opinion, albeit based on facts. It is important that a practitioner’s expert opinions and evidence-based advice are provided ‘without fear or favour’ - the same facts, the same interpretation and advice, should be provided irrespective of the client or payee, as noted by two practitioners:

[with respect to reporting] ... it comes back more to ... technical and being honest and truthful and interpretation and not being persuaded by your mind but by the facts ... That was probably my main principle. I would write a report in my mind's eye as if [it] didn't matter who the client was. That's how I see the situation (‘Dallas’).

... you need to believe in what you are saying ... irrespective of who is paying, forget about who is paying ... If you do something that you do not believe in, that is not ethical or goes against your beliefs or your technical understanding, when you work for someone else they're going to go back to that (‘Jesse’).

Respondents are somewhat divided as to whether professional advice must be ‘value-free’ (or the degree that such advice is free of personal values) in order to demonstrate impartiality and objectivity, with one practitioner emphasising that honest and impartial advice should be as free of personal values as possible, in order to be truly impartial:

... another person on site ... tried to deal with a lot of value laden issues rather than technical issues ... I felt it was emotional ... if ... people are free of being value driven ... you'll [all]come to the same answer... (‘Finley’).

This view is echoed by the environmental auditor quoted previously:

.... I can't think of any industry that I wouldn't go and do work for ... if you've already judged that a particular client or a site is unethical then you shouldn't be doing that audit because you're not independent. You're not impartial. Impartiality is another principle of auditing (‘Morgan’).

This issue is addressed, to a large extent, through the principle of transparency (i.e. ensuring that all ‘audiences’ of professional services are aware of the practitioner’s values and possible biases), as discussed in more detail below.

Although advocacy for or against a client or project is considered incompatible with a professional’s role as being impartial, objective, unbiased and disinterested, some types of advocacy are encouraged and considered part of a professional’s ethical responsibility. Most Institute codes of ethics expect professionals to advocate for certain
outcomes and in the case of EIANZ (Appendix C) this means actively promoting good environmental outcomes, as follows:

PROMOTE ENVIRONMENTAL PRINCIPLES
(a) Advocate the integrity of the natural environment and the health, safety and welfare of the human community and future generations as being central to environmental practice;
(b) Advocate the protection of environmental values and the mitigation of environmental harm, based on objective scientific and technical knowledge;
(c) Advocate and undertake environmental practice in accordance with principles of environmental stewardship, resilience and sustainability, with a view to achieving no net loss of environmental values and preferably a net gain, and to an appropriate standard (EIANZ, 2012)

The ethical responsibility of professionals to speak up within their fields of expertise and draw attention to environmental concerns also extends to public commentary, according to several of the seasoned practitioner respondents. For example, one seasoned practitioner reports that, after delivering a conference paper on a topic of public interest:

I had four people come up afterwards basically saying ... It's time for this to come out in public ... sometimes ethics can be about calling it. It's not just recognising that something is good or wrong or whatever it might be, it's actually about enunciating it and perhaps even publicising the point of view ... There's no point being silent or talking to your peers about it, you actually have to go a step further (‘Alex’).

The issue of advocacy, and its appropriateness in professional practice, is explored further in Chapter 6 Sections 6.4.3 and 6.4.5 below.

4.5.3 Professional Integrity – Principles regarding Information Use

The ideal of honest professionals, prepared to tell the unbiased truth irrespective of their own or their client’s interests, is allied to the importance of transparency. Many of the seasoned practitioner respondents place high value on the principle of transparency, as does the EIANZ Code of Ethics and Professional Conduct (EIANZ 2012) under the heading of “Practice Competently”:

(g) Acknowledge data and information sourced from others, and be accountable for data collected, analyses performed and conclusions drawn or plans developed as part of an assignment;
(h) Be prepared to explain work and conclusions drawn, and provide the evidence on which the work is based;
This emphasis reflects the science-based values of the environmental profession, in that investigations, analyses and conclusions can be validated by being reviewed, checked and if necessary replicated by others, using published methods and assumptions.

Central to the expertise of experienced environmental professionals is the skill in judging what information is needed, and at what level of detail, in order for decisions to be made by approval agencies, project feasibility planners, designers or resource managers.

... making sure we've got all the information we need. We need to engage with the specialists ... to make sure we've got that information (‘Pat’).

While the information required for development applications is now largely specified by regulatory agencies (this was not the case in the early days of environmental regulation), there is still room for professional judgement regarding the time and costs of pre-approval studies, as noted by one veteran consultant:

... we thought that we had the information to make the judgement call ... it gets back to the data and whether you've collected the right data and analysed it correctly and presented it correctly ... (‘Chris’).

For many experienced environmental consultants, transparency is demonstrated by openly reporting not only their findings and recommendations, but also by citing the project brief, the qualifications of those involved and the methods employed (including disclaimers regarding constraints or shortcomings), such that others can assess the limitations of scope and accuracy. This is succinctly expressed by one participant as follows:

... we're open and transparent with the regulator, we're open and transparent with the client, and ... we provide a good service ... that works with the two to solve the problem (‘Cameron’).

Another seasoned practitioner promotes wider transparency not only of data but also of the associated methods and assumptions, through publication:

The best strategy that we've got is to publish it transparently [referring to complex calculations of carbon abatement] ... One of the things I've tried to do in my own practice is to support transparent publication of those things and also plain English versions so that it actually becomes a layperson's field of work and also to challenge spurious accuracy ... (‘Taylor’).
There is often a gap between the investigation standards that a practitioner considers necessary (to meet agency requirements or best-practice standards) and those that a client is prepared to fund. This discrepancy can be addressed in an ethical manner by transparent declaration of limitations on accuracy or scope of investigations, as explained by an experienced owner/director of a consultancy practice:

... If we put a report in that doesn't meet guidelines, we say that that's client-directed ... then it's right up front ... this is what the ... level of work was, and it doesn't meet the guidelines ... take it or leave it. ... I don't think it's wrong because ... we're completely transparent about what we're doing. ... We'll always say to the client ... 'that's not really the right way to do it, or you probably won't get it across the line for that, but we can provide it to the agencies'. Then they can tell us what they think. ('Cameron').

Another participant adopts similar principles but often goes further in securing client commitments to additional post-approval investigations:

In putting our proposal to a client, we say ... 'this is what we think you should do'... if the client's not willing to pay for the level of assessment that we think is necessary, then ... we can try and get your approval without that information, but we can only do that by you committing to do those things at a later date post-approval. We never ... say ... 'you can get away without doing it'. We're always ... running an ethical line ... we don't hide it. We don't forget to mention that there's not enough information ... ('Jordan').

However, sometimes private sector practitioners find themselves ‘juggling’ the imperatives of commercial viability with transparency and other ethical principles, as candidly admitted by an experienced owner of a consultancy practice:

It reminds you that it's hard when you're in a commercial practice. Because you obviously commercially are looking at success all the time. But trying to walk that line around being transparent and doing the right things ... it can be challenging ... ('Cameron').

These pressures on professionals in private practice are discussed further in in Chapter 5.

A transparency-related issue in government agencies is deciding what information should be made available for public knowledge and scrutiny. Decisions of this nature are a concern for at least one government agency officer:

... I've ... talked to senior staff about ... information which has been withheld ... When I talked ... about the implications for other people, he hadn't even
thought about … the information not getting out. He actually changed his mind, said … ‘it should be put out into the public arena’ (‘Logan’).

Confidentiality is a fundamental basis of the professional relationship with clients, either as a contractual obligation or as the implied pledge of fidelity, as discussed in the following section. Although confidentiality is in some ways the opposite of transparency, in that the former is concerned with keeping information ‘secret’ and the latter with open release of information, in practice the two principles can operate side-by-side in ethical practice. Information can be kept confidential where required under contract or when unilateral release (without the approval of the information ‘owner’) would be detrimental to that party’s interests, such as commercial-in-confidence data, while other information can be openly declared and released (by mutual agreement) for greater transparency.

Confidentiality is enshrined in the Code of Ethics of most professions, for example in that of the Planning Institute of Australia:

CONFIDENTIALITY AND DISCLOSURE
Our Members will: Keep all information provided to them during the course of their work confidential, and shall not disclose or use any of that information for their own benefit, nor disclose it to any third party unless:

a) the information is authorised to be publicly available or is required by law to be disclosed;

b) it is with the express approval of the legal owner of that information;

c) is necessary to prevent a substantial damage to the public interest; or

d) has sought formal permission/approval to use any such information
(Planning Institute of Australia, 2018)

Professional relationships assume and are largely based on confidentiality, not only with respect to information to which the practitioner may be entrusted, but also with respect to anything that may confer competitive advantage in the marketplace. This is particularly apparent in the words of a practitioner with extensive experience working in and consulting to the highly competitive quarry industry:

... we had a good reputation in the industry for keeping confidences ... that was another important ethical thing ... when you do work for competing companies you've got to be very careful what you say (‘Dallas’).

Breaching confidentiality or public service codes by revealing public-interest information (‘whistle-blowing’) is most acutely a public sector issue, particularly when opportunities for ‘frank and fearless advice’ are restricted. For officers in government
agencies, the dilemma may be whether to ‘blow the whistle’ or to trust that due process will eventually lead to resolution:

So they [a Town Council] decided ... to ... change their plan to have smaller lot subdivision along the foreshores of ... Dam, .... and have septic. I ... pointed that wasn't a very smart move. I was drawing attention to it ... They didn't actually proceed with that because I'd ... mentioned [to the water authority manager] that ... he should do something about it because it's going to affect the ... water supply. There's some ethical issues in there about whether you should do those things but ... I had no problem with that (‘Finley’).

... throughout my professional career I have had conflicts .... you see things or hear about things which should really get out and be released. I think, by and large, I have obeyed the rules, but ... there's been a number of occasions where I have been in a situation where I've been very, very concerned - and a couple of occasions I have released - or pointed people in the direction of some information which may prevent environmental damage (‘Logan’).

Whistle-blowing is also an issue for private-sector professionals, especially those involved in development applications, such as town planners, and is specifically allowed under certain circumstances under the PIA Code of Conduct clause (c) above (“… is necessary to prevent a substantial damage to the public interest”). Divulging confidential client information is also an occasional or potential ethical dilemma in environmental practice, as noted by a rural planning consultant:

... I know something illegal is going on, what's my role? ... the ethical question is should I have gone the extra distance and somehow communicated anonymously or formally to Council to say the numbers on the survey are wrong? ... I didn't do it, but you know, like how far do you go? (‘Alex’).

However, in a different case, the same practitioner decided to ‘dob in’ a client to Council, because to do otherwise would have exposed two sub-consultants to unacceptable risks to their licences. In multi-disciplinary (and multi-firm) project teams involved in environmental assessment, the question of who ‘blows the whistle’ and who takes responsibility is itself an ethical issue:

... would I have handled the whistleblowing differently? I think the only option would have been to put it onto my two directly affected consultants to whistle-blow ... we stuck together as a team through thick and thin, but a significant risk was on my shoulders, but it was going to be there anyway because I was the lead consultant (‘Alex’).
Also included under this heading of ‘information use’ is the principle of community consultation, although effective consultation is more than simply an exchange of information to and from affected stakeholders. For one experienced practitioner, the twin pillars of ethical practice are science and consultation:

*Communicating it [science] to the organisation that you're working for, communicating it to the community and seeing where there's bands of acceptance and where there isn't. I think that's why I became a facilitator was that I think that that's a really crucial role is how to help that happen ... [and, when asked if these twin pillars had changed over time] ... no, if anything I've gained more confidence in the community* (‘Lennon’).

**4.5.4 Professional Integrity – Principles regarding Fidelity**

Among the distinguishing characteristics of a profession is that of fidelity to a client’s interests, rather than one’s own personal interests, as embodied in the professional’s implied pledge of service, discussed previously in Chapter 2. Although the pledge of service is two-way, both to clients and to society, obligations to clients and their interests is fundamental to practice ethics for all professions.

It is therefore surprising that seasoned practitioners interviewed for this study did not rank service to clients as an important ethical principle for their own practice, except in the context of trying to balance client service with environmental outcomes (see 4.4.3). Service to clients was not identified when discussing ethical advice to juniors, nor was poor service to clients mentioned as a criterion for identifying unethical practice. Many commented on the importance of ‘doing a good job’, but more often in the context of professional competence and reputation, rather than as a service to assist clients and their interests, such as gaining environmental approvals.

The closest any respondent came to acknowledging obligations to clients was in recollection of a previous employer who looked after clients well:

*the company I was with as a consultant was really good at serving the needs of their clients, even if it's just communication and keeping things running..., tasks and timelines ... [as well as] ... the quality of the technical activity ...* (Pat)

On the contrary, reference to clients and ethics together in the same interview topic, whether it be withstanding pressure to change reports or trying to reduce environmental harm, was in the context of clients presenting ethical challenges, or needing to be cajoled into better environmental outcomes. The implication is that clients represent a test of ethics and resolve, and that ethical practice requires constant vigilance against the demands and expectations of clients.
However this is unlikely to be a true representation of the relationships between clients and practitioners, especially those who have been successful environmental professionals for several decades. Alternative explanations for this oversight regarding service to clients are that the interview questions (Appendix A) did not adequately explore this aspect of professional ethics, that the tone of discussion during interviews encouraged participants to regard ethics and client service as conflicting concepts, or that seasoned practitioners regard client service as a contractual rather than an ethical obligation.

4.5.5 Professional Integrity – Principles regarding Agency and Resolve

All practitioners interviewed say or imply that ethical practice involves standing up for what one considers to be right, or being prepared to do so. The scenario of ‘holding the line’ and resisting pressure is one faced often in regionally-based consultancies:

Sometimes you need assertiveness ... to get the truth about facts across, or to get your opinion about what might be across ... it might be qualitative rather than something you can actually nail down ... (‘Alex’).

‘Jesse’, a wastewater consultant also in the rural sector, reports similar experiences:

... if you are working for a developer... you end up in a situation of actually saying ... you've got to do this ... it's going to cost you more money but that's the way you've got to do it ... if you don't like it, you can find someone else to help. I think you need to be able to be strong enough to be able to say that ...you have to be principled and stick to your values because it comes back to bite you in the arse. Well, no, it's more ... you've just got to do what's right (‘Jesse’).

Several consultants, especially those who commenced practice 30-40 years ago when developers and industry were more dismissive of environmental constraints than at present, relied in those days on their knowledge of regulatory agency policies and precedents to support their position, as recalled by a practitioner experienced in dealing with resource companies:

... the client’s pushing us and we’ve had to draw a line in the sand, and said ‘no we can’t go beyond this’ ... and if the client wanted it in a hurry, we’d always be using the card ‘Just give it to the Department, give them what they want, don’t push us any more. Because if you keep pushing us, it’s going to take longer’ ... (‘Chris’).
However, an ecologist with similar length of consultancy experience, regards at least some of these conflicts as tests of the practitioner’s resolve:

*People will try and pressure you. We’ve all had the experience of the tough CEO that comes in and yells at you or pushes you very hard because that’s their job. They want to make sure you tell them the truth and they need to test you, and if ... you’re weak, then they’ve had a win. But at the end of the day if you convince them, they’re smart people, they’ll turn around and say okay what do we do now. So you have to tell the truth and stick with it* (‘Danny’).

The virtue ethic of courage (Sekerk, Bagozzi, & Charnigo, 2009) is arguably even important in the public sector, where the Westminster system of public administration requires public servants to implement the policies of the government of the day, and career prospects may be affected by challenging such policies. A participant, now a senior consultant, referred back to his previous experience of ‘holding the line’ in public service management:

*... people may not like it in the moment, but I think you get respect from the Minister ... they might be offended ... but they come away from it knowing that whatever [I] say is [my] objective view of it without fear or favour. I've always ... had the confidence to withstand that sort of social pressure or political pressure where others mightn't. Someone might be more intimidated in front of a Minister than I ... have been. That would be difficult for them, but my advice to them would be just hold your line* (‘Jordan’).

Several respondents referred back to a ‘golden age’ where professionals within the public service were expected and encouraged to give ‘frank and fearless’ advice based on their expertise. To quote a practitioner with experience as a senior local government officer:

*... in those days, the Council officer was certainly expected to be frank and fearless. ... there wasn’t a sense that you had to ‘groom’ the answer so much ... and maybe that's where I felt advocacy needed to be, was in the frank and fearless advice if you had the evidence ...* (‘Lennon’).

An experienced public sector practitioner raises similar concerns when referring to public sector managers in the past:

*... There was strong stuff coming from them. It was pretty frank and fearless advice. With all the reorganisation and people ... [were] expected to toe the line, even the area managers have become ‘yes-people’ ... there's no such thing as frank and fearless advice anymore in the public sector ... I think they're all worried about their jobs, so they comply and capitulate* (‘Logan’).
‘Jesse’, an agricultural wastewater consultant with experience working with rural communities, reports instances where ‘sticking to your guns’ against a client’s preferences had positive outcomes for the practitioner:

... you'll be in a public meeting and you might end up disagreeing with your client... Council ... but you're talking about what you believe in ... Suddenly you end up with the community people actually supporting you ... they actually say 'we don't trust the Council, but we trust you'. Which is actually quite cool when people say that (‘Jesse’).

The ethical principles behind giving frank and fearless advice also apply in professional consultancy, for example two respondents understand that responsible practitioners must sometimes give unwelcome advice, albeit with consequences:

... if your technical advice was that a project ... shouldn't proceed or might meet the requirements of the law but would have negative effects none the less, it was your responsibility to make this clear to the client ... at the end of the day the worst the worst thing that could happen is the client sacks you (‘Danny’).

... you're a professional who has ... knowledge which other people don't have ... and you actually have something worthwhile to contribute here and the question ... is, ‘do I bother?’ ... That's where sometimes this social courage of saying ... I disagree ... actually using a word like ‘disagree’ so that the person is on notice that you're going to say something uncomfortable to them (‘Alex’).

Notwithstanding that environmental practitioners are sometimes the bearers of bad news, professional consultants need to be reliable advisers, and the most constructive client-consultant relationship is one of trust. ‘Cameron’, an experienced owner of an environmental consulting business, considers the relationship confers a privileged role in advising clients not only on what is and isn’t legally compliant, but also on what is and isn’t appropriate:

... as a consultant you get a very privileged position to either tell your client or inform or instruct your client on what you think is appropriate (‘Cameron’).

The term ‘appropriate’ in the above context, as a criterion for acceptable development or behaviour, may include sustainability criteria and community expectations, as well as ethical standards.
4.5.6 Professional Integrity – Principles regarding Mission and Contribution

One of the defining characteristics of a profession is the ‘ideal of service’ (Larson, 1977) whereby the particular skills of professionals are deployed primarily for the benefit of others, rather than for self-advancement. Each profession defines ‘benefits for other’ in relation to its shared values and objectives, which for the environment profession includes the wellbeing of the natural environment.

Several private sector consultants expressed statements consistent with the profession’s mission and role as stewards of environmental values:

... there are positive reasons for continuing to do what I do, including the stewardship of the planet, you know, the biggest level ... (‘Alex’).

As quoted previously, ‘Cameron’ is also a self-professed guardian of the environment on behalf of society. However most seasoned practitioners appear to regard their ethical responsibility towards the natural environment as that of applying their expertise to reduce the environmental harm which their clients may otherwise cause:

.... there's always been in the back of my mind of 'how can we do this better so we minimise environmental harm? ’ ....that's always driven me, how can we do this better? .... my role is to try to make sure it's done the best way possible ... (‘Pat’)

For several practitioners, the ill-defined concept of ‘doing the right thing’ (as previously discussed in 4.5 above) means acting in the best interest of the community or the public:

[Regarding discharge of waste-water to streams] ... we all have to use the water, regardless of what it's for. Whether it's for further use, further production use, whether it's for contact recreation, whether it's the fishery values, I think we have an obligation to do what's right (‘Jesse’).

Several respondents specifically mention that their idea of ‘doing the right thing’ includes benefits to the environment and to the wider community, and fairness to all parties and stakeholders. The principle of fairness is covered further in Section 4.7.2 below.

4.5.7 Professional Integrity Summary

In summary, analysis of the interview responses of seasoned environmental practitioners indicates widespread agreement on ethical principles grouped under the heading of ‘professional integrity’ viz: honesty and truth-telling, transparency regarding
impartiality, conflicts of interest and limitation disclaimers on submissions, and how information is used. These are consistent with a science-based profession. While the interviewees, perhaps surprisingly, failed to rank client service fidelity principles highly as professional ethical obligations, reasons for this oversight may relate to the tone of questions and interview discussion, or it could be that environmental practitioners perceive a conflict between client service and ethical practice. There is however agreement regarding principles of resolve (sticking to one’s opinions) and an ideal of service and mission, although the latter varies according to values among the cohort of interviewees. For many of the seasoned practitioners interviewed for this study, their ethical obligations towards the environment and practice standards are part of their goals of service towards the community and the way in which their skills and experience serve the common good. However, interviewee responses also highlight the tensions between professional responsibilities for confidentiality and public-interest disclosure.

4.6 Technical Integrity

All practitioners interviewed regarded their technical competence as central to their professional identity. It is also central to professional ethics, in that practitioners promise (or profess) to be suitably qualified, skilled and experienced to offer their specialised services to clients, and to provide advice trusted by the community. As noted in Table 5, technical integrity comprises accuracy and quality standards, based on science & evidence (principles regarding rigour and accountability), accurate representation of their competence in their particular scope of service, and a commitment to collaborate where appropriate to ensure an holistic and integrated approach.

4.6.1 Technical Integrity - Principles regarding Rigour and Quality

For all professions, quality of service ranks highly as a professional obligation with ethical implications. For a science-based profession such as environmental practice, technical accuracy is a source of pride, identity and is valued as ‘stock-in-trade’:

... inevitably it gets back to the data and whether you’ve collected the right data and analysed it correctly and presented it correctly, and then if you’ve come up with the right mitigation strategy (‘Chris’).
[with respect to reporting] ... it's more technical and being honest and truthful and interpretation and not being persuaded by your mind but by the facts (‘Dallas’).

There is widespread recognition, among these seasoned practitioner respondents, that factual evidence and technical accuracy are essential in supporting opinions and advice, as emphasised by an ecologist with more than 40 years experience:

... it's got to be information-based so you've got to be able to back up what you're saying. That was number one ... you might have a gut feeling if you really love an area, but if you can't back that up with the science then you've got to separate your personal views from your technical advice (‘Danny’).

Related to the principles of rigour and the previously discussed principles of honesty and transparency, is the responsibility to ensure (or at least recommend) that investigations are ‘fit-for-purpose’ and targeted to yield adequate relevant data. This requires experience, as noted by one practitioner:

... you have to interpret data, and figure out what that means, and if we need more ... or if there's any value to doing it in a different way ... It's up to us ... to talk that out and try and come to what the right answer is, if that's fit for purpose. Rather than the most amazing investigation that you've ever done. It's got to be fit for purpose. Our ethics need to be around that (‘Cameron’).

A former agency director described an example of ‘fit-for-purpose’ investigations sometimes being subverted by fear of making a controversial decision and by political objectives:

...[the] Minister ... rather than make an approval decision ... formed an expert technical panel ...[but they] ... completely over-egged the requirements of the modelling process ... [and the developer] had to comply. They spent I think it was $5 million in two years doing a very sophisticated monitoring and three-dimensional ... modelling ... [but the result] was virtually exactly ... the same as the original one. It was almost farcical ... the regulators were too scared to make a decision based on that information. ... so the fit for purpose assessment gets lost ... it's not fit for purpose anymore. It's fit for politics ... (‘Jordan’).

A significant proportion of respondents indicated that their primary motivation for practicing in environmental disciplines has been the technical challenges of problem-solving in these fields, for example one practitioner is driven primarily by the technical and scientific challenges:
... the technical interest just happens to be the environment I'm working in. It offers a lot of technical variety there. But I didn't come into it in wanting to save the world or anything like that. It was more that I saw that there were lots of interesting things happening and I liked the science that went with it ... My interest in environmental management [was that] I always liked modelling ... ('Jordan').

Similarly, an experienced auditor also indicates a primary interest in science then a developing involvement in management, more than any particular drive towards environmental practice:

I'm not a greenie or anything ... I'm quite science based, but over the years it's more business management and compliance ... I ... enjoy doing it ('Morgan').

However, several respondents indicate that they had progressed, through their careers, from valuing science and technological solutions, to realising that other factors were critical where the objective was to influence change, as, for example, a retired public servant reflects:

... I started off with research ... I saw as really important ... to have reliable information and make decisions and understanding of what's going on. However, it became very apparent to me ... that it's the application of information that's more important than the information per se ('Finley').

Almost all environmental practitioners face pressure to achieve outcomes (such as investigations, reports and approvals) in the minimum possible time while also minimising costs. While this issue is discussed in more detail in Chapter 5, it is also relevant under the heading of ‘Technical Integrity’ as an ethical principle. An appropriate ethical response to these pressures is transparency, as discussed above and as noted by an experienced owner of a consultancy practice:

... the market here is quite tough. But ... we've found a way through that ... we're still transparent in what we do ... it's important for us to be professional. If we're ... going to have to spend less time and not do the most thorough job as we would like to do, well, that's just a commercial reality and we just have to be open about that's what's happening ... So rather than doing a full report on something, you might do a 'letter report' with [fewer] figures ... We've had to change how we deliver some of our services so that we can be transparent about what we're doing, but be able to compete in the market still ('Cameron').

Continuing professional development (CPD) is another characteristic requirement for professionals (Byers, 2018) which has ethical dimensions as well as being important
for skill maintenance, community trust and ensuring one’s techniques and advice are up to date. Cuba (2004) considers it an ethical obligation of environmental professionals to keep up to date in their disciplines, in order to reduce the time lag between research, policy and on-the-ground application of the latest scientific findings. For some practitioners, CPD documentation is accepted as a necessary requirement for ongoing certification:

... to maintain your certification, you need to do x hours ... then ... submit your ... log of CPD and your logs of your audits, but if required they can request further evidence ... I hugely exceed my number of CPD points ... (‘Morgan’).

Maintaining and documenting CPD is quite a burden for those with multiple certifications:

... Each of those [certifications] have a CPD element, which is a bit of a mission to manage in that you have to make sure that you collect enough credits or undertakings for each of them (‘Jesse’).

The seasoned practitioners interviewed for this study are all committed to doing a good job, to the best of their ability within the constraints of time and budget, and this appears to be a distinguishing shared commitment among environmental professionals, one also likely to be shared by other science-based professions. In these fields, high-quality work implies rigorous assessment, accuracy and attention to detail, and also requires continuing professional development, but there is also general agreement that such investigations should be fit-for-purpose – neither more nor less than are required to acquire the relevant data and address the environmental issue at hand.

4.6.2 Technical Integrity - Principles regarding Competence and Scope

A principle related to quality and rigour is that of honest representation of one’s competence and scope of practice. Implicit in the ethical responsibility for honesty, and the trust placed on professional advice by the community and decision-makers, is the expectation that professionals will provide services only within their fields of expertise and will refrain from offering advice and opinions for which they are not qualified.

An auditor interviewee emphasises this obligation:

... one of the principles of auditing is that you only audit what you know ... if you haven't had much experience in a particular industry, you would want to be getting [in] an industry expert ... you need to know the language, you need to know what's expected ... (‘Morgan’).
One of the fiduciary responsibilities of professionals, and the basis of community and client trust in their expert advice, is that they act at all times within the limits of their specialised expertise (Thompson, 2012). This is a clause in the Codes of Ethics of EIANZ and most professions, for example Consult Australia (Consult Australia, 2010) and the Ecological Consultants Association (NSW) Code of Ethics:

12. A consultant must not hold out to the client or advertised to potential clients to have expertise in, or can conduct any work, they are not qualified for and/or have experience in, to undertake and that are beyond which they can be accredited for by the ECA. (Ecological Consultants Association (NSW), 2002, p. 2).

One participant raises an example of ‘bait and switch’ misrepresentation common among larger consultancy practices, that of bidding for projects using the names and capabilities of senior experienced practitioners, when the project budget indicates that it will be undertaken by juniors with less experience:

... I object to having my CV put in a proposal where I will not be doing that work ... [the clients] end up getting someone that they don't expect with less experience ... I've found out situations where it has over the years and I've taken action to ensure that it hasn't happened again ... ('Morgan').

Professionals earn their living by selling their expertise and experience in specialised fields. Their qualifications and capabilities contribute significantly to their reputations, and are the basis for competition between one professional and another, whether for clients, commissions or employed positions. However competitive pressures, allied with confident enthusiasm and a desire to be helpful, may tempt individuals or their employing organisations to misrepresent capabilities, overstate competence or experience, or use ‘bait and switch’ marketing. Ethical practice includes honesty in representing one’s professional competence, maintaining trust in the expertise of individuals and the environment profession generally.

4.6.3 Technical Integrity - Principles regarding Collaboration and Integration

Many site-specific environmental issues are multidisciplinary in nature, requiring collaboration between professionals with a range of skills. For example, a stormwater management plan associated with a subdivision may include wetland ecologists, soil erosion experts and landscape architects as well as water quality engineers. Similarly, many environmental impacts involve ecological interactions and energy flows within a broad catchment, and a global sustainability context, well beyond than the immediate site surroundings. The professional responsibilities of environmental practitioners
include consultation with relevant experts as required, and ensuring an holistic approach including the local, regional and national/international context, as noted by two interviewees:

...we have to be cognisant of those other things ... what happens .... to the natural environment ... upstream of a World Heritage Area? ... You can't ignore the environment within which you are working when it has multiple aspects ... I'm much more interested intellectually in multi-disciplinary approaches ... (‘Alex’).

... who are the people we need ... to make sure that it's done better .... it might be a bird expert, an ant expert, storm water expert, they need to be brought into the project to make sure that we understand the issues before we start potentially harming those environmental areas (‘Pat’).

‘Jesse’ regards this shift in perspective as a significant change compared to environmental practice one or two decades ago:

... one of the things that's changed in terms of our practice probably in the last three or four years is thinking beyond an individual client's solution and actually thinking about the bigger stuff (‘Jesse’).

Working together in multi-disciplinary teams also requires professionals to appreciate the viewpoints and ethical principles of other disciplines (McAuliffe, 2014, pp. 8-9), and for at least one participant, this helps clarify and perhaps modify one’s own opinions and principles:

... spending time with other people and spending time particularly with other disciplines, you learn a lot more about your own position and modify your position (‘Alex’).

Principles of collaboration are allied to those of competence and representation, in that ethical practitioners recognise the limits of their expertise and seek input from other professions and technical experts where appropriate.

4.6.4 Technical Integrity Summary

The ethical priority given to technical competence and honesty in reporting, as reported by interviewees, is consistent with the scientific basis of the profession. The practice ethics of environment professionals go beyond the truthfulness obligations of research scientists, because additional ethical responsibilities attach to professionals who provide expert opinions, advice and recommendations based on their interpretations of the data.
Technical accuracy and investigative rigour are also central to any claim for professional status in scientific disciplines. It is not surprising that the seasoned practitioners interviewed generally regard technical skills and integrity (i.e. always doing a good job) as a core responsibility and an ethical principle, and also consider that professional opinions should be evidence-based. However, practitioner adherence to these principles, in both private sector consultancy and government agencies, is tested at times by budget and time constraints, as discussed in more detail in the following chapter. As discussed in Section 4.5.3 above, experienced practitioners rely on transparency as one of the ethical ways to respond to such pressures.

Allied to the issue of technical quality, and to the trust placed by clients and the community in professional proficiencies, is the responsibility to maintain one’s skills through CPD and to offer services only in areas of one’s competence. While marketplace competition between consultancy firms encourages misrepresentation of skills and experience in marketing consultancy capabilities, it remains the responsibility of individual practitioners to avoid misuse of their CVs.

With respect to project scoping, experienced practitioners recognise the need for briefing and investigations to be fit-for-purpose, and targeted towards collecting the data required for decision-making. Although there may be community or political pressure for over-detailed investigations or unnecessary studies, and notwithstanding that these may create greater revenue for consultants (and less political risk for regulators), it is an ethical responsibility of professional experts to draw attention to data priorities. Several of the seasoned practitioners interviewed also consider it an ethical responsibility, irrespective of the brief, to be cognisant of the wider environmental context (beyond the immediate site surrounds), the multidisciplinary and interconnected nature of most environmental impacts, and the broad principles of sustainability.

4.7 Process Integrity

Grouped under this heading are a number of ethical principles surrounding relationships and communication, such as how to respectfully treat staff, clients, stakeholders and the community, while at the same time seeking to influence them. Also included are professional judgement and practice wisdom, the balancing of environment, economic and community outcomes, and management of a professional practice.
4.7.1 Process Integrity – Principles regarding Respect and Influence

The ethical dimension of listening, as an indication of respect, was raised by several seasoned practitioners in different contexts, and using different terms (such as consultation and inclusion), and often associated with conflict resolution. For example, one participant starts from an understanding of the objectives of the various stakeholders:

... Who are the stakeholders? ... What's their responsibility? ... how does what we're doing relate to them and what is it that they want? ... what's going to really get their support and what's not? ... we need to know that, so that you get your approvals ... (‘Pat’).

Similarly ‘Alex’, working in rural areas, adopts a tone of respectful listening in mediating conflicts over environmental constraints:

... getting the parties to think about their positions, perhaps with ... a view to moving to a different position ... [for example] ... here are some consequences that you may wish to consider ... getting your participants to think about their thinking. That's to me the core skill in mediation ... (‘Alex’).

Another consultant experienced in working with rural communities sees that part of the professional’s role is to make complex things simpler:

... I'm reasonably competent at making hard things simpler, and especially getting parties to understand ... a certain direction that they need to take and so helping with that transition of big picture, smaller solution. I think one of my drivers is to take some of these complex issues that people are debating and actually make it work (‘Jesse’).

Based on experience in liaising with Aboriginal communities, an agency officer recalls some sound advice:

... We got talking about things, and he said ‘do you want some hints in working with Aboriginal communities’? I said ‘yes please’. Basically, it came down to respect, trust and listening. I just applied that to the rest of my environmental career (‘Logan’).

The importance of respectful influence (‘bringing people with you’) in agreeing to environmental protection and management, in a process of educative persuasion, is central to both ‘Jesse’ and ‘Alex’ in their rural consultancy practices:

... you take the client on a journey to get to that point so that the community understands ... and the people who are providing for the community actually need to realise they've got to work together (‘Jesse’).
So I take quite a soft approach ... I'm quietly educating people through the newsletter about all the things that apply to their properties (‘Alex’).

For Danny, being ethical is closely associated with a capacity to persuade others to your point of view, and he regards this capacity to persuade as essential in ethical practice:

You've got to develop your powers of persuasion if you want to be ethical because you've got to bring others with you (‘Danny’).

This capability not only allows Danny and his environmental team to practice in an ethical manner, but also to progressively improve their ‘stable’ of good clients:

... you should always ... push for that a bit more ... try and get the client to do more than they needed to do, just for the minimum amount of meeting the regulatory requirements ... you want to try and build a more environmentally aware client and I think that's important ... (‘Danny’).

Similarly the relationship between experienced consultant ‘Cameron’ and some clients is one where they seek advice as to what is appropriate and ‘the right thing to do’, and this constructive relationship offers opportunities for respectful influence:

In making a decision around what they [clients] should do or what they could do, you're continually trying to influence clients to come up a bit ... some clients are great and they want to do the right thing and they want to do great things. But ... in the middle of the negotiations, they look to you for advice around what's appropriate and what's not (‘Cameron’).

The ‘rule of thumb’ that the path to better environmental outcomes is smoother if you can persuade stakeholders to accept a solution (whether based on your expert opinion or a collaborative position), is echoed by another senior practitioner:

... if there's an issue ... and it's going to be difficult ... you actually take people along with you ... help them to understand your perspective and why you're doing things ... I've done a couple of studies where we ... had resolved the issues and everybody is pretty happy and walked away. That to me is a successful outcome ... I think it's really fundamental. That affects ethics too. (‘Finley’).

Interviews with seasoned practitioners indicate that respectful inclusive relationships are important in achieving better environmental outcomes, in that such an approach brings others along with both the immediate solution and a longer-term understanding. Whether dealing with staff and colleagues, clients, stakeholders and
regulators, or the wider community, listening with respect is both effective and ethical practice.

4.7.2 Process Integrity – Principles regarding Balance, Fairness and Sustainability

As summarised in Table 5 above, this section on the principles of fairness and sustainability involves balancing environment, economics and community outcomes. The various roles of environmental professionals include, in addition to gathering scientific data and checking compliance with regulations and conditions, giving advice and opinions on an appropriate balance between competing values and interests. This may be a balance between developer’s commercial interests, community benefit and environmental impacts, the acceptability of removing fauna habitat to construct water quality protection, the mitigation of vegetation clearing for improvements in sustainable public transport, or the like. Several seasoned practitioner respondents, in particular public agency officers and those involved in rural planning and agricultural industries, consider that one of their ethical roles is to help bring people together for consensus or acceptable outcomes, and to assist communities balance competing interests. For example, one local government officer described a fairly typical situation regarding a proposed housing development adjacent to a sensitive wetland:

... I'd also help them understand ... we might lose that bit of habitat, but the project also involves improving the other side of the lake which is currently degraded and ... providing a great habitat over there ... so you have your trade-off .... and a compromise ... (‘Pat’).

Finding the appropriate balance is also an importance ethical principle for private sector consultants when dealing with individual clients or with communities:

... you're trying to get a good outcome for the client and you're trying to get a good outcome for the environment, and the best project is one where you get both. Sometimes you're going to have to compromise one to get the other, but sometimes you won't (‘Danny’).

... I was working at telling my Board at the time about the triple bottom line before it was called that ... I said to them you can't just pursue economic benefits for our locality ... you also have to take into account the social and the natural environment within which those activities are occurring (‘Alex’).

For some practitioners, the ethical responsibilities to find an appropriate balance has been a matter of personal assessment and choices, not derived from consultation, for example ‘Dallas’, a retired resource industry consultant reflects that:
... I have the public sitting on this shoulder and the company sitting on that shoulder peering down and watching what I'm doing in my mind's eye ... and the top of my head overlooking the lot was ... the courts ... I try and find a balance that is really what I think is ethical, what I think is correct for everyone ... (‘Dallas’).

Several respondents specifically mention that their idea of ‘doing the right thing’ includes benefits to the community (not just the environment) and social justice for people who may be disadvantaged in some way.

I've got a lot of concern about social as much as economic issues and environmental issues ... To me, I feel very strongly about trying to help those people to get a fair deal. So that's part of my ... social justice thing. Very strongly, yes ... (‘Finley’).

Fairness and the sense of obligation to ‘do the right thing’ also extends to dealing equitably with staff and people, as expressed by one practitioner’s efforts to stand up for junior staff trying to do their job with inadequate resources:

... looking at the fairness of things, ... my fairness test ... I've felt some sort of obligation there ... [towards] staff who are in mid-career and aren't game to say anything. I'm basically at the end of my career and can afford to, although I've done it earlier [spoken up], to my detriment ... (‘Logan’).

Resolving environmental issues, or recommending options and solutions, often requires consideration of a number of different interests and perspectives. Dealing with each of these respectfully is part of a practitioner’s ethical obligations, but so is the responsibility to strike an appropriate balance which is fair and reasonable.

4.7.3 Process Integrity – Principles regarding Judgement

Another of the distinguishing characteristics of professionals is that individual practitioners make judgements based on their qualifications, skills, experience, ethics and values (Higgs, McAllister, & Whiteford, 2019). The processes involved in professional decision-making vary between disciplines, and are difficult to analyse, replicate and teach (Zhu & Jesiek, 2017) but have been described and categorised by Schön (1995) and others. Although some aspects of professional judgement are increasingly being replaced by standardised procedures, risk management protocols and organisation codes of behaviour (Bellini & Maestripieri, 2018), the complexity of
professional decision-making still leaves scope for individuals to display judgement and to mentor juniors regarding ‘practice wisdom’, as discussed in Chapter 2 (section 2.3.3).

Practice wisdom can take many forms, and be applied in a range of circumstances, depending on the profession and sub-discipline, the types of situations encountered and the risks involved. Situations requiring professional judgement and prudence range from making quick decisions in emergencies, judging ‘good’ design and knowing the best pathway to approvals or policy change, through to staff selection and weighing up risks associated with particular clients and projects. Not all of these have ethical dimensions, but the aspects of professional judgment of interest in this study are those where seasoned practitioners use their practice wisdom to make ethical decisions.

... a decision has to be made, and ... someone might ... disagree with that decision, and you say ... ‘that's fine, but it was made in the context of this plus’ ... other information that they're not privy to ... (‘Jesse’).

Judgements of this nature may need be made relatively quickly at the first client meeting or site inspection, where the practitioner uses his or her experience and practice wisdom to undertake a preliminary assessment of the environmental ‘credentials’ of a project, or to test whether or not a relationship can be established where the practitioner’s advice will be respected:

... I'm actually setting some expectations up front and ... you get over that big hurdle of building the relationship in that first conversation and you ... don't have problems with people after that ... They pay their bills, they like the work you do, you get your approval, you alert them early to the problems that are arising ... that's good professional behaviour and people like it ... (‘Alex’).

I would always say that I will review the case and give a preliminary report before you employ me ... we lost work from that ... or clients ... (‘Dallas’).

.... where you first start dealing with ... clients that sit down and make a big speech to you about how interested in the environment they are and how they want to do the best job possible are ... not always but often ... trying to get some brownie points so they can screw you down later because they think you're on their wavelength (‘Danny’).

Several practitioners mentioned situations where they judged, at some stage during a client-consultant relationship on a project, that it was time to walk away:

... we stayed with him trying to fix it but when I could see that he wasn't going to spend the money or that, we squibbed out and basically suggested he get another ... group and then gradually moved away from it. He never used us again
after that but I made it quite clear that I was really disturbed about what his attitude to all this was (‘Dallas’).

[Referring to a client who ignored consultant recommendations] ... *Clearly him getting onto a slasher and wrecking the thing contrary to [my] eight-page letter ... that was a trigger. I'm not sure how I apply my ethics to that, but suddenly I'm right off the fence, I'm not working with this client anymore* (‘Alex’).

Experience is also essential for reflective practice (Schon 1995) and for understanding one’s own reasons for decisions which may benefit or disadvantage a client:

> when you get older and more experienced it becomes a bit more clear ... are you actually doing this to please a client? or are you working within limitations of what they can actually do? That takes a bit of experience to tread that course.

(Pat)

Within government or local council agencies, professional judgement comes into play in knowing which ‘buttons and levers’ are available for effective action, and when to use them, as outlined by a former environment branch leader in a metropolitan Council:

> We were introducing a levy to buy bushland ... we needed to know more about what Council owned and what was privately owned. That had never been mapped. Nor had all the parklands ... the change to bushland ..., and the light went on, .... look at what they’ve got and look at what they're dealing in ... the simple thing of a map could just transform what a group was saying into factual argument ('Lennon').

Practice wisdom and decision-making judgement are acquired through experience during one’s career and accumulation of case studies, and accordingly are not aspects of practice which can be taught at undergraduate level, nor incorporated into codes of ethics, but attention to ethical decision-making can over time contribute to highly-principled practice wisdom.

### 4.7.4 Process Integrity – Principles regarding Practice Management

A range of issues were raised by interviewees as ethical principles which they have developed and adopted during their long careers, which have been grouped herein as ‘practice management’. In this context, the term ‘practice’ covers any group of practitioners working together to achieve professional outcomes, whether in a business,
research or academic group, or government agency. A wide range of skills, both professional and personal, are required in order to manage a practice successfully, only some of which have an ethical or moral dimension. The activities included under this heading include team collaboration, managing people, accountability, continuing professional development and quality procedures, all of which have an ethical component as well as a practice-effectiveness component.

There is general agreement among the seasoned practitioners interviewed that, consistent with the ideals of professionalism, the quality of services provided are more important than profitability or benefits to the individual professionals involved:

I've always valued ... the quality of the work that my office puts out rather than having a business plan that says we have to hit targets of so many dollars income a month or whatever it was (‘Alex’).

[Re being ethical] ... mine is about quality also, so my sense of needing to do things of high quality ... if something is sloppy or brushes over things I'll get in there and improve it, so I have a sense of it has to be a high quality product ... (‘Pat’).

Ethical principles in practice management include communication with and supporting staff, especially when disagreements arise:

... a large part of it comes back to respect ... you respect people's judgement and decisions and you expect the same in return ... explaining that to staff so that they feel comfortable that you're not just ignoring them ... you say, 'I understand what you've got there but I'm making this decision because of these other factors of which your contribution is one of a number of factors' ... it's having that explanation which is important (‘Jesse’).

... the ethics of talking about people behind their backs and things like that ... those sort of areas of ethics, for me and my knowledge of impact on people and things like that, are quite easy for me to determine ... I can't abide anyone being bullied ... particularly with staff management. When I've seen people doing the wrong thing to other staff, fellow staff or whatever, I've been never afraid to say something to a manager, saying that's not on (‘Logan’).

The ethical dimensions of work-related communication and inter-personal relationships are particularly important when environmental assessment teams bring together different disciplines, and a project manager is responsible for integrating specialist inputs. At least two experienced consultants and environmental assessment
managers consider it part of the lead consultant’s role to override a sub-consultant when necessary:

... because I do the quality control, my regulars [specialist sub-consultants in bushfire and ecology] ... know that I may well try to massage their reports by saying bushfire wants to clear it all, ecology wants to save it all, my suggestion is ... the master site plan, what do you think? My regulars know that that will be an acceptable solution from their perspective and they understand why I'm asking for it. To me it's not unethical, it's about finding the answer ('Alex').

... it’s a combination of being able to think about the issue from a specialist point of view and also in the context of the broader proposal ... the botanists will say, 'well we've found this here, so this means that it needs to .... be referred [to the Commonwealth Government]...'. We quite often say 'no ....the report scope .... is a botanical survey of the area. We're not making recommendations for referral. That's not a botanist's job' ... So we quite often have discussions around, you need to provide the technical data ... End of story. Then the interpretation of that is secondary... The lines get blurred too easily ('Cameron').

Managing a team of environmental professionals to achieve group outcomes, whether in private consultancy or a departmental branch or section, involves a range of practice management skills. The daily practice decisions associated with deadlines and limited resources, managing risks and competing for work, marketing and dealing with staff, clients and regulators, all compete for attention with technical problem-solving and ethical issues. Managerial responsibilities generally assume greater priority as a practitioner progresses, expands a private practice, or is promoted, and senior professionals need to adopt a practice manager role to varying degrees and at different times; and this may change a practitioner’s perspective on ethical decisions.

4.7.5 Process Integrity Summary

In addition to the key professional and technical integrity principles discussed above in Sections 4.5 and 4.6, there are a number of other process-related principles raised by seasoned practitioners during interviews. These range from respectful communication, persuasive skills and staff management, to issues of sustainability, balance, fairness, professional judgement and practice management, with varying degrees of ethical and moral dimension. The linking factor appears to be that environmental practice provides opportunities for consistency between what one says and does ('walking the talk’) and the manner in which these outputs are achieved ie. the
processes by which ethical professionals carry out their day-to-day practices and try to influence better environmental outcomes.

4.8 Similarities and Differences regarding Principles

4.8.1 Common Ground

When discussing the ethical principles for the environment profession, seasoned practitioners generally agree that honesty and truth-telling, technical quality, evidence-based opinions and the courage to stick to the facts in the face of pressure, are ethical principles underpinning their practices and professional identities. Another is that of environmental harm reduction – most practitioners consider it part of their professional responsibility, and an ethical application of their expertise, to ensure that potential harm to the environment is reduced. Most also report that, at some stage in their careers, they had ‘drawn a line in the sand’ on ethical grounds, and stood up to pressure from clients, opponents, regulators, commercial interests or community groups, or even from environmental specialists. There is also agreement that professional reputation, comprising both technical and ethical aspects, is critically important for environmental practitioners, at a personal level as well for companies and practices, and reputation is both technical and ethical. For many interviewees, their ethical principles, and the extent to which they are prepared to defend them, form part of their valued professional reputation. The relationship between ethical professional conduct, integrity and reputation is strongly stated by two seasoned practitioners with widely different backgrounds:

... Don't think you can help a proponent out by slipping something under the rug here, because ... you might get a reputation that diminishes you in the eyes of regulators and also other clients ... There's no point helping one client out by diminishing your integrity or ethics for that client, because it'll just diminish it for other future clients ('Jordan').

... we need to be seen ... to have integrity and to be seen as a professional organisation ... without that reputation we won't be so successful ... If you're an organisation who is seen to cut corners and do the wrong thing all the time you get tarred with a certain brush ... that means the regulators will treat you in a certain way ... our reputation is very important in the industry ... we do a lot to protect that in terms of doing the right thing, say we're doing the right thing, helping our people in here to do the right thing ('Cameron').
There was surprisingly little mention of professional obligations to clients, perhaps because most regard these commitments as contractual rather than ethical. Nevertheless the professional pledge or implied promise of fidelity to clients should also be considered part of the package of ethical principles adopted by environmental practitioners.

4.8.2 Outliers

The 14 seasoned practitioners interviewed all have at least 20 years environmental experience, but are otherwise a heterogenous group with respect to age, gender, career trajectory location, discipline and sector, so it not surprising that they express some different principles. Two ‘outlier’ opinions are discussed in this section as worth noting, one regarding the irrelevance of ethical considerations to environmental practice, and one regarding the ethics of accepting ‘first-come first-served’ commissions.

While most recognise that environmental practice involved value-related tensions and ethical issues, two practitioners consider that ethical considerations do not figure in their day-to-day working lives:

I wouldn't say I was an unethical person, but I'm a realist … if you've got an ethical dilemma you can't say that you're impartial … (‘Morgan’).

I'm just really curious to know what other people's ethical dilemmas are or how they use their ethics because … I don't think I do, I just work within the framework of what we've got and my ... natural inclination to make sure the best job is done. I don't have ethical dilemmas as such because that would either be going against legislation or going against best practice ... (‘Pat’).

However, ‘Pat’ recognises that, while mid-level Council managers may not face ethical issues, other practitioners at ‘higher’ or ‘lower’ level (either senior decision-makers or technical specialists) are likely to do so:

The only ethics I can think of is perhaps more of a higher level…[like planning a highway] ... through a habitat of threatened species, because it's the cheapest option. But I'm not involved at that level, but to me that's ethics. [Or, alternatively, maybe at a more technical level] ... like ... an arborist ... your job is to assess trees because someone wants to get rid of them. Are you going to be swayed a bit more towards pleasing that client to get future work by writing the report in a way that supports their objective? Or are you going to be true to the tree and say, look, there's still a chance this tree can survive therefore I'm going to recommend it stay (‘Pat’).
One practitioner adopts a ‘first cab off the rank’ principle when accepting commissions, similar to the principle adopted by barristers:

*I always took the view that whoever walked in the door first or rang me first was my client for that particular project ... To me it was more important that you do this well. They came in first. I'm going to tell them exactly what I would have told them anyway but they were in first so what does it matter?* (‘Dallas’).

While ‘Dallas’ regards this approach as an ethical way of assuring impartiality (in that professional opinions remain constant, irrespective of who’s paying), it appears rare amongst environmental consultants. A degree of loyalty to clients is almost certainly valued in a commercially competitive environment, although none of the interviewees mention loyalty (to clients or teams) as an ethical virtue. On the contrary, many identify ‘tailoring’ opinions to suit clients as unethical practice (see further in Section 5.4) and several public sector respondents similarly report ethical issues associated with trying to please one’s superiors (the ‘yes-man’ syndrome).

Given that the number of environmental professionals in Australia and New Zealand may be between 10,000 and 60,000 (as estimated in Chapter 2, section 2.3.4), of which only approximately 2,000 are EIANZ members, it is likely that many practitioners do not belong to any professional association or subscribe to codified ethical principles based on peer values. Accordingly, it is likely that many are practicing in accordance with ethical principles which are personal or those of employer organisations. Some of these principles may be similar to those of the seasoned practitioners interviewed in this research, but there is undoubtedly a wider range of other ethical principles adopted by environmental and technical consultants than indicated by the above two ‘outlier’ opinions.

**4.9 Summary of Findings: Identity, Values and Principles**

Analysis of interview data indicates that the moral principles and values towards the environment of many seasoned practitioners had been formed early in their lives, under the influence of parents and teachers and through their enjoyment of nature, and these formed a foundation for later career choices and ethical practice principles. However several participants had not chosen a career in this field through any particular affinity with or values towards the natural environment, but because it represented interesting technical challenges in their chosen discipline, or had otherwise stumbled
into an environmental job; and it is likely that this still represents a proportion of the profession. Interview responses indicate that practitioners construct their roles as one or more of five identified ‘professional identity perspectives’ (objective scientist, problem-solver, balance-seeker, environmental advocate or practice manager). Notwithstanding this variation in formative influences and professional identity perspectives, there is agreement among the interviewed practitioners that ethical practice (‘doing the right thing’) is based on integrity principles including honesty and the courage to tell truths, competency and rigour, impartiality or at least personal disinterestedness, and environmental harm reduction.

These findings in Chapter 4 are complemented in Chapter 5 below, wherein practitioners describe how they deal with ethical issues in their practices. Following these two chapters analysing the research findings, their implications are discussed and reflected upon in Chapter 6.

CHAPTER 5: DEALING WITH ETHICAL ISSUES

The values and ethical principles revealed by environmental practitioners in the preceding Chapter find expression in practice situations, particularly when decisions and choices are required. Such situations may arise regularly in the working life of most environmental practitioners, or they may be occasional or specific to certain disciplines, but they are central to applied ethics and the question of how professionals apply their general ethical principles to everyday practice.

As foreshadowed in Chapter 4 above, this chapter now builds on the ethical principles and identity perspectives of seasoned practitioners by reporting on how they deal with ethical issues in practice or have dealt with such issues over the course of their careers. This includes consideration (in Section 5.1 below) of tensions between professional roles and personal environmental values, the pressures inherent in private or public practice and the role of regulatory agencies. This leads into sections addressing whether ethical practice is subject to scrutiny, codes of practice or personal morality (5.2) and a range of ethical issues and ethical decisions dealt with in professional practice (5.3). The semi-structured interview format of this investigation encouraged respondents to discuss examples of ethical issues faced during their careers, reflect on their responses to ethical dilemmas and share any lessons they may have learned, also covered in 5.3. A specific interview question allowed respondents to
consider behaviour by other practitioners which they consider to be unethical, as discussed in 5.4, thereby corroborating (or modifying) what they regard as important ethical principles for professional practice. The last two sections of this Chapter consider advice to young and early career professionals, and practitioner recommendations regarding ethical practice within the profession.

5.1 Ethics in Practice

5.1.1 Managing Personal Environmental Values

... the environmental professional is confronted with situations where his/her environmental values conflict with other more important imperatives, such as time and productivity, which often hinder pro-environmental behaviour (Gluch, 2009).

Many practitioners have been drawn to environment related careers because of their affinity with nature and the outdoors, not only those with pro-environment values but also those with other perspectives. However, most employment opportunities in the environment professions are associated in some way with economic development and regulations that aim to limit the associated environmental harm. The inevitable tensions between protecting the environment and helping to approve developments has ethical dimensions for many practitioners as was addressed in Chapter 4, Section 4.3.8.

For environmental professionals, this tension appears capable of resolution in various ways. As described in the section on practitioner values regarding the environment (4.4.1), several respondents recognise little tension because they have in effect chosen one ‘side’ or the other ie. they are generally supportive of or opposed to any development likely to have detrimental impacts.

One practitioner recognises the tension but considers that it can be resolved by being up-front about one’s values:

... all you have to do is declare it and then be careful ... (‘Taylor’).

However, other practitioners examine their personal values in relation to each problem, and provide professional services only for clients or projects they genuinely support or where they perceive an appropriate balance is being achieved. Another approach taken by some is that of education and influence, where ethical practitioners persuade clients to make changes. In this way, experienced practitioners influence decisions and encourage better environmental outcomes than if there had been no professional involvement.
The various ways in which environmental values can be reframed to reconcile professional practice and development projects are summarised by the experienced owner of a consultancy practice dealing mainly in resource approvals:

... you're working to get things developed in a way that's acceptable and that avoids impact ... it is hard for some people to reframe ... But I'm more of an advocate around .... appropriate overall development for a better outcome for everyone (‘Cameron’).

Several practitioners consider that it is easier to be ethical (or that ethical issues do not arise) when restricted to a technical role that avoids opinions, advice or project recommendations:

... there’s a very sharp distinction between straight and technical advice, where ... ethics should never come into it. People might fudge figures, in which case they’re .... unethical, but that’s not the same as making value judgements about coal versus uranium ... or whatever it might be. They’re different ethical questions (‘Riley’, consultant and site contamination expert).

Another practitioner agrees that technical services may be ethically ‘easier’, but notes that practitioners also need to deal with subjective and qualitative issues:

... for some ... scientists or regulators ... it can be quite black and white ... because they work in a quantitative environment ... for example, what's the floor space ratio or how many parking spaces do I have to provide ... But I have to blend that with the qualitative ... a lot of people don’t understand that there is a difference and when I'm doing objections for people I will say the qualitative are harder to win. (‘Alex’, experienced rural planning consultant).

Similarly, a retired ecological consultant with more than 40 years as owner of a consultancy practice recognises that technical commissions are easier, but considers an ethical practitioner cannot restrict professional services to just survey data and technical roles, leaving the project management and expert opinions to others:

I think you're avoiding the ethics when you do that ... Yes, it's easier but we as a firm we didn't like to do projects like that .... we get to write the report ... or we're out of the team .... if you provide information, then someone uses it in a way you wouldn't have used it and you didn't think is ethical .... it's a bad outcome for the environment and it tarnishes your name (‘Danny’).

The importance of educating clients, as a professional responsibility of environmental practitioners, has already been discussed in Chapter 4 but it is also an important component of reconciling one’s environmental values with client demands
and expectations, according to retired consultant ‘Dallas’, who recalls conversations with clients in the quarry industry:

... some of these old guys, they just did not consider the government had any role whatsoever ... [and] ... shouldn’t be regulating ... I used to say ... ‘the only reason they're using your crushed rock is to build these concrete footpaths because the developers have been regulated that they've got to now put in concrete footpaths. So you can't be taking at one end and not giving at the other end’. I'd use that sort of argument a lot to try and get them to balance themselves ... you'd definitely try and push them in the right direction ... (‘Dallas’).

5.1.2 Managing Pressure

Dealing with pressure is part of professional practice, whether in private practice, research or public sector, self-employed or working with conservation groups. Clients, employers, regulatory agencies and the community all have expectations regarding time, costs and outcomes of one’s professional services, several of these demands may be contradictory, and practitioners are often squeezed from several directions. Adding to these pressures may be personal conscience and objectives to ‘do the right thing’, maintaining one’s own personal ethical standards or those of your organisation or professional association.

Perhaps the most commonly reported situation where pressures cause ethical problems is in relation to the time available versus the time required to do things properly. Pressure to cut corners is a perennial problem, as noted by one veteran practitioner:

... everyone was always trying to cut corners, and today it would still be the same. Cutting corners to get from A to B quickly (‘Chris’ an environmental consultant with more than 35 years experience).

In relation to time pressures, another practitioner with similar length of practice experience notes:

... you always had these time limits and sometimes you couldn't research and reflect long enough ... There was a number of times there where I thought ... I wish I had some more time to think about this ... you've got to push big lumps through little holes really double quick time sometimes (‘Dallas’).

Environmental practitioners are generally accustomed to the pressures to get things done quickly:

... I worked in a consulting firm for a lot of my career and the budget which you have to work with .... there is a bit of stress there about how much time you
can actually allocate to the task ... (‘Pat’, now a local government sustainability officer).

One veteran participant recalls that the pressure in the early days was akin to bullying:

... miners applying or asking for certain things ... [we’d try] ... to convince them that we needed to understand how this would impact, and being bullied the whole time ... most of the time the Mines Inspector was ... very much pro the mining ... and we’re over here trying to bring in some environmental control to the mining industry ... so we were being bullied, quite constantly being bullied ...

(‘Chris’).

An ecologist with similar length of experience in consulting, knows only too well the pressure applied when an environmental investigation uncovers an inconvenient ‘show-stopping’ fact:

... if you come out with findings that are really going to cause problems for the project ... you know there's going to be a lot of pressure coming. Most developers will have spent their money on buying the property already and then ... these things start. That's the classic thing - where you realise you're the showstopper ...

(‘Danny’).

Government officers are also familiar with the pressures that can be applied when ‘frank and fearless advice’ does not suit political purposes, as explained by a former agency officer:

... we identified the areas ... [of caneland assignments] ... and we suggested that there was scope for rationalisation ... but there was an enormous amount of opposition to it by the government ... because they felt ... it also could affect some of the [sugar] mill sizes (‘Finley’).

There are situations where it may be appropriate for environmental practitioners to refuse to comply, resign or withdraw from a commission on ethical grounds, such as the dilemma faced by one consultant:

... I had to work out where I sat, because if you resign from a job, as you know, you're giving up guaranteed income (‘Alex’).

‘Finley’ also discussed a similar quandary:

... situations that could arise ... where you’d have to start thinking about whether you were going to continue working for the organisation ... because I’d find it very difficult if ... I had to support something which I thought was unsupportable (‘Finley’).
However, it is more common that experienced practitioners resist pressure or fulfil their professional obligations in more subtle ways, trying to find a compromise or offering other options, as suggested by one participant:

*Understanding what the options are ... put yourself in their shoes for a minute, they've got to make money and they're probably struggling like a lot of developers do, so how can we get them to spend more money on this and come out on top ...* (‘Pat’).

More experienced consultants developed communication skills to manage client expectations from the outset of the relationship, reducing the likelihood of later conflict and pressure, as explained by ‘Alex’ as an ‘honest up-frontness’ approach.

It is also likely that many environmental consultants, irrespective of their level of experience, sometimes feel squeezed by trying to meet regulatory demands and requirements of agencies within the expectations and constraints of clients. One way of dealing ethically with this pressure is to be transparent regarding the role of the consultant as only an agent of the client:

*... if our client has requested something and we can't turn them around to how we think ... we have to be open to the regulator and say, ‘this is what the client wants’... We are not the client. We're just representing the client. So we do need to keep arm's length ... often we represent clients who do the wrong thing ..... But we can provide information [if asked by the regulator] about what they've done or what they're going to do* (‘Cameron’).

Pressures of quite a different kind can be applied to environmental professionals in the public sector, where the objective of ‘doing the right thing’ for the common good can be undermined by internal politics and contradictory agendas, as recounted by the former manager of a newly-formed Council environmental branch:

*... [our branch] ... had a ‘siege mentality’ from the policy advisors who were always demanding inflammatory stuff from us to feed the fires of front pages ... things around bushlands or planning or whatever* (‘Lennon’).

### 5.1.3 Managing Reputation

As discussed previoulsy, ethical practice is a cornerstone of a professional’s reputation. An ethical issue commonly arising in consultancy practice, especially for experienced ethical practitioners, is that of ‘reputation harvesting’ where development proponents seek the involvement of particular practitioners trusted by the regulators or the community (sometimes referred to as the ‘A team’), in order to add credibility to
their teams and proposals. In this context, a reputation for high ethical standards is a highly marketable attribute, albeit one which can be easily damaged by misuse. ‘Lennon’ reported that, after leaving local government and becoming a consultant:

... came to me because they knew I’d been a Council officer and they felt that I would have the leverage ... So there was lots about my reputation that he wanted to harvest. But when we got down to the science and the technicality and the role of community consultation ... no, that's not how we want to do it. [Then in response to a suggestion that some clients are prepared to ‘buy’ consultants who are perceived as ethical] ... Yes ... they are bought ... but the first step is they avoid you ... but the ones that come - yeah, then you’ve really got to be prepared for some battles (‘Lennon’).

This is exacerbated if the consultancy team includes only one or two reputable practitioners, outnumbered by less ethical ‘hired gun’ consultants:

... would always alarm me - where a ... client puts together a team largely comprised of other consultants who would say what they were paid to say... the ‘B team’ and somehow you found yourself there quite often because the regulator had said you need someone of this quality onboard for this issue .... As soon as you saw the B team people following into a meeting you're thinking .... this is going to be difficult because you're not going to get any support from the other consultants (‘Danny’).

However, ‘Danny’ was sometimes pleasantly surprised when one or two ‘B team’ consultants seized an opportunity to agree with an ethical position, so sometimes it takes just one team member to express doubts for others to reconsider their previous support for a proposed project. Also, development proponents may legitimately choose to include a particular consultant’s name on the team, in order to enhance their chances of success or to add credibility, without raising any ethical issues, as noted by two very experienced consultants:

... architects ... who are looking for a local planner ... to get it through [approved] for them ... I wasn't particularly comfortable with the whole thing but that was okay ... they may have been using my local name as part of the team in order to improve their chances of success (‘Alex’).

I remember one QC introducing me and saying to the tribunal ... Madam Chair ... ...’s evidence is in some parts good for us and in some parts not ... but he ... said that because it adds a lot of credibility to the bits that are good for them (‘Danny’).
Conversely, ethical practitioners may gain a reputation, fairly or otherwise, for being a troublemaker within their organisations, or being out of step in some way with organisational culture:

... they saw me in some ways as stepping out of line - they were happy ... [with my Branch] ... doing bushland ... but I was ... pushing them to broaden the environmental agenda when a local government didn't do those things. ...... there was a real view that we were too young and we were not in tune with the culture of the place. ('Lennon', former Council environment branch manager).

Also in the public service, one practitioner is reportedly considered a ‘thorn in the side’ of the agency for repeatedly raising awkward issues:

... at work I'm known as a troublemaker because I call it like it is ... if there are issues I usually bring them up ... with pretty senior people, much to their dislike sometimes ... that's one of the things I've been proud of with my professional career in the environment, is when there have been issues that people have tried to hide ... I've always been willing to bring them up, particularly when other people aren't game ... ('Logan', conservation agency officer).

However, one rural practitioner has found a way to turn a ‘greenie’ reputation into an opportunity to educate clients and colleagues:

I do get called a greenie ... [but in this way] ... the developer is giving me feedback ... but he's also given me an opening ... to ... politely talk about what I'm interested in and why and how the world is changing and what that means for us as professionals. So I can segue it back to a professional discussion about ... implications for the property industry ... ('Alex').

5.1.4 Regulators and Compliance

Environmental practitioners, whether in public service or private sector, become proficient in interpreting legislation and regulations regarding environmental planning and protection. Many deal with regulators on a regular basis, often on behalf of clients, stakeholders or the community. The environmental standards adopted by developers and their professional advisors may be conceptualised as a continuum, ranging from compliance with the current regulations and project conditions, through to ‘best practice’. Compliance is a minimum legal requirement, with no ethical choices required, as noted by the following two practitioners:

... if you need to go and test water quality once every month, well you make you sure you do that ... So I don't see that as an ethical thing, it's just some people are perhaps lazy and not interested ... going against what their role says they're meant to do .... ('Pat').
... when I was a regulator ... there was an abattoir... [and] ... a fish processing factory that I had to shut down. Both of those operators were trying to get away with low level of treatment. But I never put that down to them being unethical. It was just that they didn't have the money ... They just simply couldn't afford to do what they had to do ('Jordan', an experienced consultant and former senior agency manager).

However, beyond compliance, environmental professionals often push for higher standards (Byers, 2018). Part of the professional responsibility of environmental practitioners under the EIANZ Code of Ethics is to promote higher standards that go beyond compliance (EIANZ 2012). In relation to a development proposal, environmental consultants may be presenting a case to the regulator for flexibility with regard to their client’s compliance, while at the same time trying to persuade their clients to ‘do the right thing’ and do better than mere conformance with the law.

A range of such situations was discussed in interviews with practitioners. At one end of the spectrum, there is a shared agenda between regulatory agencies and consultants, for example environmental auditors consider themselves (and are regarded by the regulators) as ‘in loco’ agents:

... you're not working on behalf of [the agency], but [they] could, if they chose to ... they could have a team of auditors ... But they don't ... have the expertise. They probably don't have the money ... So ... they've decided they'll use third party independent auditors, and to cover themselves they need to be satisfied ('Morgan').

This close relationship, whereby environmental consultants in USA function as private facilitators of public regulation, has been documented by Owen (2019), and consultants and regulator have a similar relationship in Australia and New Zealand.

At the other end of the spectrum is the experience of one interviewee where being a responsible and ethical environmental practitioner in the field of mining approvals in the 1970s meant standing up to both the client and the regulatory agency:

... in the early days ... I had a Chief Inspector of Coal come back to me with a report saying 'do you really want to submit this report?' Now I wasn’t the only one he did that to, in other words telling us ‘back off, change the report ...’. ('Chris').
However, those days are (thankfully) past and regulatory agencies can now generally be relied upon to uphold the standards specified in regulations, in a predictable manner which practitioners can rely upon:

... We'll always say to the client, ‘well look, that's not really the right way to do it, or you probably won't get it across the line for that, but we can provide it to the agencies’. Then they can tell us what they think (‘Cameron’).

Similarly, when negotiating with developer clients, consultants can now depend on agency consistency in applying legislation, regulations, policy and precedents, and can advise them to cooperate with agencies if they want to avoid delays (as reported by ‘Chris’). This means that practitioners need to become familiar with what is and is not likely to be acceptable to the regulators, and also need to maintain a good relationship and reputation with the agencies. There is widespread agreement amongst seasoned practitioners that regulatory agencies are familiar with their reputations, through the quality and ethical standards of the investigations and reports they submit on behalf of clients:

... if the EPA here gets a report [from our firm], we know that they think ... that'll be a good report, a good assessment. They may not agree with everything. We may have to iterate and come back and provide further information, but they know we write well. They know we're competent. They know we cover all the issues that we need to cover, even though the client may not be able to afford for those issues to be covered to the depth that they need to be (‘Jordan’).

Experience is needed to know and advise on what is likely to be acceptable to agencies:

... It changes from regulator to regulator, and individuals within regulators ... it's really important that we keep a really good name with the regulators ... but ... they ... are strongly guided by their own ... policy .. [and] like to draw the line around their guidance documentation ... that's what's expected ... the right thing to do ... [but] ... they're simply guidelines and there are some instances where you need to not go with the guidance. There are other factors at play ... (‘Cameron’).

One interviewee employed by a local authority also recognises the importance of agency guidelines and advice when dealing with approvals:

... you are ... guided by what's allowed and what's not ... not just my personal opinion on what's right or wrong, there's lots of guidance around how things can be done ... state government policy or guidelines. There might not be legislation to enforce [these] but .. if ... a developer wanted to do something and ... [an approval] agency said ... ‘unless the EPA support this, it's not going to go
anywhere’ even though the law doesn't necessarily recognise that. So sometimes things get bent one way even though they're not legally enforceable (‘Pat’).

Conversely, practitioners realise that agencies apply more critical scrutiny to the work of consultants who have previously submitted poor or unethical reports on behalf of their clients:

... If you put in work like that, those assessors talk amongst themselves and over time there is a negative view so you will end up having more scrutiny and doubt for the work that you do submit, even if ... the later work is kosher. It will get more scrutiny because you are known to not admit to inconvenient truths (‘Alex’).

Since I retired I’ve talked to people ... on the regulatory organisations, in the tribunals and the courts and also to some of our clients and they all knew ... if they wanted someone to say what they wanted, they knew who to go to, but they knew that if they got ... our firm or some of the equivalent firms that the information provided was taken a lot more seriously by the regulatory authority (‘Danny’).

Client compliance is also taken into account by regulatory agencies, as reported by ‘Logan’s’ experience while Acting Head of an agency’s waste compliance unit:

I ... said to the senior people [of a waste company], ‘look, it's cumulative impact ... many, many small compliance issues. Each one on their own, they’re not significant, but totalled up ... it's large ... It says a lot about the culture of [your] company’... Just saying that up front actually changed their culture. She said ‘we will comply now’, and they agreed to much stricter monitoring ... (‘Logan’).

Sometimes the agency will recognise that developer clients are misleading their own consultant advisors, as in a case reported by one interviewee:

I was never a great friend of the [State] Department of Environment mainly because their people were very unskilled and not really worldly. But in this case they were correct. The evidence was there and so something had to be done quickly and properly. Whereas we were getting the wool pulled over our eyes (‘Dallas’).

This relationship between environmental professionals and regulatory agencies, whereby practitioners know and can advise their clients the standards expected by the regulators, the clients trust their professional advisers and agencies know whose work is trustworthy, can be disrupted by changes in government policy. In advising clients or community groups, environmental practitioners sometimes ‘go out on a limb’ predicting
the way in which a regulator is likely to interpret the relevant regulations and policy.

Cameron, a consultant with 21 years experience in resource approvals, summarises the situation this way:

... governments don't always hold those lines. But in most foundational things they do. If you don't do a survey to the right kind of standard they will say ... do it again ... but there's things that they won't hold lines on as well. We'll usually advise our clients ... [that their application] ... might not get through because it's not to the right standard, but 'if you want to have a go, sure, knock yourself out.' ... When ... the regulators are inconsistent, that makes it more difficult to encourage people to do the right thing. Because other people get away with things ... ('Cameron').

This is exacerbated if there is no legislative requirement for developers to ‘do the right thing’, or the standards one is advocating are higher than those the agency is willing to accept:

... we're being pushed to a certain point by the client and then having to draw a line in the sand and just stand fast. Without ... legislative backing, quite often that's a hard gig ... ('Chris').

The mutual trust between agencies and professional environmental consultants can also be disrupted when development proposals become controversial, as reported by one participant:

Not everyone likes being publicly scrutinised or criticised. Regulators and developers, both, when they ... get attacked ... it can be very uncomfortable and so they will tend to fall back and just keep on asking for more information ... ('Jordan').

One response by some environmental practitioners to increased pressure and competition with respect to time and cost performance is to cut corners and undertake inadequate investigations, then submit the ‘cheap’ reports and wait for the regulator to request further information. However, several practitioners adopt a transparency strategy in response to such pressures:

... if you're doing a smaller job you need to say you're doing a smaller job, and be clear about what that represents. Rather than ... [hoping] ... that'll just be okay, and if the regulators want more they'll come back. But that is unfortunately a way that people use the market ('Cameron').
5.2 Scrutiny of Ethical Standards

5.2.1 Recognising an arbiter

One of the interview questions was whether or not the respondent relies on or uses codes of ethics, where the professional Institute is in effect an arbiter of ethical standards. Alternatively they may consider their ethical standards are subject to external scrutiny from professional peers, regulatory agencies or courts; or they regard their practice ethics as mainly personal (internal).

Consistent with the science-based orientation of the environmental profession, several practitioners consider that peer review is an effective means of scrutiny to ensure appropriate standards:

... you're writing down the evidence ... and another person that's appropriately qualified can come up with the same findings. If you do that ... then you're fine, from an auditing point of view ('Morgan').

At a technical level you'll get questioned by peers who have similar expertise and ... it might be in court or there might be peer reviews of work done ('Jesse', rural waste-water consultant).

However, Jesse also recognises that technical peer review does not apply to non-technical (project management) advice:

... at a project management level, you don't get that. You may get ... the odd client saying we ... want a level of confidence in terms of ... the strategy we're following here, we'll just get someone else ... to have a quick look over ... there's a bit of judgement call and there's more strategic thinking ... ('Jesse').

For one participant, professional institutes and certification bodies are the most appropriate arbiters of what is and is not ethical:

... the bodies that have certified practice are the arbiters [of what is ethical]. ... industry goes two thirds of the way, and government probably the same, but they don't really deal with the full picture. .... you need to have somebody outside ('Finley').

As acknowledged above by ‘Jesse’, the Courts also have a role to play not only in judging ethical conduct, but also in adding strength to practitioners’ resolve when resisting pressure for unethical practices, as noted by another interviewee:

... I have made it clear to a number of clients on certain occasions that ... 'you'll get mowed down in court on this, so you can't do it' ... I didn't mean that the courts were the ultimate arbiter .... Now I've done that [giving expert evidence] a number of times and ... always found that process comforting in the
sense that the rules were quite specific ... it's just one of many things that you gain experience and strength from ... (‘Dallas’).

Even when the Courts are not involved, the possibility of a court appearance at some future date provides a useful test and mental check-list of ethical behaviour, as explained by a sustainability and energy policy officer with more than 25 years experience:

... alongside the code of ethics ... I often use... what I call the High Court test ... would I be happy to stand up in the High Court and repeat this conversation and this approach and explain myself... that's a very useful guide too because ... how easy it makes things (‘Taylor’).

However, practitioners from three different perspectives are sceptical of the role of Courts and professional institutes in influencing ethical practice, and consider instead that the ultimate arbiter of ethical standards is the individual:

[When asked if ethical standards are under any scrutiny]... I would think that it’s a personal choice. I can’t recall anyone ever coming to me ... on what I consider to be ethical. Even though I believe ethical issues arose (‘Finley’).

I think the individual is the arbiter. I'm very strong on this. I think the courts and the tribunals are somewhat hamstrung. It's different ... if they ... have a non-ethical consultant on one side and an ethical on the other. Then they can make that comparison, but if ... they've just got one consultant, they've got no comparison. (‘Danny’).

... I just had a sense that there was a better way to do things. I don’t know if I felt I was right, maybe I did ... in our generation we threw everything out and put it back together for ourselves. The church wasn’t going to ... tell us what's right and wrong ... I probably felt the authority came from my reading of the science ... I don’t know if the court is an arbiter ... I have felt the courts haven't understood (‘Lennon’).

‘Alex’, a practitioner whose source of ethical standards is personal, values professional reputation as critically important to practice and identity. When discussing a case where a decision was needed as to whether or not to ‘blow the whistle’ on a client, ‘Alex’ responded to an interview question ‘would your reputation personally have suffered if you had turned a blind eye to that?’ as follows:

... in my own eyes yes ... I don't care what other people think ... I'm quite centred in that ethical sense but to me there was no decision. Once we’d given him the letter [pointing out that he had unlawfully cleared some vegetation] and he
ignored it, I would have lost my two ecologists from the job ... if I hadn't supported them, and ... my reputation would have suffered with them ... (‘Alex’).

With respect to reputation, several interviewees consider that the market per se provides ‘word of mouth’ scrutiny and functions as an arbiter of ethical practice:

*I'm selling my time. All I've got is my name ... I value the reputation of my name above everything else with my work. So I've never put myself in a position where my professionalism, or my ethics if you like, can be brought into question ... As soon as ... word gets around that you've made a mistake or done the wrong thing or something, that's it, you're gone ... especially with LinkedIn and everything like that these days. You can't afford to be in that boat (‘Morgan’).

5.2.2 Institutes and Codes of Ethics

Most interviewees are members of EIANZ and several also belonged to other professional associations. The reasons for joining and remaining a member of a professional association are mentioned by several respondents, and included the emphasis on ethical practice:

... I joined the Environment Institute because it allowed me to get a really good insurance policy ... the main reason for joining. But once I joined, I realised all of a sudden that this was probably a place we could start to look at the ethics of practice and let's have a line drawn in the sand ... (‘Chris’).

[Referring to how personal environmental values have informed practice ethics] ... Yes, it certainly has and that's one of the reasons that I've really enjoyed being in the EIANZ (‘Taylor’).

The practitioners interviewed displayed a wide range of attitudes towards professional institutes and codes of ethics, ranging from hostility or ignorance, through to vague awareness and enthusiastic adoption. At one end of this spectrum is the attitude of an experienced consultant, now retired:

... certification by itself can't ensure ethics ... they're the minimum you should obey but ... a whole lot of other things ... aren't codified ... it's good that professional organisations have ethics policies ... but I don't think they work ... particularly where they involve certification ... because the shonky operator can always find a way of getting certification. Then whatever they say ... these answers appeared as though they were certified by the state government as being from an ethical person (‘Danny’).

Another retired practitioner with a similar length of experience expressed similar disregard:
I don’t find them [Codes of Ethics] terribly useful... I know everyone likes codes ... but ... if you're breaching those codes you're real bad ... because they're that broad. They ... don't come down to one's individual moral compass .... They're good .. as an overview of how you conduct your profession but how you actually act in an ethical and moral way, that's something that you've got in you ... I believe that people that are registering themselves are doing so to distinguish themselves whereas I believe you should do your work well. You should build a reputation and people know whether you're competent or not ... (‘Dallas’).

It is perhaps not surprising that some practitioner pioneers had made their own rules as they developed their careers and established their own practices. Although these individuals may belong to a professional institute such as EIANZ, that organisation’s code of ethics is not something they refer to or use, except perhaps as a broad framework of guidelines within which they practice according to their own ethical principles:

I use the code of ethics from the Institute now, fortunately I haven’t had to ... worry a great deal about it ... my work in the last number of years ... hasn’t been in a confrontational position. In the last few years I’ve never had to use it a lot (‘Chris’).

I have to say over the years ... it's never done any harm, but I don't think it's ever done me any good. It's just a thing I have ... letters after my name, which maybe people looked at and thought, oh, there's some independent judgement about capability or ethics. But it's never been a big thing for me (‘Jordan’).

However, the availability of a code of ethics, such as that of the EIANZ, is a resource to which practitioners can turn and use when necessary, as was the case recently for a rural planning consultant dealing with a difficult client:

... I do look at it from time to time and occasionally, like ... before I resigned from that job ... [dealing with a difficult client] ... I looked at the code of the ethics to think, ... what are the reasons that I'm actually going to resign from this when I would like to have the work? ... I did the crosscheck ... because as a boss of a consultancy, who else are you going to talk to? ... that particular time I did look at the code of ethics and I just thought, yeah, that's okay, I can let this one go (‘Alex’).

The code is also useful as a resource and occasional reference by practitioners in the public sector:

[Referring to the EIANZ Code] ... it's a guide to people to realise the standard they’ve got to meet ... there's a realisation of the importance ... they're up there so people can address them and they can't say they weren’t aware of them,
particularly now ... one of the strong things about EIanz is the ... sense of ethics ... a really important component of being a member ... (‘Logan’).

At the other end of the spectrum is an experienced consultant, for whom the EIanz Code of Ethics and Professional Conduct is ‘foundational’:

... it really does make a lot of sense. It reminds you that it's hard when you're in a commercial practice. Because you ... are looking at success all the time. But trying to walk that line around being transparent and doing the right things. So it can be challenging but it ... it's ... almost foundational ... it's so straightforward, because it is actually just part of the way that you do the work (‘Cameron’).

It is interesting that two of the practitioners who adopt an environmental advocate identity perspective (‘Lennon’ and ‘Taylor’) have very different attitudes towards codes of ethics, although not surprising as they both have strong opinions on the direction of the profession. One activist was quite dismissive:

[Referring to ethical codes] ... They’ve never been a focus (‘Lennon’).

While another sustainability advocate regards the EIanz code as a source of inspiration and motivation:

... a code of ethics has been the primary motivator... for me to be in the Institute. I've only had to use it professionally a few times but I .... I move forward every day in my career with a solid underpinning philosophy that I will be ethical in my practice. Then if I am ever tested on that, it provides a real set of guiding principles and I have had cause at some stages to be able to say ‘no, I can’t do that because I'm bound by my code of ethics’ ... It's been really useful in those circumstances, even though they're very rare ... but ... on a day-to-day basis ... it still is in the back of my mind all the time as a set of guiding principles (‘Taylor’).

5.3 Dealing with Ethical Issues

5.3.1 Recognising Issues and Dilemmas

A critical step in addressing and dealing with ethical issues is, in the first place, recognising that a situation has arisen or presented itself which has an ethical or moral dimension (Craft, 2013); and secondly identifying whether or not it represents a genuine ethical dilemma requiring a moral choice between alternative courses of action (McAuliffe, 2014).

This initial step in the ethical decision-making sequence requires a cognitive reasoning strategy to make sense of an emerging situation, and this complex but often
quite rapid sensemaking ‘... begins when an individual realizes something abnormal is happening and ends when that individual understand the situation well enough to make a decision to act, monitor, or ignore the situation.’ (Caughron et al., 2011, p. 353).

For most of the seasoned practitioners interviewed, the initial recognition is intuitive, a ‘gut feeling’ that something’s not right, as described by three experienced practitioners:

... you have that gut feeling ... all of a sudden someone has asked you to do something that you’d never contemplate doing ... it’s never crossed your mind to do that, because you’d always thought that it was wrong (‘Chris’).

... this isn't really right. That's not really the right thing to do. I guess when people ask you to do something that's not kosher or ... pushing the boundaries ... I think it's more of an experience thing ... and you go, hang on, that's not okay ... (‘Cameron’).

... the first thing is intuitive, if you feel uncomfortable or worried or confused, it's a good indicator that something's going on that you need to think a bit more ... about. Then ... you ... wonder what to do and where to go... you recognise that is an ethical dilemma and then ... you think ... okay, let's ... consider it as an ethical thing and .... see how the principles apply (‘Taylor’).

The frequency with which ethical issues arise in professional practice appears to vary between disciplines and roles, ranging from ‘never’ for ‘Morgan’ in environmental auditing or ‘ethical issues are someone else’s problem’ according to ‘Pat’, through to ‘frequently’, as reported by two other interviewees:

They're important and they come up frequently ... People are more ethical now ... more considerate of environmental issues ... But there are still those who like to cut the corners ... or would rather not consider it. So ... people understand that it's a factor... (‘Cameron’).

... different people want to achieve an outcome for different reasons, and quite often those reasons are conflicting. Some people always want to simply do the cheapest and others want to do the most environmentally sound. So the ethics that ... I have are around ensuring that the other aspects of that discussion or that project don't get ignored. Sometimes if you are working for a developer ... their bottom line is how do we make the most out of this. (‘Jesse’).

However, not all of these ethical issues are major challenges, for example one practitioner’s perspective is that:

... genuine conflicts of interest are rare. People often think that they've got a conflict of interest ... and it's not really. It's just a kind of standard day-to-day
dilemma that there's a relatively easy answer to. So I do tell people that serious issues are rare, but they'll happen and that it's very useful to have a code of ethics (‘Taylor’).

The same practitioner uses the following framework when considering ethical dilemmas and moral choices, referring to a risk matrix widely used in environmental impact assessment (Pope, Bond et al., 2013) wherein ‘Likelihood of an event occurring’ is tabulated on one axis, and ‘Consequences of such an event’ on the other:

... it's like a risk matrix ... something that's ... a moderate risk can either be ... something that will happen infrequently but be ... serious, but it might also happen every day and be minor ... ethical problems .... are like that. ... very occasionally you get a serious issue .... but more often you make small decisions every day and you make them ethically (‘Taylor’).

Several seasoned practitioners indicate that they are generally sceptical of the motives of others (developer clients, agencies and protestors), and while this may not per se be a recognition of an ethical problem, it may ensure that they have a heightened awareness of potential ethical conflicts in those situations:

... when I think other people are doing it for self-interest reasons ... I've made a judgement about what their interests are and ... [referring to consultants]. If I've been working for a single master with the idea of advancing myself, then the claim that I can represent the community, that's very naïve ... (‘Finley’).

Retired ecologist ‘Danny’ is also suspicious of clients who over-enthusiastically profess their environmental credentials, as discussed in Chapter 4 (Section 4.7.3).

For experienced rural consultant ‘Jesse’, working with other consultants also presents ethical challenges:

.... the biggest ethical dilemma I have is ... working with other consultancies who may not share the same values, and ... who like to maintain the interest of the client. To them, maintaining that business with the client is important to them ... That's probably the thing that is the hardest to deal with, and in that case you're better off not working with other consultancies (‘Jesse’).

5.3.2 Avoiding Ethical Challenges

When an ethical problem is recognised and identified, it needs to be addressed through an appropriate ethical decision-making process (see section 5.4.1 below). However issue-identification is more than an intuitive feeling of moral discomfort regarding a particular project, client or situation. A preliminary consideration is that of decision-scope i.e. whether or not the identified issue requires a decision, whether the
required decision is an ethical one (or more to do with financial risk, for example), and whether or not it is within the practitioner’s scope to make a decision (or, for example, the decision is one for the regulatory agency to make). Consideration and discussion of decision-scope can sometimes show that there are no ethical decisions required of a practitioner, and thereby avoid dealing with an otherwise difficult dilemma.

This is different from avoidance of practice-related ethical challenges by refusing to work with particular clients, industries or types of projects (as discussed in Chapter 4, Section 4.2.3 above), or by scrupulously avoiding any advocacy role, although it is noted that such choices are themselves ethical decisions. Another way of avoiding ethical challenges is to work in a field that is purely technical, with black-and-white answers (such as compliance auditing) which leaves little room for interpretation or ethical decisions, as also discussed in Chapter 4. In terms of a professional’s responsibility to be personally accountable, perhaps the least satisfactory way to avoid ethical challenges is to define one’s decision-scope in such a way that moral and ethical decisions are someone else’s responsibility (discussed in Chapter 4 Section 4.8.2).

One participant’s consultancy practice adopts a strategy of separating technical reports from professional advice:

... we have a bit of a strategy here which is the technical reports provide no recommendations for anything other than that specific technical area. We say, ‘we've gone out and we've found this, and that's it. The implications for that are not in that report’. (‘Cameron’).

However, experienced ecologist ‘Danny’ is not comfortable with any approach which avoids taking responsibility for interpreting the implications of technical investigations (see 5.1.1 above).

Arguably, the most straightforward way to avoid many of the ethical (and business profitability) challenges associated with ‘problem’ clients and difficult projects, is to realistically estimate and quote on the resources and length of time to do a job properly, without cutting corners. One experienced consultant even takes a perverse pride when that uncompromising approach loses jobs to competitors:

There's over the years been so many jobs that we've lost on dollars because we've said... ‘this is what we think you need to do’... but I'd rather lose jobs than win a compromise. Sometimes I think we come out of it feeling quite noble when we lose a job, because we might have overestimated what we thought was required (‘Jordan’).
5.3.3 Ethical Decision-Making and Resolving Dilemmas

Several professional institutes and authors in the field of applied ethics for professionals have published step-by-step guides for identifying and addressing ethical problems and dilemmas, for example (Josephson, 2002) and (Caughron, Antes et al., 2011). However, no such guide has yet been published specifically for the environment profession. A number of practitioner interviewees report they have developed personal strategies for resolving ethical challenges while still remaining true to their integrity principles. For one participant, this means adopting a pragmatic attitude to what is achievable within the legal and planning framework, notwithstanding a professed love of the natural environment:

*When you're in environmental practice, as opposed to being .. an environmental activist ... you've got to work within the system you're given. So, if ... you do a study and you come across an area which you personally like ... then you've got to weigh it up ... give your advice professionally and indicate ... this area has some nice values, but .... none of the values are such that these particulars of legislation or planning policy will apply* (‘Danny’).

Most interviewees indicate that they have ‘lines in the sand’ which they choose not to cross, in their professional practices and these challenges are quite often associated with requests to change or water down reports, to reduce or soften findings which may be detrimental to a development application, prior to submission for approvals, as ‘Cameron’ explains:

*... quite often clients will ask ... to change a report or where they say, ‘oh can you just ignore that?’ Those kinds of things. We talk to them ... we want to provide a good service to the clients and we want a good relationship with them, but it's not acceptable ... You need to work with them to try and find what the best way is when they find an issue that really impacts on their project. You need to work with them to try and come up with an ethical solution to it, not just ignore it.* (‘Cameron’).

‘Cameron’ also ensures, as part of this approach, that others in that consultancy practice are consulted and have the opportunity to discuss the ethical implications:

*... we have a good reputation. We do a lot to protect that in terms of doing the right thing, say we're doing the right thing, helping our people in here to do the right thing. If they think something's a bit ‘on the nose’, well let's have a talk about it* (‘Cameron’).
Such ethical conversations within practice teams appear to be a reassuringly widespread approach to dealing with clients, situations and challenges with an ethical dimension. An example of how this plays out in practice, where junior staff may be uncomfortable with respect to ethical principles, is explained by ‘Jesse’ as follows:

... we have those discussions ... ‘what do you think is not so right?’ ... I like to challenge the young staff ... to.. make those decisions for themselves. Some jump on it really quickly, they're really good, others ... run into a sticking point, I try and get them to take it as far as they can and then I'll ... say, ‘hey, what's the story? What's going on?’ ... [Sometimes] there is a need to make snap decisions ...[but at other times] at the right time in the right place, ... allow people to make some mistakes, but you have to manage those mistakes and make sure that they're safe ... for the individual, safe for the business and safe for the client ... that person has to be able to come to work the next day and feel comfortable ... You need to also make sure that the business is protected because ... there's other people that are relying on that, but ultimately, you're responsible to a client as well. (‘Jesse’).

The above example has several facets, in addition to the practice wisdom of encouraging ethical conversations in the workplace. One is to recognise that junior staff need to gain their own experience in ethical decision-making, with the practice manager acting as a ‘helicopter’ mentor prepared to step in if the practice is at risk. Another is that sometimes the practice manager must make quick decisions, but in doing so should ensure that there is no loss of face to those staff who may disagree or have been overruled. And finally, the staff know that, if necessary, the practice manager is prepared to sever a relationship with a client.

Other widely-used strategies for addressing development-related ethical problems are those of patiently educating clients or the community, based on the practitioner’s expertise, or ‘jollying along’ clients, using the relationship of mutual trust which has (hopefully) been established, to push them a bit further towards environmentally-responsible development than they might otherwise have been prepared to accept. Conversely, when dealing with affected communities, a relationship of trust may help stakeholders to accept that some of their feared impacts may not eventuate.

Influencing clients or the community may require building up some trust ‘capital’ with the client, by doing good work on time and within budget, or successfully obtaining approvals, so that bigger issues can be negotiated later. This also requires familiarity with the client’s objectives and limits as ‘Danny’ explains:

... you need enough understanding of it as a consultant ... to realise what their other constraints are (‘Danny’).
This level of understanding is also needed in the local government area, when looking for trade-off community benefits likely to be attractive a development proponent, such as environmental awards and prizes, floor area or building height bonus incentives, or media coverage. This approach works best when one understands the proponent’s motivations and constraints, as reported not only by ‘Danny’ but also by other experienced practitioners in both private and public sectors.

For junior environmental professionals facing ethical challenges, suggested responses are addressed in Section 5.5 below, including recommendations to seek and discuss problems with a more experienced mentor. Research scientists have their work constantly subject to technical peer reviews, and requirements for peer review are increasingly part of environmental impact assessment (NSW Government, 2017). While for many professions, such as psychology, psychiatry and social work, it is common practice for senior experienced practitioners, not just junior early career professionals, to engage and consult professional supervisors (Davys & Beddoe, 2010) or case study reviewers, this is not the tradition in the design or environmental professions. Not surprisingly, none of the practitioner respondents raised this option in interviews.

Where ethical dilemmas cannot be resolved while maintaining relationships (with clients, the community, employer or regulators), a practitioner may need to choose between those relationships and their professional integrity, for example in one case study:

... the owner started clearing, assuming he was going to get development consent ... and we were talking within the team about ‘what do we do now?’ ... we will lose our scientific licences ... he's putting us at risk professionally ... I resigned from the job. ... we handed him an eight page letter saying here's all the statutory reasons you can’t do what you're doing, and then ... I handed him a box of all the documents ready for the DA [Development Application] lodgement and we then reported him to Council ... (‘Alex’).

‘Whistle-blowing’ is one response to an ethical problem, although it involves a genuine ethical dilemma in that two ethical obligations of environment professionals are in conflict - that of fidelity and client (or employer) confidentiality, and that of reducing environmental harm. However, in some cases (such as that of ‘Alex’) legislative requirements to report environmental harm may in some cases avoid the ethical dilemma associated with whistle-blowing.
5.3.4 Case Studies

Each of the 14 practitioners interviewed was asked to consider one or more personal ethical decision case studies and discuss these confidentially during interviews. These ranged from examples of conflicts of interest, unreported environmental degradation, non-disclosure or falsifying environmental information and examples of unethical conduct by others, to whistle-blowing or public sector staff selection and promotion issues.

Some of the historic cases reported by veterans of environmental consultancy involved conflicts or stalemates between proponents and their professional advisers, such as the following:

... one client ... was supposed to stand 40 metres off from the bank, but this is the best gravel [for mining] ... I said, 'have you mined this'? They said, 'no'. Then you'd poke around some more and then you'd realise they'd mined 30 metres into the buffer, backfilled it with clay ... the whole thing's at risk of getting washed out in the next flood. Well, I did explain all these things to them but .... [they didn't follow this advice so] ... I should have probably done it in a different way ('Dallas').

Several case studies involved situations where the practitioner failed to prevent environmental damage or risk, was overruled or had their advice ignored. Examples from veteran practitioners, who had commenced practice in the early days when clients and governments were not particularly receptive to environmental messages, included the following:

... I had to present the case why we shouldn’t sell the Council land It was ... very much koala country ... He [the Mayor] sat there and he said to me, in front of the cabinet ... 'why ... should I save any land on my side of these creeks .... what's the business case here?' I'd never heard that term before. This was 1991. I said, ‘because it's koalas’. His view was ....if you don't give me more to go on here I'm not going to save koalas ... what's the point? So I learnt that my argument which had been moral wasn’t enough ... I took a moral stance, it had worked for a very long time. [He] ... was the first to say, what's the business case for this set of morals that you've got. I thought, I've got to get better at this ('Lennon').

When giving lectures and seminars on professional environmental practice, one senior consultant refers to a case when an engineer was persuaded to think 'outside the box':

... the engineer turned up with a diagram of the sewer ... through the middle of [a rare grassland], and the developer ... said ‘we need to solve this - I'm not allowed to build ... this sewer’ ... The engineer just said ... ‘water has to go
downhill; it can't go anywhere else’ .... Then I said ‘what would you do if there was an enormous granite boulder .... blocking this whole valley’. He said ‘oh that's no problem you'd put ... a pump station - you'd pump it around here; take it down there’. - I said ‘okay imagine that the grassland is that huge granite boulder’... The developer took me aside afterwards and he said ‘that was great ... I loved it’ (‘Danny’).

One of ‘Jordan’s’ case studies is particularly instructive about the importance of seeking appropriate environmental inputs at an early stage in project planning, and also about how to deal with a significant gap in the information required for impact assessment:

... a new mine was proposed and ... they'd finished their drilling program ... [but not] in the surrounding waste rock ... from an environmental point of view, the geochemistry of the waste rock is critical. They didn't have any more money and they wanted an approval on the basis of that [drilling program] ... Coming in late, we had to just try and deal with what we had ... In the EIS ... we said .... ‘a commitment is [that], prior to the commencement of mining, a waste rock ... drilling programme will be undertaken’ ... They actually found a lot more acid rock than they thought. They had to go back to the EPA for a variation on their approvals, which caused all sorts of problems ... (‘Jordan’).

Rural planning consultant ‘Alex’ had several ethical dilemma case studies from 40 plus years in practice, one of which resulted in reporting a client to Council for pre-emptive clearing, as reported in Chapter 4, Section 4.5.3 above. However, in another case, ‘Alex’ felt compelled to resign from a commission because of deceptive conduct by a client and project manager, but did not report the deception to the regulators because it had not caused any direct environmental harm:

... the day that I found that they [the developer and project manager] had ‘grown’ the size of the land on the survey in order to ... get another unit on the land, ... I resigned [but did not ‘whistle-blow’ the survey discrepancy to Council] ... that particular one went to Council ... nobody knew that they had ... changed the numbers on the survey plan, but it did get refused by Council ... as soon as they did that I walked [away]... (‘Alex’).

A second case study reported by a retired quarry consultant involved a community protest against river dredging proposed by a regular client, leading to an ethical dilemma which tested two of ‘Dallas’s’ principles detailed in Chapter 4 (sections 4.7.2 and 4.8.2) regarding balance and ‘first cab off the rank’ acceptance of a commission:

... there was an island ... and ... one of our clients ... wanted to mine it ... there was a protest group ... against it. They came and saw me ... about the issue,
and .... I formed a view ... that ... these couple of islands ... are a landscape resource that should remain ... like a national park .... I ... preferred to work with the community group ... [rather than my client company] because of the ethical side of it. ... so I wrote a report saying the island should stay ... I'd written this little, tiny report and ... set out .... an esoteric argument rather than a technical one ... to my surprise the [Government] chose my report so ... [the] island is still there ('Dallas').

Ethical dilemmas are not necessarily associated with large projects, significant impacts or high-risk professional roles, but can arise over relatively small projects or requests for endorsement, some of them involving pro-bono advice, as reported by 'Taylor' a sustainability specialist practitioner:

.... I lived in a rural area ... and people knew that I was an environmental professional ... a nice woman who lived in the local area wanted to buy a stretch of riverbank so that she could have pumping rights for her house. It was a public open space, riparian zone and I was asked to write a letter to Council to support her claim and I said 'no, that I couldn't do that because I was ethically obliged, even in my personal life, to always make sure that I acted in the public good and in the environmental good'. In this case, my opinion was that the protection of the public open space was more important than one person's access to pumping water ... [the EIANZ Code of Ethics] provided me a backing to say no, there's a principle here ... ('Taylor').

'Taylor' also reports an illuminating case study, with an ethical dilemma which goes to the heart of professional responsibilities for data:

... results came in from a study ... that were disappointing. We were hoping for a better outcome and we looked back to see what data we might have given that was wrong ... I don't mind at all if the results are bad .... but it's unacceptable to me for the results to be bad because ... they're based on the wrong data ... I will do anything it takes to get the numbers accurate. But then there was a question ... 'would you like us to use this set of numbers or that set of numbers', where ... the good set of numbers ... was not accurate ... I went to my manager and said 'this fails the High Court test ... even though it would be nice for us to have a better outcome ... it's not consistent with the rest of the assumptions that we're using ...' ('Taylor').

These case studies illustrate some of the complexities, conflicts and pressures associated with professional environmental practice, and how these situations present very real challenges to a practitioner’s ethical practice.

The most common response to these challenges, among the 14 practitioners interviewed, is to look at the facts, tell the truth and give honest opinions. Almost all the
seasoned practitioners interviewed recount examples of standing up for their principles at some stage during their careers, as confirmation of their self-perception as ethical professionals. However, where this approach fails to gain traction with recalcitrant clients or agencies, appropriate ethical responses range from persuasion, aimed at gaining acceptance of a more responsible point of view, to resignation and whistle blowing. Another response is to accept defeat this time and learn lessons about how to do things better next time, as discussed further below.

5.3.5 Lessons Learned

The careers of the seasoned practitioners interviewed have spanned four decades, during which they have experienced the highs and lows of economic and political cycles, developed and applied their ethical principles in practice, mentored juniors and faced a variety of ethical challenges. Some of the lessons learned along the way, as reported by interviewees, include the following five instructive examples:

1. There are more long-term regrets associated with backing down and failing to uphold one’s principles, than there are in standing firm and taking a stand, as noted by one seasoned practitioner when recalling a dispute over environmental risks on a gravel extraction site:

   ... the things that I could have done better was that where you had a recalcitrant client I should have spent more time trying to educate them. Not just saying ‘well this is the law’ ... I might have been a bit more aggressive towards the client rather than just a quiet back off but I did make myself quite clear to him what I thought ... and why he should do this and do that (‘Dallas’).

2. There is risk in lending one’s name and reputation to add credibility to a project, when the role is restricted to just survey and data-collection, leaving it to others to interpret your results and make final recommendations:

   ... sometimes .. engineering firms put together multidisciplinary teams and they'd put us in ... to get credibility for their team. Once they've got the job they'd say' no you're just doing the surveys; we don't want any interpretation; we've got people to do that’... after a couple of bad experiences when we were young and naïve we just wouldn't do that (‘Danny’).

3. Factual data and scientific evidence on their own do not convince others to make necessary changes, so the role of an environmental professional is to help clients and stakeholders understand the implications, a lesson that one participant learned mid-career:
... it's the application of information that's more important than the information per se. You've got to have the information but unless it can actually be applied and used by people, which means they've got to understand its costs and benefits ... that to me, was a radical change in my view of the world ('Finley').

4. Experienced rural planning consultant ‘Alex’ reports some lessons acquired during a traumatic court case arising from a dispute with a client:

... you've got to pull your head in occasionally, and ... sitting in the Supreme Court for six days with ... legal fees mounting up during that period and seeing what the barrister did ... that's a very sobering experience. So learn from your experiences and learn to eat humble pie and learn how to respond to set backs as well as to respond nicely to triumphs or good things ('Alex').

5. And finally, a clear conscience is the reward for being honest and true to one’s ethical principles, according to one experienced practitioner:

... it's amazing how – you're just free. It's like that thing where a lie builds lies. If you lie, you end up lying again and again ... to cover it up. Whereas if you draw the line and say, ‘this is right and I'm confident this is right even though it's disappointing’, then your conscience is clear and you can just move forward ... if you just continually make sure that your practice is ethical ... getting the principles right meant that then the consultants had more trust in us and everybody breathed a sigh of relief. So it really pays, I think, when you're ethical as well ('Taylor').

5.4 Identifying Unethical Practices

Interview questions concerning the ethical standards of and criteria for judging other practitioners (Appendix A) resulted in responses which are particularly illuminating, in that the answers were not simply the converse of personal ethical principles. While there are some ‘mirror-image’ responses (e.g. the ethical principles of doing a good job and transparency correlate with shoddy work and deceptive reporting as characteristics of unethical practitioners), many practitioners also cite marketplace conduct, such as undercutting on fees, as criteria for defining unethical behaviour.

Notwithstanding that discrepancy, many practitioners regard as unethical professional conduct any example of lying, whether outright or by exaggeration, misrepresenting evidence and deliberate withholding of information, although such instances are more often suspected than proven:
Well, you know what's a lie and what's not a lie ... I can tell pretty much when people are gilding the lily, telling a fib ... where people leave out information. People do that. Have I done it? Gee, I hope I haven't. I really hope I haven't because I've really tried not to (‘Dallas’).

... suppressing information, deliberately suppressing information or deliberately biasing reports and ignoring evidence ... but it's very difficult to prove what was done or why they did it ... (‘Logan’).

... the biggest would be that the evidence says one thing and you're willing to go against that or water it down ... but ... you wouldn't notice that about someone else necessarily. Unless you had competing information and you appeared ... in a court case or whatever, that would be very obvious then (‘Lennon’).

Interviewees generally agree that it is unethical to act as a mouth-piece for clients, changing one’s opinion to benefit the project they are engaged to support, and saying and reporting only what suits the client’s interests.

The following comments from one participant sum up the experience and opinions of many consultants who try to walk a fine line between professional integrity and supporting their clients:

I think most environmental consultants are generally quite ethical ... you don't generally come through into this space without ... looking for a good outcome. [but] ... there are some consultancies that will take the lead heavily from their clients around what they want to achieve ... we all do that. That is part of our remit. But when it gets to a place where the needs of the client are going far beyond what is appropriate ... and corners are being cut ... [some] ... people aren't transparent about that because ... some clients will say ... ‘I don't want to pay for that’ ... The lack of transparency ... [about] ... the client's revised scope and .... what was done ... is probably when you would see a bit of an ethical blip on the radar of other consultants (‘Cameron’).

The sequence of concepts here appears to be that environmental practitioners want to do the right thing. However, the professional’s job is to help their developer clients, so they try to persuade them to achieve better environmental outcomes, but sometimes clients want to cut corners. Ethical practitioners push back or are transparent about reduced scope, whereas unethical ones collaborate in cutting corners, and in deceiving regulators with respect to the reduced scope.
‘Lennon’s’ reference (above) to court as a forum wherein dishonesty is likely to be exposed, is shared by retired ecologist ‘Danny’ talking about another characteristic of unethical professional conduct, that of changing one’s opinion to suit a paying client:

... you just have to look to see what they've done, what their outcomes are. Changing your mind ... where you see a consultant under pressure, particularly in a court or tribunal, and suddenly their evidence changes. That's a huge flag for me. (‘Danny’).

As an experienced environmental auditor, ‘Morgan’ is skilled at picking up instances of consultancy reports tailored to provide clients what they want:

Occasionally you ... see reports ... written ... for the purpose of the client ...[who] wants a particular answer... to say that they're allowed to do something and the report's written in that way. It's not always based on how things are usually done. So I would pick that up in an audit and raise it as a concern (‘Morgan’).

As mentioned above by both ‘Lennon’ and ‘Danny’, unethical practices are often difficult to ascertain or prove. ‘Taylor’ also considers the independence and structural position of other practitioners before labelling their conduct as ethical or unethical, even when something ‘doesn’t look right’:

... you'd need to consider structurally where the person sits in relation to the issue and whether or not they're independent ... when ... consultancy groups who work predominantly for developers ... do environmental impact statements .... you ... question the accuracy of the results that they're getting and very frequently we see that those ones don't look right and are open to question. It's hard because things like environmental offsets for ecosystem services or ecosystems themselves are such an inherently difficult concept ... but the fact that it's caught up in development decisions makes it even harder to wind back the noise and look at the signal. So that's why you need to understand the structural position of the people that are making a determination (‘Taylor’).

‘Danny’ also doubts that unethical conduct can be easily predicted, but for different reasons:

... I tend to be quite market-based in my view of things. I think the market, experience in the market, working with people, looking at the outcomes of projects they've done and so on, that tells you. You can't work out people's ethics upfront very well because everyone knows what to say to sound really ethical. (‘Danny’).
Unethical professional behaviour includes undeclared conflicts of interest, as candidly admitted by retired quarry consultant ‘Dallas’ in relation to decades-old courtroom evidence:

... the ethical dilemmas .. are situations where I gave evidence in court cases on resources that were mine, and of course I was quite open about that generally but ... I had to really think hard ... it was in my interests to get something approved because I was dabbling in the resources side but ... I was quite comfortable with it because I ... did exactly the same ... as if you were working for the whatever side (‘Dallas’).

The most extreme example of conflict of interest is acceptance of bribery. Overt offers of bribes to environmental professionals are rarely encountered these days, but when some of the practitioner pioneers started their careers (especially in the mining sector) they were not uncommon, as recounted by one veteran practitioner:

... I’m a young ecologist with the Mines Department and I’d go on tour once every 3 weeks or 4 weeks around the State .... in those days there were masses of small mining operations ... I remember distinctly to this day walking onto an alluvial gold mine and this particular gentleman who owned the mine ... showed us all these samples of gold, poured some in my hand, when I went to give it back to him he was going ‘no, you keep that it’s yours’ ... and that did happen on a number of occasions (‘Chris’).

Although blatant bribery of regulatory officers may have waned, offers of favours remain a probity risk for public servants, particularly during fieldwork, as directly experienced by an agency officer (now retired):

He said to me ‘Where are you staying?... I’ll organise that’ ... ‘Are you doing any fishing while you’re up here? ... you can use my boat’.... I kept on pointing out to him I’m not going to be indebted to you in any way whatsoever when I’m making a determination in your favour or otherwise ... he was clearly trying to buy favours which I wouldn’t accept (‘Finley’).

One unethical practice on which there is widespread agreement is competitive undercutting on fees and time, as confirmed by two experienced practitioners:

... you know in the marketplace, ... to do a job ... to a particular standard ... then you can’t do it ... short of ‘x’ number of hours, with a bottom cost. But if you see someone coming in ... with half the hours and only spending half the time on the site, then you know that there’s some unethical practice, ‘cos they’re not actually complying with what they say they are ... (‘Chris’).
We talk about …. this competitor's completely under costed this. They can't provide the service for this. It's going to be a terrible job and they won't get the outcome for the client. We're not usually prepared to do that ... because there ... are a lot of practices who ... will just do anything for any price, and not really consider what the ramifications of doing that are, and maybe aren't clear in their reporting around that  (‘Cameron’, owner of an environmental consultancy practice).

According to one interviewee, market competition causes consultants to act against their own interests by reducing fees and scope, and that ethical problems arise when they say or imply that the reduced scope will meet specified requirements:

Usually consultants are happy to do the most amount ... But ... the market has driven it ... in order to retain the work or win the work, they might need to put in a really small scope with a really small price .. Unfortunately that's where you can run into trouble ... if you're trying to claim that the small amount of work that you've done is going to address the issue.  (‘Taylor’).

The widespread agreement among the consultant practitioners interviewed that unethical practices include under-pricing (and thereby gaining unfair advantage in a competitive marketplace) has no equivalence with the professed values and principles described in Chapter 4. No interviewee implied that charging uniform fees is a principle of ethical principle of professional practice, so the reasons for identifying fee undercutting as unethical appears to be associated with the ‘rules of the game’ in a competitive marketplace, not with ethical principles per se. This question is explored further in Chapter 6.

5.5 Ethics and the Early-Career Practitioner

5.5.1 Ethical Conversations

While the focus of interviews was on the ethical principles and issues of experienced practitioners, several of the questions relate to ethical discussions with other members of professional teams, including young and early career practitioners, and ethical advice to junior colleagues or those starting out in their environmental careers. Most of the practitioners interviewed who were also practice managers encouraged conversations in the workplace where ethics could be discussed:

... when people joined our firm ... my main discussion with them was about ethics and how to deal with difficult ethical situations, and what support was available ... if they found themselves uncertain about an ethical situation ... come
and talk to me or the appropriate manager .... We had ... regular forums to ...
discuss pretty much anything ... ethics would feature in that every so often. Not as
much as people might think because ... it actually isn't the dominant thing in your
day-to-day life. It just pops up every so often (‘Danny’).

For one practitioner responsible for a consultancy practice, ethics is a minor part
of coaching and mentoring younger staff. However, such ethical conversations were
found to be opportunities for two-way learning:

... the mentoring and the coaching were very specific to teaching people how
to be consultants ... how to manage the project, the client’s expectations ... how
to talk to the client ... to the government authorities ... but secondly also teaching
them ... how to delegate ... but .... I learned as much from a number of staff
about ethics and crossing lines than I taught them (‘Chris’).

‘Chris’ and ‘Jordan’ both recognise that many graduates are more attuned to
ethical considerations than the older generation may have been (similar to the findings
of (Weber, 2019), and are prepared to challenge their employers regarding ethical
choices as well as business-related matters:

.... some of them came with a moral compass, to start with ... and some of the
questions were not just ... about ... doing the right thing ethically in the
environment but some of them were commercial issues ... I remember ... being
confronted [about an ethical issue] ... where it came from I don’t know, I think
maybe it was just the individual ... being brought up with their family, ... maybe
that’s why they were doing environmental science ... in terms of that commercial
point of view, one of them would do ‘Hang on a minute ... we’re doing this, we’re
doing that, we need to stop ... [and] ... confirm with the client ... to make sure it’s
approved ... let’s sort of draw a line in the sand on a particular issue.’ (‘Chris’).

... the younger ... people, they're very idealistic ... [referring to employees of a
company merger partner] ... they definitely have a very green ethos, so it's
interesting. Neither's right. I mean, we hope it's a good mix, but it's just an
interesting difference between the way we evolved over the years ... versus how
another company might evolve, another city (‘Jordan’).

Other practitioners also understand that younger professionals often have a
different ethical perspective than those who may have ‘cut their teeth’ in practice during
the early years of the environment profession:

It would be really interesting to understand ... because I think they would have
a very different take on it ... it is actually such a values-based approach when
you're talking about ethics and environment, and how much you value the
environment, what’s right, what’s wrong, and what level of development’s okay (‘Cameron’).

5.5.2 Advice to Young Professionals

Most interviewees provided thoughtful and well-considered answers to the interview question ‘What would you advise a young environmental practitioner regarding ethics?’ and in general there was agreement on the importance of the same principles and values as described in Chapter 4.

Early career practitioners need and appreciate mentors, as recalled by local government sustainability officer ‘Pat’ referring back to two previous employers who also acted as mentors:

... I ... learned ... from them about high quality and thinking about all the other players in the room ... I wish I'd had ... someone at the start of my career saying ‘if you're going to be a consultant these are some things to really start thinking about’ (‘Pat’).

One experienced practitioner described a situation that arose during a selection panel deliberation, which happened to be also attended by an early career person in training, where an ethical dilemma became an opportunity to provide mentoring through example of how to deal with the issue:

I felt a real obligation ... to actually articulate the ethical consideration. Because we had this early career person and also we had another person which really had never done this kind of thing before. So I said ‘right okay, well we can only use the information that is provided to us in this particular set of project proposals and we can only compare it against the published evaluation standards that we've got’ ... (‘Taylor’).

‘Alex’ has specific advice for early career professionals regarding mentoring, continuing professional development (CPD), networking and remaining open-minded:

... get yourself a mentor is the first one, ..... Keep doing your CPD is another thing ... it gets you out and understanding other people's perspectives and respecting other people's knowledge ... Network, for the same sort of reasons, ....so that you know lots of people across a lot of different areas ... people have different life experiences... Our generation we were raised to be judgemental ... in today's world that's not helpful ( ‘Alex’).

‘Jesse’ considers the most effective mentoring is to allow juniors to explore their own ethical challenges, make their own decisions and occasionally make mistakes (within reason):
... we expect a certain standard ... about how we deal with things ... It's a trade-off between being very prescriptive yet allowing individuals to have space for their own personality. ... rather than spoon-feeding people, ... you give them an opportunity, you find out where they're going, what they know, and then you [support] as necessary (‘Jesse’).

Notwithstanding the workplace conversations and mentoring which may take place with respect to ethics, situations arise where young and early career professionals feel compromised and uncomfortable about facilitating development that may have environmental impacts. Most seasoned practitioners, especially those in consultancy, have either had these conversations with juniors, or have at least prepared a ‘this is the real world’ type of response ready for when these issues arise, including some plain speaking when necessary:

I would ... contextualise it and say, 'look at the work that you do ... on this project you found this, and this was saved or this was avoided. ... you might have cleared this, but ... it was a great research project’ ... it is the reality of it, but sometimes you just need to lift the eyes a little bit to see the broader context. Some people would still struggle with it. I think all consultants do it over time, but that's what we do. We facilitate development (‘Cameron’).

... if you really want to just stop a development you shouldn't be a consultant. There'll be times when you'd recommend something shouldn't go ahead, but there'll be other times where you'll have to say, ‘well on the basis of the information you should be able to get permission to do this’. If you want to stop that sort of thing then you need to be an NGO, an environmental activist or a politician or ... a different field of practice (‘Danny’).

During interviews, ‘Alex’ gave a double-edged message to graduates who may have strong pro-environment values viz. believe in yourself, but at the same time do not expect others to fall in line with your attitudes:

...believe in yourself ... and do what it takes to grow your abilities and skills and interests and stay interested and allow yourself to be stimulated... it's really critical for a young professional ... to not feel that ... ‘I've got a degree and I've got passion and I belong to Sea Shepherd or something and I'm there to be feared and respected’ ... No, sorry ... (‘Alex’).

However, these two concepts are not as diametrically opposed as they may seem at first glance, but rather they are an encouragement to be passionate but also open-minded and non-judgemental, without imposing one’s values on others.
Several interviewees, when considering the advice they’d give young and early career professionals, emphasised the importance of developing technical skills and investigative rigour, looking at problems from several angles, and speaking up, as part of their ethical ‘armoury’:

... develop strong technical expertise, attack every problem objectively and triangulate it from as many perspectives as you can, including how opponents might see it, how regulators might see it, how developers might see it. Try and empathise with all positions. Be rigorous in what you do. Recognise the cost implications for developers, that often they don't have money until they've got a project, so they can't spend a lot of money upfront .... Recognise the potential for fear in the public to propagate like a virus. If ... some meme gets out there about a project that is scary, that it can completely derail approval process, so be conscious of that and be attuned to it. It's sort of a tautology, but be ethical ...(‘Jordan’).

Advice would be, number one, understand the technical stuff and do what you think is right. If you understand the technical stuff, you give your view... you need to be comfortable with it, but don't be scared to say something ...., if it's wrong you'll deal with it later, but at least you're giving ... an honest view on it ... everyone is going to make mistakes or are there are things that they could have .... said differently, that's fine ... there needs to be an acceptance of that. But if you don't say anything you're never going to make a start (‘Jesse’).

In terms of career planning, for those graduates who have choices, two practitioners gave quite specific advice:

... avoid ... starting their career in an ethically comprised group or in a big multidisciplinary group where their potential to have a voice is very small, because they won't get the opportunity to see how you can practice ethically and to be supported .... Whereas if they are able to start either in government or with a specialist consultancy firm in an environment that's supportive ... they build their skills and their professionalism, and particularly their confidence ... I always used to be very pleased when people left [my firm] but went into other organisations and improved [their] ethics .... You didn't see it a lot when people came out of an early career in organisations where ethics wasn't prized or wasn't much practised. It was much harder to convert them later. They developed bad habits ... they didn't have the habits of mind to put it [ethics] into practice (‘Danny’).

... know the entity you're working for... have a strategy about how your practice sits in that strategy ... Then ... get the skills to enable you to practice in that organisation. Some of them may not be just science, they may be meeting skills, they may be negotiation skills, they may be ‘stepping up to power’ skills ...
you must work with people ... and alliances and collaboration ..., but you can't know right and wrong .... till you know the entity.... what they see they're there for, what the culture is  (‘Lennon’).

Many of the practitioners interviewed are committed to the professional association (EI ANZ) and its practitioner certification scheme (CEnvP), so unsurprisingly several raised these in their ‘advice to the young’:

... they join the EI ANZ ... they've got a code of ethics to work with and that they should take that seriously (‘Taylor’).

... look at the certification program and understand what the ... code of practice actually means, have a good understanding of it. But secondly too, if confronted with what they think is an issue, to actually approach the [CEnvP] Board and seek guidance. Go to those senior practitioners that are certified and seek guidance  (‘Chris’).

5.6 Recommendations by Participants

Although not specifically covered by the semi-structured interview questions, several practitioners took the opportunity to make recommendations regarding ethical practice within the environmental profession.

For example, ‘Logan’ suggested measures to enhance compliance with the EI ANZ Code of Ethics:

... one thing that’s gone to be done also with ethics is they’ve got to be governed as well, and ... there's got to be consequences of not acting ethically. I think I'm aware of ... circumstances where people from EI ANZ have been castigated to various degrees for ethical issues (‘Logan’).

‘Chris’ also recommended an EI ANZ ethical hotline service (which has subsequently been implemented) plus additional Institute guidance to its members on ethical matters:

... there need to be ... more examples ... of ethical practice or examples ... might be just a part of a webpage where there's an ongoing conversation... So all ... practitioners are aware ... and if it pops up, they can help contribute to it or say here's an example ... [to] help build the database of issues. [and, referring to EI ANZ Statements of Good Practice] ... those statements on particular issues ... they clearly need to be upgraded ....if you're operating outside of that view or contrary to it, then perhaps ... you've moved into an area of ethical dilemma ... that's another way of utilising them  (‘Chris’).
Two practitioners (one from private consultancy and one in the public sector) recommended that ethics training be included in environmental courses at universities:

[ethics training] can come from all sorts of aspects, but certainly I think it should be part of courses. It should be taught but in a more practical way - from a practitioner rather than a theoretical way (‘Danny’).

... I didn’t have any of that [ethics training] I still don’t think anyone does because I’ve seen new consultants and they don’t seem to have any regard for a lot of that. [I would like the] ... universities ... to start teaching the attributes ... and the values of a good consultant .... (‘Pat’).

5.7 Summary of Findings: Ethical Issues

The values and ethical principles espoused by these practitioners in the course of semi-structured interviews are largely corroborated by their responses to ethical challenges faced during their careers, the criteria they adopt when identifying unethical practice, and the advice they would give to younger colleagues. However, when dealing with the ethical issues which arise during professional environmental practice, only a small proportion of practitioners rely on institute or organisational codes of ethics. As discussed in Chapter 4, most seasoned practitioners have developed their own principles and definition of what constitutes ethical practice (‘doing the right thing’). Although these principles are generally consistent across the range of practitioners interviewed (and consistent with a science-based profession), greater differences emerge with respect to the practical application of these principles, for example in ethical decision-making. An important part of the link between principles and decisions, that of recognising ethical dilemmas (and hence knowing whether or not to invoke one’s personal ‘code’), appears to be largely intuitive and triggered at least partly by an ingrained sense of right and wrong.

Professional environmental practice involves distinctive ethical issues, and the experiences of seasoned practitioners provide guidance for appropriate responses to these challenges. Analysis of interview data reveals similarities and differences in the ethical principles adopted by these pioneers of the environmental profession in Australia and New Zealand, and the various ways in which ethical dilemmas are avoided, or are being recognised and addressed. These are further analysed and discussed in Chapter 6 below, and implications for the profession, for EIANZ and for environmental education are outlined in the concluding Chapter 7.
CHAPTER 6: DISCUSSION AND REFLECTIONS

*Ethics is not an exact science.* (Irland, 2007, p. 4), citing R.S. Miller.

As discussed in Chapter 4, the 14 environmental practitioners interviewed for this study expressed ethical principles and responses that largely correspond to three types of integrity (professional, technical and process-related). This thesis categorises their values and approaches as five professional identity perspectives (objective scientist, problem-solver, environmental advocate, balance-seeker and practice manager) indicative and predictive of their responses to ethical and other issues, although individuals may adopt one or more of these according to situation and role. However, these differences are expressed mainly in their personal values regarding the environment (generally derived from formative pre-career influences) and the priorities accorded to various ethical principles. There is overall agreement between those interviewed that professional ethics for environmental practice is based mainly on honesty and truthfulness, technical competence, accuracy and rigour, and transparency regarding impartiality, conflicts of interest and use of information. These principles generally correspond to those of a science-based profession (Weinbaum, Landree et al., 2019).

The research findings with respect to ethical issues which arise in environmental practice, as reported on in Chapter 5, are consistent with the above principles, notwithstanding that the cohort of practitioners interviewed had little if any ethical training or mentoring, had largely developed their own practices and ethical standards *de novo*, and fewer than half expressed reliance on professional institutes or ethical codes. Nevertheless, most practitioners (with two exceptions) recognise that environmental practice raises ethical issues which require addressing, as reported by Cuba (2000) in relation to consulting, and by Goldman (2005) and Batavia and Nelson (2019) in relation to the public sector, and as analysed by Blumenfeld (1989) with respect to environmental auditors.

Also as described in Chapter 4, Section 1, a thematic analysis of interview transcripts analysis grouped participant responses into five topic groups, corresponding to broad themes, plus a sixth topic (recommendations) which emerged from interviews, as follows:

- **Topic Group 1: Formative Influences Theme** (see 6.2 below)
- **Topic Group 2: Professional Identity Theme** (6.3)
Topic Group 3: Values and Ethical Principles Theme (6.4)
Topic Group 4: Ethical Issues Theme (6.6)
Topic Group E: Ethical Advice Theme (6.7)
Topic Group F: Participant Recommendations (6.8).

The structure of this Chapter is based on these themes, with the addition of an introductory section (6.1) describing the environmental profession and some of its distinctive attributes, and a section (6.5) which relates the ethical principles of practitioners to ethical theory.

6.1 Environmental Practice as a Profession

6.1.1 Professionalism and its Changing Nature

As discussed in the literature review chapter, the nature of professionalism is not static but requires updating for relevance and moral legitimacy, and each profession needs a ‘legitimating ethic’ (Koehn, 1994) as well as ongoing ‘identity work’ by the profession as a group, and by individual practitioners (Lepisto, Crosina et al., 2015). Chapter 2 also reviewed the changes which have taken place within professional practice over time. Consistent with these changes, several interviewees noted that reductionist and issue-focused approach considered normal two or more decades ago have been largely overtaken by a need to take integrated and multidisciplinary approaches to resolving environmental problems; but that the fundamental ethical issues of environmental practice have not changed. In addition, there is a steady trend towards professionalisation of fields wherein experts offer analysis and advice, such as environmental practice, notwithstanding that there are countervailing trends of commodification, productisation and standardisation of professional services. At the same time, global and national economic conditions result in cyclical periods when skilled and experienced environmental practitioners are in high demand and can pick and choose employers and clients, interspersed with periods of downturn when the market is highly competitive. Several interviewees regard the current economic climate as particularly competitive for environmental consultants, requiring changes to the way in which services are promised and delivered (in effect ‘cutting one’s cloth to suit’ reduced budgets) and therefore presenting challenges to the ethical principles of many practitioners.

For environmental practitioners in Australia and New Zealand, there is a range of professional institutes, learned societies, industry associations and technical bodies
offering membership and collegiate support. These have varying degrees of exclusivity and specialisation, with different proportions of membership among private sector consultants, the public sector, academics and researchers. Arguably the broadest and most all-embracing is EIANZ which includes members in the ecological, waste and contamination, and water engineering fields (the ‘green’, ‘brown’ and ‘blue’ strands of environmental practice). As indicated by the professional and technical associations listed by the 14 seasoned practitioners interviewed (Chapter 3, Table 1), it is quite common for experienced practitioners to be members of two or more associations, for example a specialist society (such as Ecological Society of Australia) and/or an industry-based group (such as Central Queensland Mine Rehabilitation Group) as well as a broader ‘umbrella’ institute (such as EIANZ or Engineers Australia). The roles of professional institutes and their codes of ethics are explored further in Section 6.4.6 below.

Organisations and agencies often adopt ethical codes that impose standards of behaviour on their employees, including professionals, and framed codes hang on many office walls attesting to high ethical standards. Such codes of practice cover and set standards for a wide range of matters from fraud, bribery and conflicts of interest, through to internal bullying and harassment, courteous and equitable dealings with clients and the community, as well as honesty in reporting and a focus on client interests. Some corporate codes are no more than compliance with legislation or common law, others are ‘window dressing’ and marketing ‘spin’ that do not reflect or change organisational culture. There are also differences between ethical codes which are mainly aspirational (goal-setting) and those that set accountable standards, whereby alleged breaches can be alleged and tested against demonstrable criteria.

For professionals bound by organisational codes of practice, conformance is compulsory and a condition of employment, and does not require any ethical choice (analogous to obeying the road rules). Nevertheless, having clearly-defined ethical codes provides a framework of rules and assurance of organisational consistency which can support one’s personal moral choices, providing the two are consistent. Conversely, a breach of such rules may be considered unethical by the organisation or agency, but the question as to whether or not it is morally defensible depends on the alignment of organisational ethics with one’s personal ethics. An organisational code of ethics developed collaboratively, rather than imposed from above, is more likely to be based on shared values and align personal and corporate principles.
Similar considerations apply to a professional institute or organisational code of ethics - to the extent it represents mandatory rules, conformance is not an ethical choice. However, an institute code can effectively support personal ethical principles, by emboldening an individual to stand up for what is right, provided it has been developed collaboratively so that each member identifies with and has some ownership of the code.

6.1.2 Complex environmental inter-relationships

The inter-connectedness of ecosystems and human society requires multi-disciplinary teams to address impacts and environmental management, and requiring practitioners to adopt interdisciplinary approaches (Canter, 1991). One of the issues raised by several interviewees, as an ethical principle, is that practitioners should take an holistic approach to all issues, rather than addressing problems in isolation, or through adopting reductionist approaches which break down problems into investigable elements. In fact, several practitioners state or imply that a failure to consider ‘the big picture’ is unethical. This consideration raised ethical dilemmas following global oil crises in the 1970s and 1980s, when some environmental practitioners perceived that working on motorway projects had an ethical dimension, in that highway upgrades encouraged more vehicle traffic, petrol consumption and air pollution.

Similarly, the current public and political controversy over coal mines in Australia is one where environmental professionals undertaking scientific assessment of specific environmental impacts, for example, hydrogeological investigations of groundwater, are criticised as unethical practitioners by those with ‘big picture’ concerns regarding global climate change. In some cases, the offices of consultancy firms (and mining conferences) have been picketed (Friends of the Earth Australia, 2018). Although other professions face ethically ‘hot’ issues from time to time, or are associated with particularly controversial topics (for example abortion in relation to the medical profession), the environment profession has been challenged for a long time, and over many issues, to reconcile its practice ethics and industry adviser role, with its conflicting role as environmental stewards and guardians.

Practitioners may, as part of their ethical responsibilities towards the environment, choose to go beyond their brief to consider a more holistic context, and in some cases it may be an ethically responsible extension of their charter. However, the question would then arise as to how wide should the net be cast in recognising the environmental
implications of development proposals? For example, in assessing the environmental effects of a proposed uranium mine, is it appropriate to consider the likelihood that the mineral will be exported, and the possibility that uranium may find its way to a nation using it for nuclear weapons?

In response to these and similar concerns, the scope of impact assessment has been codified with respect to the carbon ‘footprints’ of mining and industry, as measured by their greenhouse gas (GHG) emissions. It is difficult for an environmental practitioner, when assessing impacts under a government-issued brief that lists only direct project-related emissions (for example of a coal mine), to take into account the impacts of indirect emissions (for example from burning the coal in an overseas power plant). For many environmental practitioners, similar quandaries play out in various ways, large and small. The specified task is often to assess a specific site, proposal or impact - an expert practitioner is generally aware that there is a broader context in which the assessment should take place, but is beyond the prescribed brief. Similarly, project-specific assessments may fail to take into account cumulative impacts, whereby habitat or other environmental values may be whittled away over time by a series of small project approval decisions (a ‘death by a thousand cuts’).

Practitioners specialising in environmental impact assessment have long called for strategic and cumulative environmental assessments to address these problems (Pope, Bond et al., 2013), and to place project-specific assessments in these wider contexts.

6.1.3 Different Types of Environmental Practice

The 14 practitioners interviewed included professionals from both the public and private sector, several who had changed during their careers from public agencies, Councils or semi-government organisation to private consultancy, and one (‘Lennon’) whose career trajectory had included multiple sectors and roles. In terms of practice disciplines, their fields range from ecology and site contamination to regional planning and sustainability policy. Despite these differences, similarities emerged with respect to the ethical principles of honesty and truth-telling, technical quality, evidence-based opinions, persistence and resolve, and the responsibility to reduce environmental harm, as summarised in Chapter 4 (section 4.8.1) above.

Other similarities that emerged are that:

- Practitioners in all various fields and sectors of environmental practice need to stay up to date with the latest research, emerging environmental threats and
risks, new approaches to environmental management and changes in legislation, policy and regulations across multiple layers of government;

- In their field of expertise, most environmental practice takes place in small teams, although some practitioners may also be managers within larger organisations, and small groups are often part of larger multi-disciplinary ad-hoc project teams; and

- Most have experienced, and have developed ways of resolving, the tensions between helping clients, solving problems and meeting their expectations on the one hand, and the requirements of legislation and policy (and agency expectations) on the other hand, while at the same time acting as a steward or guardian of environmental values. There are generally ethical dimensions associated with these tensions.

However, one major difference between public sector environmental professionals and those in the private sector is that the former (especially regulatory agencies) have a responsibility to act in the best interests of the public, as represented by the government of the day. Environmental scientists and academics with primary responsibilities in pursuit of truth are also likely to exhibit role identities and practice ethics different from those of consultants and agency officers, but no such practitioners were interviewed. The levels of trust accorded to environmental professionals are also likely to vary between academics, public sector and private consultants. Practitioners with primary (highest level) responsibilities to the public or to the pursuit and dissemination of truth are likely to be trusted to a greater degree than those in the private consultancy being paid by proponents of development.

Another significant difference between practitioners in the public and private sectors is the importance of personal reputation, especially for consultants whose livelihood depends on successful marketing and word-of-mouth references from clients and colleagues. The reputation of environmental consultants arises not only from their capabilities, expertise and track record of successful project completions, but also on their reliability, professionalism and credibility with agency officers. These personal attributes relate to trustworthiness and practice ethics, and although they are characteristics of professionals in all sectors, they have a tangible market value in the private sector.
Ideally, professional institutes provide forums for practitioners from various sectors to discuss issues of joint and mutual interest, such as educational qualifications, best-practice standards and certification. In the environmental field, this occurs to some extent with some learned societies (such as Ecological Society of Australia) catering for academics, researchers and private consultants; and industry-related associations (such as Parks and Leisure Australia) covering many government and Council employees as well as private sector practitioners.

In the case of EIANZ, membership in the early years (from 1987) included practitioners in Universities and the private sector, and some in public service, driven by the ‘opportunity for multi-sectoral collaboration … by all levels of government, private industry and community groups … as well as the educational programs … to form a representative professional association’ (Morris, 2017) p.1. However, EIANZ is now dominated by private sector practitioners, in part a reflection of the reluctance of government agency environmental regulators to consider themselves part of the same profession as those they seek to regulate. This regrettable division further undermines community trust in the environmental professions.

One of the contentious areas of environmental practice affecting community trust in the profession, which would benefit from a more collegiate approach from professionals in the public and private sector, is in respect of scoping of environmental studies. Development proponents generally engage private consultants to assess environmental issues and impacts, based on guidelines or technical coping documents issued by government agencies. While it may be an ethical responsibility of environmental practitioners to consider a broader context, such as Scope II emissions of greenhouse gases, these issues are beyond the scope of investigations unless specifically included by agencies responsible for writing the guidelines.

With respect to the ethical principles adopted by experienced practitioners, there may be differences in emphasis between professionals in various sectors, such as consultancy, regulatory agency, public sector resources department, academia and research, non-government organisations and the community sector. For example, personal reputation is particularly important to private sector consultants, where specialist technical skills are a marketable commodity, as is ethical reputation to a lesser extent, both known ethical and known unethical consultants are likely to find ready customers. In the public sector, a personal reputation for competence and sound judgement can make promotion more likely, but specialist technical skills may be
valued less than personnel management, and high ethical principles may create a reputation for being a troublemaker.

It is not clear, from the interviews conducted for this research, whether or not these differences in career motivation between public and private sector practitioners act alongside differences in professional identity perspective to affect their ethical priorities. In both cases, practitioners are responsible to someone in a position of authority (a senior officer, or a client) who makes it clear what answer they would prefer, and the practitioner tries to respond in an ethical manner with minimal risk to career, profits or employees. The question is: do similar situations trigger a similar moral ‘line in the sand’ for public and private sector environmental practitioners? It appears from case studies discussed in the semi-structured interviews that many individual practitioners, public and private, sometimes feel uncomfortable with something they are asked or expected to do. In private consultancy, the application of ethical principles is part of a dynamic interaction between practitioner, client and regulator, sometimes with secondary interactions involving junior staff and community stakeholders. In contrast, the ethical dynamics as expressed or implied by public sector practitioners is more concerned with boundaries and limits of decision-making authority, becoming aware of (or being directed to do) something which they consider unethical, unlawful, unfair or contrary to guidelines. The concept of professionalism provides helpful guidance for both public and private sector practitioners, in that personal pride in ‘being professional’ encompasses high standards and ethical conduct as well as service to clients and the public good.

While a sample of 14 practitioners is insufficient to test this hypothesis, it is an intriguing possibility deserving of further study, as discussed in Chapter 7. Also, if there are demonstrable differences between sectors in the priorities given to different ethical principles, it would be appropriate for the future teaching of ethics to reflect this.

6.1.4 Influences on environmental practice

While the experienced environmental practitioners interviewed for this research brought a range of personal values and moral principles into their practices, they report a lack of training in elements of professional practice, including ethics, during their tertiary education. For them, the transition from University graduation to professional practice consisted almost entirely of on-the-job training and (for some) informal mentoring from respected employers and supervisors. While this situation has improved
since these practitioner pioneers graduated, in that many graduates now have access to University-arranged industry placements, graduates in environmental sciences and policy are still generally unprepared for a career as a professional.

Josephson (1989) considers the critical period of life for ethical development is early adulthood, between the twenties and thirties. The main influences on the professional work performed by practitioners week-by-week, and especially on the values, standards and habits developed by practitioners in their early years, are those practices learned on the job and reinforced by workplace culture, informed to varying degrees by research and industry-wide best practice. However, in a broader historical context, the framework for acquiring values and practice learning is the concept of professionalism per se, and broad agreement among members of the same profession (through institutes and associations) as to the values, standards and conduct expected (LeDuc & Kotzer, 2009).

In summary, this research has found that professional environmental practice is broadly influenced, for each practitioner, by:

- Discipline-related qualifications, training and acquiring the values of the profession;
- Work experience and personal on-the-job learning from employers and supervisors (and vice-versa, as practitioners become more senior and mentor others);
- Continuing professional development (CPD) and in-house training by organisations;
- Personal values and moral principles from childhood and early experiences;
- Professional associations, institute codes and collegiate interactions;
- External forces and trends, including markets and economic cycles, competition between practitioners and changes in government policy; and
- Research and current best practice.

This thesis also proposes that these influence the ‘building blocks’ of professional practice (competence and capabilities, identity and ethical principles), and various aspects of professional contribution (to society, to the environment and to the profession), as conceptually illustrated in Figure 1 below.
**Figure 1:** Conceptual Influences on Professional Practice (see full model in 6.6.5)

![Diagram of Conceptual Influences on Professional Practice]

Figure 2 explores one of these building blocks in more detail viz. competence and capabilities, with reference to the inputs and outcomes relating to qualifications and skills. Accredited qualifications and on-the-job training contribute to competence and capabilities, maintained up-to-date through continuing professional development (CPD).

**Figure 2: Influence of Qualifications and Skills on Professional Environmental Practice**

![Diagram of Influence of Qualifications and Skills on Professional Environmental Practice]

Other influences (professional identity perspective and ethical practice principles) are presented diagrammatically later in this chapter, in Figures 3, 4 and 6 below.

6.2 Formative Influences Theme
6.2.1 Development of Ethical Principles (Practitioner Journeys)

This research has confirmed previous studies (Singhapakdi & Vitell, 1993; Weber, 2019) that underlying values regarding morality, the natural environment, responsible behaviour and the role of professionals influence one's ethical principles. The set of values and attitudes underpinning a practitioner’s professional approach are largely derived from formative influences prior to and during early career professionalisation. As reported in Chapter 4 Section 4.2, most of the practitioners interviewed trace their early interest in the natural environment and science to influences in childhood or their school years, and attribute their basic ethical principles to moral guidance from parents, teachers or other mentors. Another characteristic of this pioneering cohort is that, throughout their careers, they have generally been ‘self-starters’, and had taken advantage of opportunities presented by the emerging profession of environmental practice. None appeared to have known, at the outset of their careers, where their professional trajectory would lead, nor in many cases that environmental practice was even a profession. They have each been on their individual journey, all different, in some cases driven by a clear desire to create a career in the environmental field, in other cases simply exploring opportunities which arose following graduation.

Notes made by the researcher following each interview, in the form of a research diary (Bloor & Wood, 2006) recorded that all interviewees were thoughtful and perceptive regarding ethical principles in practice, and many welcomed the opportunity for self-reflection. It is also apparent that, when dealing with ethical issues, experience provides valuable perspective. Seasoned practitioners with experience across various sectors, roles and types of environmental issues appeared to be more confident in their ethical judgements and more prepared to be assertive with respect to their environmental values and practice principles, than those with experience just in one sector or role.

6.2.2 Context and Trends

Although the 14 practitioners interviewed represent, in some ways, a pioneering cohort, their careers did not develop in a vacuum, but in the broader context of societal changes and especially global awareness of environmental issues since publication of Rachel Carson’s seminal Silent Spring in 1962 (Carson, 1962). Public discourse regarding environmental responsibilities of governments and industry grew exponentially in subsequent decades, philosophers started to explore environmental
ethics, and the new profession of environmental practice proposed codes of practice that defined their ethical responsibilities.

A theme which emerged, (quite unexpectedly), during interviews is that some practitioners considered themselves fortunate to have established their careers in the late 1970s and 1980s, at a time of considerable change in community concern regarding nature and pollution, and the associated explosion in legislation, regulation and demand for environmental expertise. As discussed in Chapter 4 Section 7.6, this period coincided with the recognition and growth of environmental practice as a profession (with the establishment of EIANZ), to which these pioneers contributed. Other ideas gathering force in this period included interdisciplinary and multidisciplinary approaches to complex problems, ecologically sustainable development (ESD) and global interactions, environmental ethics, triple-bottom-line reporting and accountability, ‘deep ecology’ and social justice considerations. Several interviewees reported to have progressively responded to these influences by broadening their approach to practice to incorporate more holistic approaches.

Due to this combination of self-motivation, pioneering spirit and more holistic approaches to environmental practice, seasoned practitioners appear to consider they are ‘ahead’ of their clients, and in some cases the agencies and community, in perceiving and understanding not only the technical aspects of environmental issues, but also the wider context (the ‘big picture’). Accordingly, many regard their professional responsibilities as including an educative and guiding role, in which their persuasive capabilities (to convince clients, colleagues, agencies and the community regarding their recommended solutions and compromises) are a key part of their expertise.

6.3 Professional Identity Theme

6.3.1 Professional Roles and Identity

Professionals in general carry out roles which have been historically assigned to them by society, or are ‘licenced’ and entrusted to fulfil specific duties and meet certain community expectations (Hogg, 2006). They understand that they have responsibilities associated with their function (Koehn, 1994). At the same time, professionals construct and maintain their role-identities, both individually and as a group, by various purposeful activities (‘identity work’) (Lepisto, Crosina et al., 2015).

Analysis of data for this thesis indicates that the combined ‘package’ of values, world view and how people perceive society, role-identities and personality traits is
expressed as five ‘professional identity perspectives’ as identified in Chapter 4 and listed in Table 4 (objective scientist, problem-solver, balance-seeker, environmental advocate and practice manager), which affect the way they identify, categorise and deal with ethical issues. The practitioners interviewed appear to select and rank their ethical principles according to their professional identity perspective and role, and this affects their ethical decision-making. Accordingly, there is no single template for being an ethical professional, despite the availability of a profession-wide EIANZ Code of Ethics and Professional Conduct. One environmental professional may be acting ethically in making a decision which another professional, with a different identity perspective, may consider unethical.

There is no evidence that a single professional identity is shared by environmental practitioners (Lidskog & Sundqvist, 2018), and this absence of a cohesive identity is borne out by the responses of the Australian and New Zealand practitioners interviewed for this study. While all environmental professionals may share many ethical principles in common, and groups of practitioners in a particular field (such as ecology or environmental impact assessment) may share a collegiate identity, there appears to be no collective environmental professional practitioner identity, as there is (for example) in the medical or legal professions, or among professional accountants (Brouard, Bukaki, Durocher, & Neilson, 2017). This lack of a collective identity is likely to be a function of recent and ongoing professionalisation, the diversity of practice and multitude of academic qualifications, the relatively low proportion of practitioners who consider themselves part of a cohesive profession, and the absence of professionalism orientation or professional practice training at undergraduate level for most environmental graduates. In terms of the ‘layers’ of aspiration commonly used in medicine to assess professionalism, wherein ‘being’ a doctor is the final stage of professionalisation (Cruess, Cruess, & Steinert, 2016), environmental practitioners demonstrate a variety of responses regarding their professional identity.

Importantly, the interviewees all consider their roles and identities to be professional rather than technical (i.e. exercising professional judgement in an autonomous manner, for at least part of their responsibilities) and even the compliance auditor interviewed rejects any implication that it is a ‘box-ticker’ role. All consider that they use their expertise to help others solve environmental problems and reduce environmental harm, that they practice in an ethical manner.
Underpinning their practices are assumptions that clients, employing organisations and regulatory agencies will trust their investigations, opinions and advice, not only because they are technically competent to provide these services, but also because they are professional, with all the implications of competence, integrity, impartiality, fidelity and ethics implied by that status (Lane, 2018).

In this context, the influence of professional institutes and codes (and organisational or public service norms of behaviour) on practice may not be direct, as implied in Figure 1, but via each practitioner’s sense of identity as an environmental professional as illustrated conceptually in Figure 3. In this diagram, the inputs to each practitioner’s professional identity perspective are a range of formative influences (life journey and career trajectory) and the professional and assigned roles of each situation, as well as the theoretical and research basis of social and role identity, as discussed in Chapter 2. The observable outcomes of the professional identity assumed by each practitioner include his or her reputation and professional image (curriculum vitae, marketing and promotion) i.e. the identity they choose to present publicly.

Figure 3

The Influence of Identity on Professional Practice (see full model in 6.6.5)

While several practitioners appear to have a primary commitment to one or other of these five types (in that they address most practice situations and ethical challenges in a manner which is consistent with their identity perspectives), others appear capable of switching between roles and perspectives according to the situation, or of functioning in dual roles at the same time, for example those of both a problem-solver and a practice manager. Caza and Creary (2016, p. 16) refer to this as identity complexity, where practitioners structure two or more identities in relation to each other by dominance of
one or the other according to role, compartmentalising, augmenting or assuming an holistic identity which subsumes the others. (Hooker, 2007) uses a simpler analogy of wearing one or more ‘hats’.

Notwithstanding overlaps and dual identity structuring, the five professional identity perspectives identified for environmental practitioners offer a more useful framework for analysing differences between practitioners with respect to their ethical principles and practices than other potential categorisations of the 14 interviewees. For example, there is little discernible difference between retired and currently active practitioners in their approaches to ethics, and few differences between public service officers and private sector consultants, although the issues dealt with in private and public practice are different. Some differences are also noticeable according to age, gender and location, but these are minor variations compared to those of differing professional identity perspectives. Age is a factor only inasmuch as veterans with more than 35 years experience commenced their careers and developed their personal principles in more ethically challenging times, and in several cases had faced difficult situations (with little guidance or support) early in their careers, as discussed in Chapter 4 Section 4.2. The influence of location appears to be mainly in respect to client sophistication, in that consultants in regional and rural locations interact with a wider range of communities and clients, some of whom require guidance and education to understand environmental issues.

6.3.2 Effects of professional identity perspectives on practice

Although there are significant similarities in the ethical principles of all the seasoned practitioners interviewed, certain differences appear to correlate with professional identity perspectives.

The most significant of these differences relates to the recognition of an ethical dimension to their professional environmental practice. In general, those with an ‘objective scientist’ perspective recognise little role for ethical considerations, in that their focus is primarily on performing accurate reliable work and reporting or interpreting factual evidence. While research scientists generally aim for objectivity (descriptive accuracy and value neutrality), the illusion of a value-free science prevents some practitioners from acknowledging the role played by subjective values, assumptions described by Appleton’s interviewees as a ‘boardwalk analogy’ (whereby ecologists would prefer to build a boardwalk through wetlands, rather than cause
footprint impacts) (Appleton, 2012, p. 76). The objective scientist perspective encourages an assumption that ethical dilemmas can be avoided through independent investigation and value-free neutral reporting (Lekka-Kowalik, 2010). Some interviewees expressed frustration with others who allow their values to cloud rational judgement, notwithstanding that their environmental assessments may be funded by development proponents. However, other seasoned practitioners considered that the obligations of environmental professionals include advice and promotion of sustainability, biodiversity and other aspects of the common good, in addition to the science-based obligations of competent investigation and impartial honest reporting.

A focus on technical quality alone, with no ‘ideal of service’ dimension, is more appropriate for a skilled process-oriented technician than for a professional with commitments to the common good (Hughes, 1988). That is not to imply that one is more ethical than the other, but that the ethical framework of process-oriented practitioners is more deontological (duty-based and prescriptive) in nature, whereas that of the problem-solvers, balance-seekers, environmental advocates and practice managers is more teleological or consequence-based. Another way of describing this dichotomy is consequentialism (a focus on the consequences of action) versus non-consequentialism (Preston, 2014).

However, the degree to which an environmental scientist can be objective and impartial in reporting investigations, while at the same time providing professional opinions and advice in the best long term interests of the community and the environment as well as the client, will depend on the practitioner’s role and scope in particular situations. The concept of agency is relevant in this context, in that practitioners in specialised disciplines may often be commissioned for a specific technical role (such as, for example, air quality monitoring) (Noble, 2015) with little opportunity for assessment or advice regarding overall sustainability of a proposal. This is a different situation from a practitioner whose expertise includes habitat evaluation, but who chooses to restrict professional services to a purely technical role (for example by undertaking a fauna survey) when working on a project likely to destroy habitat. One experienced ecology practitioner (‘Danny’) considers it an abrogation of ethical responsibilities to restrict one’s professional services just to technical roles in those situations. However under some circumstances this approach may be a justifiable way of dealing with an ethical dilemma.
Several interviewees consider that transparency and communication regarding the practitioner’s values, and a professional relationship of trust, are important for reconciling these ethical tensions.

The mutual trust of professional relationships, not only between proponent and practitioner but also in the workplace, between different disciplines and among all members of an interdisciplinary EIS project team (Canter, 1991), can overcome some of the tensions which arise when solving environmental problems. Several practitioners with objective-scientist and problem-solver perspectives consider a ‘hard-nosed’ approach is needed to solve environmental problems, and express irritation towards ‘tree-hugging’ environmental advocates; and conversely ‘green’ environmental graduates may be frustrated with an engineering paradigm of seeking technical solutions without questioning the problem. Similarly, experienced environmental project managers (such as ‘Alex’) sometimes override the recommendations of specialist sub-consultants (such as botanists), and justify such actions by claiming that they have additional information or adopt a wider sustainability context, whereas the specialist scientists may consider this practice unethical. These different professional identity perspectives require mutual trust as well as respectful conversations and understanding of each others’ ethical frameworks (McAuliffe, 2014).

As well as the professional identity perspective which practitioners may generally adopt and which influence their ethics and behaviour, the various situations encountered in professional practice may call for them to undertake different roles, with differing degrees of agency and autonomy (Dent & Whitehead, 2002). A practitioner acting in the role of a project manager, and trusted by the proponent, may have considerably greater agency (capacity to act and make decisions) than, for example, an air quality sub-consultant dealing with only a specialist component of a proposal, and at arms length from a client. In this context, practitioners functioning as an objective scientist or technical problem-solver are likely to have less agency, and a more passive role in decision-making, than someone in a practice manager or environmental advocate role. The balance-seeker perspective is, in most cases, somewhere in between these two extremes, in that facilitating a consensus between various parties requires some agency (and a great deal of skill) but may be relatively passive in terms of influencing or implementing outcomes.

Many environmental practitioners, both in consultancy and public service, have found themselves caught up in adversarial conflicts to varying degrees at some stages in
their careers (Colvin, Witt et al., 2016; Futrell, 1994). For environmental advocate ‘Lennon’, the tensions associated with such conflicts led to ‘a fork in the road’ decision to redirect energy and professional capabilities towards conservation. Others have made directional career decisions in support of industry clients and development projects, but qualified by constantly promoting better environmental outcomes or drawing ‘lines in the sand’ regarding certain industries and clients they consider unsustainable or unethical. Those with a balance-seeker professional identity perspective aim to reconcile opposing forces and facilitate various parties to reach consensus, and may in this way avoid taking sides. However, irrespective of which ‘road’ a practitioner decides to take, that of supporting or opposing unsustainable development, or seeking a ‘best fit’ balance acceptable to all parties, decisions are required regarding the scope of professional responsibilities.

Another way of looking at these different perspectives and roles is to consider the degree of autonomy associated with various roles. The autonomous exercise of professional judgement is one of the hallmarks of a professional (Adams, 2017; Bayles, 1986), although this attribute is increasingly challenged by organisational procedures and industry standards (Evetts, 2016). A practitioner who is following quality management procedures, complying with agency conditions, employer protocols and compliance requirements, may be exercising considerable skills and applying expert knowledge, but may not be exercising autonomous judgement in that role (Valtakoski & Järvi, 2016). Although many practitioners undertake some work which involves ‘ticking the boxes’ to assure regulators that proposals comply with legislative requirements or conditions, such roles involve little autonomy or professional judgement.

6.3.3 The Ethics of Compliance and Teamwork

Another challenge for the environment profession is ironically associated with the explosion in legislation and regulation aimed at protecting the environment (Bigham, 2010). Compliance with legal requirements often exposes differences between the ethical principles of different professions working together in interdisciplinary teams, and between the evidentiary framework of science (data and probabilities) and law (compliance with legislated requirements). For environmental practitioners, compliance with relevant laws and conditions is not an ethical decision it is a ‘bottom line’ requirement of professional advice. However, ethical practitioners do not recommend clients adopt bare-minimum compliance and try to avoid their advice being interpreted
by clients as a ‘what can we get away with?’ approach. One way to avoid any such implication is to note factually the compliance requirements, but consistently advocate for higher standards which go beyond compliance.

Environmental practice often comprises multi-disciplinary work, either leading or as part of assessment, management or monitoring teams (Byers, 2018). The most effective involvement of environmental professionals and their expert advice is in the early feasibility planning stage of proposals. Yet both of these (teamwork and early advice) also present ironies and ethical challenges. Being part of a team, working together collaboratively to reduce and mitigate the environmental impacts of a proposal, involves group dynamics where ‘… critical evaluation is traded off in favour of achieving consensus within the group …’ (Colvin, Witt, & Lacey, 2015, p. 243).

However, this can lead to ‘group-think’ pressure to conform, to suppress concerns, to take ‘ownership’ of a compromise solutions and to bargain away one’s professional ethics to achieve the team goal of project approval (Muller & Schafer, 2016). Proponents and project managers often encourage professional teams to put aside their differences and personal opinions in favour of a ‘best for project’ approach, but there are ethical risks for environment professionals in this approach. When dealing with developers who aim to profit from removal of one or more natural values, who speaks for the environment, credibly and based on evidence, if not the environment profession? (Hull, Richert, Seekamp, Robertson, & Buhyoff, 2003).

6.4 Values and Ethical Principles Theme

6.4.1 Values Towards the Environment

As discussed in Chapter 5, most practitioners interviewed for this study share a love of and respect for nature, and they had generally developed their values and principles early in life. There is tacit agreement (most likely shared by many who have chosen environmental careers) that humans have ethical obligations towards the natural environment, in that living fauna and flora are deserving of moral consideration (McNeil, 2016). There is also tacit agreement that the concept of ‘public interest’ extends beyond the utilitarian concept of ‘greatest good for the greatest number’ (Malik, 2014, p. 209) to now include, not only the well-being of humans, but also the environment as a common good. These underlying assumptions, based on environmental ethics, were not challenged or explored by any of the interviewees, notwithstanding that they represent relatively recent and profoundly radical changes to
previous concepts of moral philosophy and professional obligations (Koehn, 1994). Interview transcripts and research diary notes reveal that all 14 practitioners regard the minimising of environmental harm as part of their roles and professional responsibilities, and most thoughtfully reflect on their personal values regarding the natural and built environment on a regular basis.

However, as reported in Chapter 4 Section 4.4, the personal values of interviewees towards the environment range from almost spiritual reverence for nature as the basis for sustainable communities at one end of a spectrum, to a constraint on development which presents interesting problems for experts to solve.

In general, the interviews revealed that practitioners who indicate that they personally value the natural environment are those who had been exposed to and learned to love nature as part of their early formative influences. However this affinity with nature does not consistently correlate with professional identity perspectives. As expected, the two practitioners with an environmental advocate perspective have strong pro-environment values, whereas two with an objective-scientist perspective express few personal attitudes towards nature and the environment, but there is little correlation with respect to the other 10 interviewees. Some balance-seekers, problem-solvers and practice-managers are very ‘green’ (pro-environment) in their personal values, especially those whose values were shaped by early nature-based experiences, while others are relatively neutral or balanced in their personal attitudes regarding conservation and development. This indicates that, for experienced professionals, the link between personal environmental values and ethical principles in practice may not be a straight line relationship, where practitioners with the ‘greenest’ personal values have the strongest ethical principles, but is more nuanced. This finding may be considered at odds with public surveys indicating and correlation between personal values towards nature and environmental ethics, for example that of (Manning, Valliere et al., 1999), but such surveys of public attitudes to nature and associated ethical concerns have not addressed professional ethics.

This disconnect between ethical principles and professional identity perspectives is also possibly associated with the manner in which practitioners deal with tensions between personal values and professional responsibilities. All professionals need to reconcile personal values with their professional role, and environmental practitioners need to deal with the conflict between pro-environment values and client development needs.
Most seasoned practitioners, especially those in the pioneering cohort sampled for interviews, report that they had developed and adapted their own approaches to practice and ethical standards during their careers, notwithstanding that their underlying moral principles may have been derived from earlier formative influences. Accordingly, it is not surprising that professional judgement and practice wisdom varies across different disciplines, fields and sectors of environmental practice. For example, two practitioners including ‘Chris’ faced instances of blatant bribery or attempts at falsification early in their careers, and such experiences undoubtedly affect a young practitioner’s perspective on ethics. Also, the experience of maintaining a practice over several decades in one field or discipline may involve dealing with quite a different range of clients, proposals and ethical dilemmas from those involved in another field or sector.

However, each practitioner will almost certainly interpret his or her experiences within the framework of their own professional identity perspective, whether (for example) as a balance-seeker or problem-solver. As illustrated conceptually in Figure 4 below, a practitioner’s identity and role will influence their interpretation of challenges and dilemmas in environmental practice, and their decisions and the consequences thereof will contribute to their growing body of practice wisdom.

**Figure 4: Practice decisions and experience influence how identity is expressed**

![Diagram](image)

The ethical principles described by each interviewee are part of their tool-kit of experienced professional judgement and practice wisdom (Lovett & Woolard, 2016), based on decisions made and the consequences thereof. These include both ‘wins’ and ‘losses’, when their professional advice had been disregarded or overridden. The study found that some of their ethical principles have been formulated in response to recurring situations in a particular type of work, in a manner similar to Preston’s situational ethics (or ethics of response) (Preston, 2014). Such ethical principles have in effect been field-
tested, and it is for this reason that the advice of these mature practitioners is likely to be valuable for young and early career professionals.

Reassuringly, even those interviewees who had been ‘battle- scarred’ by multiple disappointments and knock-backs had an optimistic outlook, open to new ideas and ethical perspectives, from staff, from professional associations, publications and conferences, or from the community and media.

6.4.2 Agreed Integrity Principles

As discussed in Chapter 4, Sections 4.5 to 4.7, the concept of integrity and its associated principles resonate with all practitioners interviewed and participant responses are explored under three themes (professional, technical and process integrity).

The principles of professional integrity, on which there was almost universal agreement among interviewees, include sub-themes of honesty and truthfulness, impartiality, information use and transparency, agency and resolve, and ideals of mission and contribution. However, within several of these sub-themes there is considerable variation and individual interpretation of professional obligations, for example with respect to responsibilities for confidentiality and public interest disclosure. Differences are also apparent between the way in which each practitioner interprets their obligation to contribute to society and the common good (Daly, Cobb Jr et al., 1994). Such differences are expected given the various professional identity perspectives represented. There are also subtle differences in ethical obligations between the concepts and definitions of the words honesty, truthfulness and truth-telling, where a professional may be honest but not entirely truthful, or be both honest and truthful but not pro-active in truth-telling (Sutter, 2009). The seasoned practitioners interviewed generally used terms indicating they regard truth-telling as an ethical obligation, and express pride when recalling episodes when they did so.

With respect to the principle of technical integrity, the sub-themes on which there is agreement among seasoned environmental practitioners are the central importance of accuracy, rigour and quality standards, an emphasis characteristic of a science-based profession (Friedman, 2002).

There is also general agreement regarding the sub-theme of competence and scope of practice, associated with non-misrepresentation of one’s professional capabilities (a necessary part of the trust relationship), and collaboration and context. In environmental practice, clients and the community may not appreciate the complexity of interacting
factors affecting environmental decisions (Hurst, Hull et al., 2005), hence it becomes a professional responsibility to ensure that issues are addressed in appropriate context and in a multi-disciplinary manner.

The third integrity principle, that of process integrity, is a collection of those issues raised by interviewees as part of their concepts of integrity, but which do not ‘fit’ comfortably under the professional or technical headings. These include sub-themes of communication, consultation, respect and influence, balancing outcomes, fairness and sustainability, wisdom, prudence and judgement, and practice management and effectiveness. These strands of process integrity are linked to each other, and to the other integrity themes, through ethical practice. The ‘engine room’ of environmental practice, wherein decisions are made on a daily basis (Figure 4 above) regarding quality versus short-cuts and ‘best for client’ versus ‘best for environment’ outcomes. Such decisions are among the many pressures and conflicts requiring resolution through cognitive processes wherein integrity principles can be applied and demonstrated. Consistency of decisions are more likely to add to a reputation for integrity where they are based on ethical literacy and confidence in ethical conversations, and involve clear ethical decision-making processes.

Logically, the criteria by which practitioners would judge unethical conduct are the converse of the above viz. dishonesty, bias, lack of fidelity to clients or fiduciary failure, cowardice, lack of ideals or contribution, incompetence, poor communication, unfairness and lack of balance. However, the most egregious unethical conduct by environmental practitioners, and other professionals, are deliberate deception and betrayal of trust (sins of commission, rather than failures of process (sins of omission).

**6.4.3 Other Common Principles**

Most seasoned practitioners consider themselves as ethical in their professional practice, explicitly during interviews, or through their agreement to practice in accordance with the code of ethics of a professional institute. The semi-structured interview questions (Appendix A) probed the ethical principles of practitioners from three angles. What seasoned practitioners consider to be their own principles, what they would advise young and early career environmental professionals regarding practice ethics, and (conversely) what they regard as unethical practices by others. Questions on these three topics identify those principles where there is alignment of responses to all three of these topics i.e. if a practitioner places high importance on honesty, it would be expected that this would also be reflected in ‘truth-telling’ advice to young
professionals and conversely the absence of honesty as a criterion for identifying unethical practitioners.

The responses of interviewees to these questions reveal a strong alignment between espoused principles, advice and unethical criteria with respect to honesty and truthfulness (the first sub-theme in professional integrity listed in Chapter 4 Table 5), in that most interviewees regard lack of honesty in reporting as a breach of professional ethics. This principle is consistent with a science-based profession. There is also agreement, albeit with less alignment, regarding the other integrity principles viz. technical quality and ‘doing a good job’, impartiality, conflicts of interest, transparency, evidence-based opinions and the courage to stick to the facts (and one’s principles) in the face of pressure. While these are frequently cited by experienced practitioners as ethical principles for their own practice, and as ethics advice to younger professionals, there is less agreement that their converse represents unethical conduct. For example, although the seasoned practitioners generally agree that it is unethical to change one’s opinion to suit a client or to misuse their expertise through ‘green-wash’ advocacy (see Chapter 5, Section 5.5), only two of them criticise practitioners who offer expert opinions which are not based on evidence. Similar reticence to criticise is also evident with respect to the technical quality of work performed, notwithstanding that it is a widely agreed principle of professional practice. These anomalies may be because members of the environment profession, like other professions, are fairly forgiving of their colleagues (Irland, 2019); and in the absence of evidence to the contrary, ascribe worthy motives to them or attribute poor quality work to a lack of qualifications or experience, to budget or time constraints, or to organisational factors beyond their control, rather than to any ethical shortcomings. It could also be a recognition that most experienced practitioners have fallen short of their own principles at one stage or another in their careers, as discussed further in 6.6.10 below.

Another principle on which seasoned practitioners are in agreement, although it is expressed differently by various interviewees, or sometimes as a tacit assumption, is that of accountability and taking responsibility for one’s actions and those of your employees, as well as for data collected (Newton & Paulshock, 1982).

The issue of impartiality is one raised by several practitioners, but only one expressed it as an ethical principle basic to environmental practice. There appears to be a spectrum of approaches to the issue of objectivity and impartiality, or possibly two spectra. On one scale is conflict of interest versus personal ‘disinterestedness’, where an
ethical approach is to avoid, reduce, declare and manage any real or perceived conflicts of interest (including one’s own environmental values) to a level where one’s professional opinions are unbiased, and seen to be so (Dare, 2009). On the other scale, the dimensions are advocacy versus objectivity, where an ethical approach may be to adopt a strictly objective ‘truth-seeking’ mind-set and avoid advocacy for any person, project or group, in effect putting on ‘blinders’ to deal with one’s professional responsibility, remaining blind to one’s own personal values (Green, 1997).

However, the EIANZ Code of Ethics (Appendix C) makes it clear that part of that same professional responsibility includes advocacy in relation to effective environmental management and ‘best for environment’ outcomes. There is general agreement among the interviewed practitioners that ethical practice involves, not only the reduction of environmental harm, but also advocating for better environmental outcomes. It is up to each practitioner to decide how to do so in each situation, and how best to document their efforts if challenged as to whether or not they had fulfilled their ethical code obligations with respect to advocacy.

Person-to-person dynamics are important in most professional relationships with clients and staff, and persuasive capacity (and legible non-technical communication) appears to be particularly important for environmental practitioners of most professional identity perspectives. This issue has been addressed in more detail under ethical decision-making in Chapter 5 Section 5.3.3.

One of the benefits of having focused this research on seasoned practitioners is that they report having learned many such lessons over decades of practice, juggling ethical considerations with practical challenges of client demands, economic and political cycles, changing standards and addressing the concerns of younger staff. Many had also gained valuable perspectives from exposure to a wide range of client and project types, different natural and built environments, private and public sectors and collaboration with other disciplines, all of which allowed many seasoned practitioners to see issues through other peoples’ eyes. In terms of Kohlberg’s six cognitive stages whereby humans develop moral reasoning (Ponemon & Gabhart, 1994; Rest, 1994), the practice wisdom and professional judgement of experienced practitioners represent a high level of moral reasoning.

The final topic on which seasoned practitioners are generally in agreement relates to issue identification - the important first step whereby an issue is first recognised as being ethical. Studies in the psychology of morality, based on four components (moral
sensitivity, moral judgement, moral motivation and moral character) (Rest, 1994) indicate that professionals differ in relation to the ‘moral sensitivity’ component i.e. their capacity to interpret situations as ethical, and the environmental practitioners interviewed for this study show such variation. As pointed out in Chapter 5 Section 5.3.1, identifying the ethical dimension of problem situations is the link between principles and practice. Recognising a problem is the first step in knowing how to deal with it, for example, by drawing upon one’s personal or organisational code of ethics.

Most interviewees report that their first inkling of an ethical issue, a perception that ethical boundaries are being transgressed or that a particular situation could become problematic, is intuitive. The ‘gut feeling’ reported by several interviewees is partly based on experienced judgement and pattern-recognition, drawing upon previous similar situations, but appears to also rely on a personal sense of right and wrong, derived from earlier moral influences. There is evidence that ‘automatic’ intuitive responses often form the basis for immediate moral judgements, and that later more deliberate conscious reasoning tends to rationalise these initial ‘gut reactions’ (Singer, 2005, p. 338). However, Singer notes that post-factum rationalisation of intuition has logical fallacies and ethical risks. Nevertheless, ethical intuition is important for most seasoned practitioners in first alerting them to potential problems (the ‘moral sensitivity’ component), allowing for subsequent more rational analysis (the ‘moral judgement’ component), although rationalisation is also a common obstacle in all four of the moral psychology components (Rest & Narváez, 1994). In addition to the 12 common ‘rationalisation obstacles’ listed by Josephson (2002), several other excuses for ethical lapses adopted by environmental professionals are outlined in 6.6.10 below.

6.4.4 Values and Ethics in Practice

Conceptually, ethical practice principles form a third group of influences on professional practice (see Figure 1), and the component ‘values and ethics’ elements are illustrated diagrammatically in Figure 5 below. For the environmental profession, the major inputs are ethical theories (including professional and environmental ethics) and the formative influences of an individual practitioner’s life journey and career trajectory, inasmuch as they have affected personal environmental values and ethical ideologies. Ethical ideologies (such as idealism and relativism), social context (where consensus competes with competitiveness) and ‘moral intensity’ combine to impact ethical reasoning (Valentine & Bateman, 2011).
As shown in the model (Figure 5), the professional ethics element is based on the concept of professionalism in historical context and as interpreted by the codes and norms of professional associations, employer organisations and the public sector. Both professional and environmental ethics, and group norms and codes, contribute to the moral obligations, integrity and primary ethical responsibilities that together make up the ethical practice principles of environmental practitioners. The outcome of these principles, in professional environmental practice, is a framework for ethical decision-making, including issue-recognition, moral intent and judgement, assessment of options and consequences, and post-decision evaluation, as indicated in Figure 5.

**Figure 5: Relationship of values and ethics to practice (see full model in 6.6.5)**

The concepts of professionalism as an ideal, and of ‘being professional’ in all aspects of practice, are arguably as important as the various component integrity principles, especially in consultancy. The fee-for-service relationship between client and contractor carries ‘considerable potential for ethical tension’ with a risk that ‘the master paying the bills will call the tune’, and in this situation the ideal of professionalism is one of the ‘counterweights [which] can shift the balance for consultants when interests diverge’ (Zemansky, 1996, pp. 780-781). In the practitioner quotes regarding professional integrity in Chapter 4, Section 4.5, ‘Cameron’ expresses the sentiment that ‘we are professional, so we’ve got to do the right thing’.
6.4.5 Divergent Principles

Most of the interviewed practitioners recognise the ethical dimension of environmental practice, and agree on certain principles and approaches. However, they express divergent opinions and approaches regarding several issues.

One is the question of advocacy and activism. Opinions differ on whether or not it is professional and ethical to actively advocate for outcomes in accordance with one’s personal values. In general, professionals consider some advocacy appropriate to their role, for example in promoting due process, evidence-based solutions, compliance with the law and high standards of practice, and the environmental profession regards such advocacy as ethical responsibilities. The EIANZ Code of Ethics and Professional Conduct (Appendix C) goes a step further and encourages members to also advocate for improved environmental outcomes, and interviewees generally consider it their role to reduce environmental harm. However, the Code provides only limited guidance on the ‘dividing line’ between advocating for appropriate processes and better outcomes, and environmental activism based on personal values. Several practitioners interviewed consider that such advocacy is an ethical responsibility, while others consider that it represents bias and imposing of one’s personal views, in contravention of the professional principles of dispassionate advice.

The dividing line between ethically appropriate and inappropriate activism for professionals has been subject to debate in other professions, most notably in social welfare professions where practitioners are encouraged to actively promote social justice and equality, and collectively engage with issues of human rights (McAuliffe, 2014). However, professional obligations are not so clear with respect to the limits of responsible activism. A critical analysis of activism in relation to social work ethics (Mendes, 2002) assessed that the professional code of ethics commits practitioners to the principles of social justice, but lacked guidance on issue-specific ethical obligations. However, that study focused on situations where collective activism involves civil disobedience or law breaking. It did not address the broader issue where a professional has an ethical responsibility to advocate for general principles (such as social justice or biodiversity conservation) but is unsure whether or not to openly express opinions for or against specific projects or policies.

Several of the interviewed practitioners resolve this dilemma in their own practices through transparency, whereby they disclose to clients any bias, organisational memberships or relevant personal values at the outset (part of what one practitioner
calls ‘honest up-frontness’), and manage the issue as they would any other perceived conflict of interest. While this allows practitioners to sometimes come out from behind their dispassionate professional ‘screen’, there may be awkward consequences for client relationships, project teams and corporate image. Some clients may consider that a pro-conservation bias cannot be adequately managed within a project team, and such personal advocacy may be incompatible with employment by an organisation focused on servicing clients.

An additional constraint on project-specific advocacy by practitioners is that colleagues in the same professional institute are likely to have been involved in environmental assessment, planning or design of the project, hence any opinions expressed opposing particular developments may be considered an implied criticism of fellow professionals. Many professional codes of ethics, including that of EIANZ, regard bringing ‘discredit to the profession’ as an ethical breach (EIANZ, 2012). The potential for profession-wide discredit or personal offence may cause a professional institute, acting on behalf of its members, to confine its advocacy to ‘safe’ generic comments, rather than criticism of specific projects. Individual practitioners may feel less constrained by the sensitivity of colleagues when advocating for or against the environmental consequences of particular developments, providing comments do not directly criticise (without evidence) the professional performance of fellow professionals. However, the desire for collegial cooperation (Healy, 2016) and associated reluctance to openly criticise fellow-professionals, is more akin to professional etiquette than ethics (Namazi, 2018). The reticence of institutes to ‘air their dirty laundry in public’, even when there has been obvious breaches of ethical obligations, undermines community trust in professions as guardians of community interest (Adams, 2017).

The question of advocacy is part of a broader issue of professional objectivity and demonstrable impartiality. On this topic seasoned practitioners take widely different approaches, including those who consider that professional impartiality can best be demonstrated by unquestioningly accepting commissions from any client (similar to the code requirements of the Ecological Consultants Association (NSW) that its members ‘… must accept instructions regardless of their personal prejudices …[and] … must not refuse instructions except on proper professional grounds …’ (Ecological Consultants Association (NSW), 2002).
At the other end of the spectrum of opinions on this matter are environmental activists who work only on behalf of community groups opposing environmentally harmful developments. In between those extremes is the approach of several practitioners who report that they discriminate on the basis of the likely beneficial or detrimental impacts of projects, or their experience dealing with clients promoting such projects, such that they no longer accept work in certain types of industry.

A second topic on which divergent opinions are expressed by participants, is disclosure of confidential client information, where such ‘whistle-blowing’ is intended to prevent or reduce environmental harm, or intended to alert authorities to unlawful activity and offences. In all Australian States and in New Zealand, any person who is aware of breaches of environmental legislation resulting in environmental damage is required to report such to the relevant agencies, for example Queensland’s ‘Duty to Notify of Environmental Harm’ (Queensland Government, 2016). Accordingly, reporting such breaches involves no ethical decision by practitioners, as compliance with the law is a professional requirement. However, situations can and do arise where environmental practitioners consider that the public interest is best served by revealing information in their possession as part of their professional role, for example, false or misleading information submitted to agencies by clients which falls short of the legislative definition of environmental harm. In such cases, several practitioners report that they chose to leak or report information which their clients may have assumed would be confidential as part of the professional relationship. The EIANZ Code of Ethics provides little guidance on the circumstances that might justify whistle-blowing and some practitioners have wrestled with their consciences over the morality of whistle-blowing. While the Ecological Consultants Association (NSW) includes, within its Code, detailed instructions on the circumstances under which the members should refuse work, and on the appropriate procedures for dealing with ‘delinquent clients’ intending to carry out unlawful acts (Ecological Consultants Association (NSW), 2002), it maintains the usual code of ethics emphasis on client confidentiality with no whistle-blowing exemption.

The ethical codes of other related professions may provide some guidance. The Code of Ethics of the Planning Institute of Australia Planners indicates that planners may ethically disclose confidences if necessary to prevent a substantial damage to the public interest (Planning Institute of Australia, 2018). The question of what constitutes ‘substantial damage to the public interest’ is, in the PIA case, a matter for the
professional judgement of each planning practitioner. The role of professional judgement is more explicit in the Engineers Australia Code, which requires engineers to:

… demonstrate integrity – act on the basis of a well-informed conscience … [including]
(a) be discerning and do what you think is right … [and]
(c) act appropriately and in a professional manner, when you perceive something to be wrong (Engineers Australia, 2010).

For social workers in Australia, their code of ethics appropriately alerts practitioners to their dual responsibilities to both clients and the public interest, as follows:

… in exceptional circumstances, the priority of clients’ interests may be outweighed by the interests of others, or by legal requirements and conditions. In such situations clients will be made aware that their interests, or those of others, may be jeopardized (Australian Association of Social Workers, 2010).

The principles of honesty and transparency could in theory allow the above different approaches to objectivity, impartiality and whistle-blowing to be at least partly reconciled. Up-front disclosure by practitioners to their clients of any personal values and biases that could affect their objectivity, and discussion of potential conflicts, could reduce subsequent ethical dilemmas, and such discussion could include the circumstances in which practitioners are legally obliged to report significant environmental harm. However even such ‘honest up-frontness’ would not address the ethical dilemma of whistle-blowing, where obligations of client fidelity and confidentiality conflict with those of environmental harm reduction.

A third topic raised by a minority of practitioners as an important ethical principle is that of fairness, not only as applied to person-to-person interactions, but also extended to include ‘equitable’ dealings with the environment. For example, their obligation to stand up for the environment, and demand that environmental values have equal respect and weight to those of economic considerations, is based partly on a sense of fairness. Similar concepts underlie their perspective that the environment belongs equally to everyone. Two practitioners whose ethical principles are largely based on fairness trace this emphasis to family values absorbed during childhood, and they are both quick to recognise or interpret practice situations that offend their sense of equity.

Several interviewees comment on the moral culpability of professionals who unquestionably accept commissions in their narrow technical field, without reference to the broader ethical implications for the environment and the community. There is a
range of opinions about this issue, mirroring a decades-long debate about the moral responsibilities of science more generally. Is it unethical for a professional (or a scientist) to do simply what one is commissioned to do, to use professional expertise to assist a client to the best of one’s ability, without conflict of interest or imposing personal values on others, but without questioning the likely outcomes? While this research does not purport to answer this question definitively, findings suggest that professional identity perspectives are relevant. Objective-scientists and problem-solvers are likely to consider a hands-off approach as entirely consistent with professional ethics, whereas environmental advocates are likely to question the ethical implications.

6.4.6 Relationship to Institutes, Codes and External Arbiters

The discussion above regarding whistle-blowing and its relationship to professional codes of ethics is part of a more general topic, that of the influence of institutes and codes on practice (Newton, 1981), and the question of who or what is recognised as the arbiter of ethical practice. The interview questions (Appendix A) explored whether practitioners consider that their ethical practice standards were subject to scrutiny or oversight by, for example, employers, regulatory agencies, courts, professional institutes, scientific review or a competitive marketplace. The interviewees expressed an unexpectedly wide range of views on this topic, perhaps because they included many self-starters and pioneers of the environmental profession, who had developed and adapted their own ethical principles as their careers progressed.

This appears to be the case for four of the practitioners interviewed, who regard their personal ethical principles as based on and derived entirely from their own individual experiences and moral philosophy, neither reliant on nor hiding behind codes, agency requirements or legal opinions. Two went further in criticising institute codes of ethics as useless or too broad to be of any practical value, and (along with certification) counter-productive in providing a means by which unscrupulous practitioners can portray themselves as ethical. As indicated in the research diary notes, which reflected the researcher’s impressions of the tone and direction of interviews following completion, these four practitioners are among the most self-confident interviewees, with a clear sense of right and wrong, a personal framework of accountability, and had given this topic considerable thought prior to interview.

Several practitioners consider that peer review of their work, especially the scientific and technical aspects of their project outputs, represents a sufficiently high standard of quality assurance, and that the ethical codes of professional institutes are too
broad to address the detail and range of issues which arise in their particular field, echoing the concerns of IT professionals reported by Weckert and Lucas (2013). Similar attitudes are expressed by those practitioners who consider that the market is the ultimate arbiter in that consultants with a reputation for rigorous ethical work will prosper, while those with a poor reputation will struggle to find work. This preference for relying on peer review or reputation in the marketplace (or both acting together) is shared by five practitioners, one with an ‘objective scientist’ professional identity perspective and four ‘problem-solvers’.

Two of the practitioners place considerable emphasis on the role of regulatory agencies, and the rigorous process for certification of auditors, in scrutinising ethical standards, and this is likely to be associated with their roles as environmental auditors. When faced with pressure to change opinions, to advocate for a ‘dodgy’ client or non-compliant project, or to take an unethical position, many environmental practitioners rely on regulatory agencies and the courts to bolster their position. Institute codes play a similar role in establishing an industry benchmark for what is considered ethical (Gaha, 1997). Codes provide ethical practitioners with a rationale for resisting such pressures, notwithstanding that this is regarded by some as hiding behind codes and avoiding personal moral accountability.

[Regarding codes] …I don't think they work….Ethics policies in my view, particularly where they involve certification, enhance the ability of the shonky operator because the shonky operator can always find a way of getting certification. ... I think the individual is the arbiter. I'm very strong on this. (Danny)

The role of professional institutes, in particular EIANZ, is emphasised by four of the interviewed practitioners, both in relation to promoting a code of ethics for their own practice (even for those who refer to it only occasionally) and for scrutinising and judging the ethical standards of other practitioners.

It is worth noting that no practitioner refers to the law (legislation and regulations) as constituting a standard for ethical practice, and by inference none consider that oversight or review of work by lawyers is sufficient scrutiny for ensuring ethical practice, consistent with the professional ethics summary of Callahan (1988). Some interviewees are quite dismissive of the ability of the legal system to understand, let alone judge, factual evidence and best practice in highly technical fields, and argued that only specialist peers should evaluate rival claims in these fields. However, the spectre of giving evidence in courts is a different matter, and several experienced
practitioners refer to a courtroom ‘test’ of ethical conduct. When weighing the ethical pros and cons of alternative courses of action, they envisage what responses they would make if called upon to justify their choices in court.

Most of the seasoned practitioners interviewed (10 out of 14) do not regard professional associations and associated codes of ethics as important sources of their ethical principles in practice, nor do they consider their ethical standards to be judged or scrutinised by institutes such as EIANZ. Arguments against institutes and certification include the lack of specificity in codes of ethics, their misuse by unscrupulous practitioners who adopt the guise of ethical practice for marketing purposes, and a preference for relying on personal morality and reputation. However, the professional infrastructure of institutes, codes and certification represents collective practice wisdom, and is important for some practitioners, as indicated in Figure 3 above. There is a range of views regarding the value of professional institutes and codes of ethics, and their relevance to personal ethical principles, but those who dismiss collective ethics overlook the importance of accountability. A practitioner who is accountable to a professional association or certification scheme has voluntarily agreed to comply with a code of ethics, and if found to have breached this code, can lose certification and even institute membership.

6.4.7 Notable Omissions

While most of the issues raised by seasoned practitioners in interviews are addressed generally or specifically by clauses in the EIANZ Code of Ethics and Professional Conduct, and vice versa, there are several matters of non-alignment. Practices that interviewees raise as issues of ethical concern, but are not in the code, include fee undercutting and workplace behaviour, such as bullying and harassment. Ethical codes of related professions sometimes address the issue of ‘finder fees’ or referral fees, as discussed below in 6.6.6, but this practice is not mentioned by any interviewee, nor does it appear in the EIANZ Code of Ethics, so perhaps it is relatively rare in Australian and New Zealand environmental practice.

On the other hand, the EIANZ code (and other professional codes) includes obligations to contribute to environmental practice knowledge, and to distinguish between fact and opinion, but these are not mentioned in interviews as being important principles. Similarly, the obligation to seek peer review or other forms of quality assurance and to promote community and stakeholder involvement in decisions which may affect them, are in the EIANZ Code but not mentioned by interviewees.
It is also noteworthy that neither the EIANZ code, nor the ethical principles expressed by seasoned practitioners, emphasise loyalty to the profession or any professional institute. This is consistent with an underlying premise of EIANZ to enhance the environmental profession generally, not just its members. The only reference in the code to protecting the reputation of the profession is in relation to advertising and criticising colleagues, wherein it is a breach of the code to do so in a way that discredits the profession. There is, for example, no code provision whereby the actions or behaviour of an individual (apart from advertising or criticising a colleague) is considered unethical because it risks bringing the profession into disrepute.

Conversely several clauses in the EIANZ Code were not raised by interviewees as features of their own ethical principles, nor as advice they would give to juniors, nor as criteria for judging unethical behaviour by others. These include obfuscation (making something unclear by obscuring the meaning), a particular concern in the environmental profession where expert opinions can be couched in technical jargon, legalese, ‘weasel words’ and scientific uncertainty, such that the significance of findings is not clear to a lay reader. Reviews of the ethical codes of various other associations and institutes (Bullock & Panicker, 2003) do not identify any which mention obfuscation, hence it appears that the EIANZ Code is the only such code to specifically list this as an issue of professional ethics.

The EIANZ Code also requires that ethical practitioners promote community and stakeholder consultation and also an obligation to seek independent peer review and other quality assurance. These principles were discussed by only two participants, a reflection that these practices are not widespread among environmental consultants (except for internal non-independent peer review) and likely to be implemented only where clients require them or agree to the additional cost.

As discussed above, it is noteworthy that none of the 14 interviewed practitioners regard ‘the law’ as sufficient (on its own) as a benchmark of ethical practice. There are also several cornerstones of commercial, organisational and departmental operations that are noticeably absent from the ethical discourse of seasoned practitioners. For example, although the principle of technical integrity espoused by interviewees includes rigour, accuracy and quality, the ethic of hard work *per se* is not mentioned as a virtue or ethical principle, not is its converse (laziness) described by any as a criterion for judging others as unethical. Many, if not all, practitioners may consider hard work as a characteristic of being a professional, and part of providing service to clients, but
perhaps do not associate this virtue with ethics. It may be conceivable that a practitioner could be ethical but lazy, or diligent but unethical, because the two attributes are not mutually exclusive.

However, all practitioners discuss their work and reputation in terms which indicate they are each proud of doing a good job, to the best of their abilities, and consider this a defining characteristic of being a professional. This aspect of professionalism is consistent with ‘technical rationality’ as the dominant positivist epistemology of practice, whereby professionals apply theory and skills to solve problems, although the problems per se are generally defined by others (Schön, 1995).

For environmental practitioners the concept of doing a good professional job includes an ‘environmental guardian’ role, i.e. applying one’s expertise to reduce environmental harm. This is an extension of the one of the core ethical principles of many professions, that of non-maleficence (avoidance of harm). However, both the guardian role and the safeguarded values may be expressed to varying degrees by practitioners with different professional identity perspectives, and depending on the situation. All those interviewed regard ‘doing a good job’, whether it be solving a problem, reducing harm or helping clients secure approvals, as a central part of their responsibility as professionals – they all consider that their role is ‘making a difference’. However they also refer to the difficulties of doing so within the constraints of pressures of time and budget.

As mentioned in Chapter 4 (Section 4.8.1), a particularly concerning omission in the ethical obligations discussed by participants is that of service and fidelity to clients, although this oversight could have been due to the nature of the research questions, the tone of the interviews, or the conceptualising of fidelity as a contractual rather than ethical obligation. However it is also possible that the adversarial nature of environmental practice, and the implied challenge of environmental ethics, causes practitioners to regard clients as a source of ethical problems rather than perceiving both client service and environmental harm reduction as complementary professional obligations.

It is also noticeable that no interviewee refers to achieving a profit, cutting costs or creating shareholder value as central to their professional obligations or ethical principles. On the contrary, several refer to focus on profitability or ‘counting the dollars’ as the antithesis of professional service and ethical practice. While considerations of profitability apply mainly to the private sector, the equivalent
‘currency’ in government agencies may be favours and influence. An officer who consistently provides advice conforming to current policy, in effect telling Ministers what they want to hear, may be promoted but is not acting in accordance with the highest principles of either professionalism or the Westminster system.

Other widely promoted corporate values, such as team cohesion, servicing client needs and ‘best for project’ collaboration, may be adopted as principles of good practice by both private and public sector organisations, and in annual reports and marketing material, but are not mentioned as professional obligations or ethical principles by interviewees. Also, the oft-touted virtue of loyalty (to clients or teams) is not mentioned by any of the interviewed practitioners. Conversely the desire to please clients and superiors by uncritically adopting team positions, and advocating for proposals with dubious environmental benefits, are regarded as unethical practices.

The virtue of consistency per se is rarely mentioned by the interviewed practitioners as a principle of ethical practice. This is perhaps surprising, because most regard acting contrary to one’s personal principles as unethical, and because ethical mentoring of early career professionals might be undermined by inconsistencies. There is no fundamental moral requirement for personal ethical principles to be consistent with each other, and several practitioners who consider themselves to have high moral standards reveal some inconsistencies in their ethical principles.

It is noteworthy that several well-known ‘mantras’ of professional practice are not mentioned as ethical principles by any of the practitioners interviewed. One is that servicing clients and looking after their needs are the highest priorities (analogous to ‘the customer is always right’) and another is a team commitment to achieving ‘best for project’ outcomes (analogous to ‘the show must go on’). For example, the marketing material of one consultancy which employs environmental professionals in Australia and New Zealand promotes the message:

Our priority is to understand our clients’ business needs and provide real solutions to real problems, whatever and wherever they may be. We combine our diverse capabilities to help our clients mitigate risk, manage and reduce impacts, and maximise opportunities related to health and safety, sustainability, climate change and the environment (wsp, 2020)

These tropes may be drivers for corporate decisions and for marketing in a competitive marketplace, but are disconnected from and do not appear to influence what seasoned practitioners consider to be ethical practice. As such, these messages may be consistent with the construct of professionals as technically competent and dedicated to
helping clients, but do not encompass other aspects of professional ethics and obligations.

The various clauses in the codes of ethics of different professions generally address issues raised by their members, especially if such codes are in their second or subsequent revisions, and are likely to reflect the ethical challenges of that profession. Several issues of environmental practice which are addressed by the ethical codes of related professions, but which were not raised by any of the practitioners interviewed for this study, include collusive tendering, ‘third line forcing’ (whereby consultants, as a condition of engagement, require clients to engage a third party), the duty to inform and explain to clients all relevant science, a duty to immediately correct any misleading or incorrect statement, a prohibition on publishing material without client consent, and on submitting applications on a client’s behalf, all of which are ‘rules’ of the ECA (Ecological Consultants Association (NSW), 2002). It is assumed that these practices are either not commonly encountered by the practitioners interviewed, or rarely raise significant ethical issues for them. However, one practice which ECA’s code regards as unethical is that of ‘high fee deterrence’, whereby a practitioner deliberately quotes a higher fee in order to discourage a client from offering a commission, whether because of current workload, personal values, perceived likely ethical problems or undeclared conflicts of interest. This practice is not discouraged by the EIANZ Code of Ethics, and was mentioned by ‘Chris’ as strategy to avoid a potential ethical problem.

Despite broad agreement among the interviewed practitioners on what is and is not ethical practice, differences of interpretation emerge when they deal with specific situations. Analysis of interview transcripts regarding case studies, together with post-interview reflections in the reflective researcher diary, reveals that most seasoned practitioners had done something in their career, or expressed an attitude while discussing ethical case studies, which one or more of the other interviewees would probably find unethical; although they themselves regard it as consistent with their personal moral code, or justify it as being realistic in a competitive marketplace or a politicised public service. The issue of rationalisation is addressed in 6.7.10 further below.
6.5 The Role of Ethical Theories

6.5.1 Relationship to Professional Ethics

As discussed in Chapter 2, belonging to a profession implies a pledge of competent trustworthy service, not only to specific clients, but also to the broader community. The associated ethical obligations (and the trust and autonomy enjoyed by professionals) are derived from these implied promises, and the expectations of clients, the community and the practitioners themselves that professionals will maintain those standards.

Notwithstanding the emphasis on ethics in the relationship of trust between professionals, clients and the community, professional ethics are not ‘special’ ethics, separate from the principles to which all humans normally aspire (Koehn, 1994). Professional ethics do not allow a practitioner to do something that ‘normal’ ethics would not allow, although society-designated roles for some professions may impose particular obligations that would normally be questionable, for example the obligation for barristers to defend persons who appear to be guilty. Conversely, professional ethics represent a ‘heightened’ code of practice in the sense that some things that are normally unethical but nonetheless widely practiced (e.g. exaggeration or ‘white lies’) are unethical to professionals (Koehn, 1994). Similarly, the environment profession does not expect that practitioners be excused from any ‘normal’ standards of ethical behaviour, although animal rights activists may argue that environmental management involving the culling or poisoning of pest animals contravenes community standards.

Koehn also addresses the contentious issue of whether professionals can or should incorporate their own personal values within their ethical obligations to clients – according to her, professionals:

… can be held accountable by themselves and others for discharging their responsibilities because their pledge enables them to oppose client attempts to shirk responsibility or to ask too much of the professional. Under this arrangement, the professional and client are equal as agents … it explodes the myth of the professional as a passionless, self-denying, disinterested creature. Ethical or true professionals are passionately concerned with and satisfied by the upholding of their public professions … (Koehn, 1994, p. 143).

The theory and practice of professional ethics have been well-researched and analysed for many decades. Notwithstanding debate among ethicists regarding the basis of professional ethics, and despite modern challenges to the concept of professionalism, all professions need an ethical code. Not only do codes of ethics partly define
professions, but they also help group cohesion by expressing shared values (part of the ‘identity-work’ of professionals), they establish the ‘rules of the game’ in a competitive professional market, and most importantly these ethical commitments maintain trust with clients and the community. This mixture of ‘drivers’ for ethical codes is reflected in the codes of EIANZ and other professional associations representing environmental scientists, and as expressed by practitioners during interviews for this research. Although there is general agreement between practitioners on some ethical principles (most notably those characteristic of a science-based profession), there is variation between practitioners, several notable omissions, and discrepancies between the EIANZ codes of ethics and the principles adopted by seasoned environmental practitioners.

6.5.2 Relationship to Environmental Ethics

For the environment profession, an additional layer of ethical consideration is that of nature and its moral considerability, as discussed in Chapter 2, Section 2.2, _viz._ whether or not moral status is anthropocentric, whether such consideration should also be extended to other forms of life and the natural world generally (a non-anthropocentric approach), or whether non-human life forms have moral standing only inasmuch as they are or might be useful to humans (an instrumental value approach) (Angeloni, 2019). Over the past 50 years, this broadening of moral consideration to include all life forms has both resulted in and influenced community awareness of environmental concerns, and underlies the philosophy of environmental ethics, defined as the moral relationship of humans to the environment and ecosystems.

Environmental ethics, as a cohesive philosophy or as a loosely associated group of ideas, has influenced community attitudes as well as the professional ethics of the environment profession. For example the EIANZ Code of Ethics (Appendix C) includes, under the heading of ‘Promote Environmental Principles’, three clauses which require members and certified practitioners to advocate for the integrity of nature and the protection of environmental values and to practice in accordance with environmental stewardship (EIANZ, 2012). Various authors have considered that environmental ethics has distinct elements of communitarianism (Callahan, 2003), as discussed in Chapter 2 (Section 2.8), in that actions are considered good or bad according to whether or not they reflected a harmonious relationship between humans and the environment. However, for the purposes of this research, environmental ethics is regarded as more related to consequentialism than to virtue ethics.
The moral imperative of environmental stewardship (Minteer & Collins, 2008) is incorporated in the ethical principles of the interviewed practitioners to varying degrees. Several (especially those with an ‘environmental advocate’ perspective) consider that their expertise and understanding of environmental problems require them to be an environmental guardian and to advocate for conservation measures; whereas others regard their stewardship responsibilities are discharged by assisting clients obtain development approvals, while gaining incremental improvements in environmental outcomes or at least reducing of environmental harm which might have otherwise occurred, in the absence of their expert input. However, this cohort of practitioner pioneers had mostly established their practices during the period of increasing community concern for and understanding of the natural environment, and subsequent generations of environmental practitioners might express more consistent attitudes regarding the profession’s stewardship role.

The question likely to arise for environmental professionals, certainly for those with strong environmental values, is what to ‘do’ with one’s personal moral principles – how does one apply environmental ethics in professional practice? There are few if any avenues for an environmental practitioner to express personal values through practice, in a way that is compatible with professional ethics, because the ethical basis of professional relationships is primarily concerned with how people relate to and trust each other, based on the expertise of one party. The personal principles of individual practitioners regarding environmental ethics are not derived from nor linked to organisational or public sector codes, nor professional institute codes. No degree of technical expertise, practice wisdom or professional ethics obliges a practitioner to recognise that rare snails are deserving of moral consideration, or to advise that economic development and employment opportunities ‘should’ be curtailed in order to maintain a wildlife movement corridor, unless it is protected by legislation. These moral considerations have no language in which they can be expressed when conversations and decisions focus just on scientific, commercial, legal and political factors. Apart from an obligation in the EIANZ to ‘advocate for’ environmental protection, there is no demonstrable ethical requirement to act or advise in such a way as to avoid environmental harm or to enhance the environment, and even that mild obligation is missing from the Ecological Consultants of NSW Code. The advocacy obligation is considered ‘mild’, because it could take the form of merely suggesting that ‘doing the right thing’ environmentally could possibly provide one’s client with a competitive or
award-winning green edge in a competitive marketplace i.e. re-framing an ethical principle as a commercial ‘win-win’ proposition. However, the risk associated with that strategy is that any market advantage is lost if and when all competitors similarly ‘do the right thing’, as ethical practitioners might hope.

A growing proportion of environmental practitioners are likely to enter the profession with strong ideals regarding global sustainability, impact minimisation and ecological enhancement, and require guidance on integrating these values with professional ethics. While this is partly an issue to be addressed in education and mentoring, (as discussed further in Chapter 7 Section 7.6) it is also up to the environmental profession (through its institutes) to assist practitioners with ethical decision-making guidelines and continuing professional development in ethics, which recognise an appropriate role for personal values and environmental ethics. If the issue is not addressed, an increasing number of early career professionals may find themselves disillusioned, or caught unprepared for ethical dilemmas where their personal values conflict with professional obligations. An analogy may be drawn with practitioners in health-related professions who have a religious worldview and need to constantly reconcile their beliefs and morals with professional obligations.

6.5.3 Relationship to Applied and Practical Ethics

In considering the various philosophical approaches to ethics as reviewed in Chapter 2, the ethical principles adopted by professional environmental practitioners are examples of applied (normative) ethics (Cohen, 2004) i.e. determining what is the ‘right’ action in environmental practice generally, as agreed by members of the profession (a communitarian approach to ethics), and also in response to particular situations (situation ethics, role ethics and an ethic of response). However, within the broad heading of applied ethics, the various integrity principles listed in Chapter 4 Table 5 represent broad categories with overlapping elements of deontological ethics (imperatives, duty and procedures), teleological or consequential ethics (taking into consideration the outcomes of any action, including utilitarianism) and virtue theory (emphasising character and intentions). Several authors e.g. Baggini and Fosl (2007) have noted that professional ethics generally comprises elements from various ethical theories.

Drawing on considerations of role ethics and ethic of response, a relationship is likely between the ethical principles of practitioners and their professional identity
perspectives, although the relationship is likely to be confounded by their professional roles. For example, a practitioner with an ‘objective-scientist’ identity perspective may be expected to adhere primarily to ethical principles associated with truthfulness, objectivity and technical integrity, but these may be expressed to their fullest extent only when practicing in the role of a technical expert. If such a practitioner is required to work with a range of stakeholders to find a mutually acceptable solution which balances the needs of all (a role more suited to that of a ‘balance-seeker’), he or she would need to also invoke a number of ‘process integrity’ principles associated with communication and respect.

In general, those practitioners adopting identity perspectives of either an objective-scientist or a problem-solver emphasise ethical principles in accordance with a deontological approach (based largely on rules, procedures, duties and compliance), with less involvement of professional judgment, reflection and choice.

Utilitarianism and situation ethics, on the other hand, are more relevant to the ethical principles espoused by those with balance-seeker or practice-manager identity perspectives, and also to some of the principles of problem-solvers, in that the focus is on the consequences of actions and decisions. However, utilitarian approaches, in the context of professional practice, can range from highly ethical (actions are judged as to whether or not they have good environmental outcomes) through to self-interested (actions are judged as to their consequential benefits to one’s business or career). Many of the interviewed practitioners adopt reputational consequences as a balanced approach between these two extremes, whereby actions may be judged good or bad according to whether they enhance or diminish one’s professional reputation.

This and many other ethical principles expressed by experienced practitioners have been formulated, tested and adapted in daily practice as they deal with problems, clients and competitors (see Figure 4 above). In this regard, they are encompassed by the term ‘Ethic of Response’ (Preston, 2014) which includes responsiveness and responsibility as well as roles, duties and virtue theory.

6.5.4 Relationship to Virtue Ethics and Role Morality

Virtue theory (D’Olimpio, 2014) also plays a role in the ethical principles of environmental practitioners, most noticeably with respect to the professional integrity sub-theme of agency and resolve (persistence, courage and consistency). Many of the interviewed practitioners refer to the importance of ‘holding the line’ with respect to
safeguarding environmental values and reducing environmental harm, notwithstanding that they each may draw their lines differently. It is a widely regarded as an attribute of ethical practice that a practitioner will, at some point, have the personal resolve and persistence to stand up to a client, other team members or a regulatory agency, to defend a position based on ethical principles, and to withstand pressure to compromise. These qualities are in essence those derived from virtue ethics, in particular the virtue of courage (Sekerka, Bagozzi et al., 2009).

Also based in virtue ethics is reflective self-questioning of the moral implications of decisions, seeking to reconcile actions with one’s personal sense of right and wrong. This involves considering the type of person one wishes to be and to be perceived as, for example: ‘if I make this decision, and continue making similar decisions, what kind of person am I becoming? and what sort of example am I setting?’ This self-reflection is more than ensuring a reputation for ethical practice, because it involves doing the right thing even when no one is watching, and when it might work to your disadvantage (Dungy & Whitaker, 2011).

However, satisfying one’s personal conscience may be inconsistent with role morality, whereby the duties and obligations of professionals recognise the responsibilities associated with their expertise and the trust placed in their impartial advice (Preston, 2014). As discussed in detailed in Chapter 2, Preston’s proposed ‘ethics of response’ incorporates elements of consequentialism, virtue ethics, feminist care ethic and environmental ethics (bio-centrism), in that professionals have particular agency in responding to others, to life, to the future, to the parts and to the whole.

6.5.5 Why be Ethical?

Moral philosophy and ethical theory provide a range of reasons why humans generally aspire to be ethical, as outlined previously, but these explanations do not answer the fundamental challenge of amorality (Mathias, 2018): why should any person act ethically and responsibly when it involves some effort or disbenefit but makes no difference to the outcome, and especially if others appear to gain an advantage by acting unethically? For commercial entities, perennial arguments against the relevance of ethics generally focus on profit-making obligations to shareholders (Martin, 1998), and for this reason the focus of professional ethics has always been on the moral obligations of individuals, not firms. At a broad level, the moral arguments for acting ethically are associated with virtue ethics (what sort of person do I wish to be?), Kantian ethics (what sort of society do I wish to live in?) and environmental ethics (what sort of world do I
wish future generations to inhabit?). At a more specific level, considering the moral behaviour of professionals, part of the answer to this question is that each practitioner benefits from a general level of trust which clients and the community place in the professions. Accordingly, each practitioner should act ethically and contribute to this common pool of trust. However, the word ‘should’ in that claim pre-supposes adherence to some normative system of ethics, without which an individual could choose to take advantage of a common asset of trust, without contributing (the so-called ‘free rider’ problem – (Battaglini, Nunnari, & Palfrey, 2012).

The concept of a ‘level playing field’ is also relevant, whereby all practitioners who compete with each other (for consultancy fees, promotion or influence) benefit from rules which ensure fair and open competition. Unethical conduct on the part of one or more practitioners undermines fair competition, and while it might benefit an individual practitioner temporarily, eventually the whole profession could be brought into disrepute and all practitioners suffer a loss of credibility.

However, the question ‘why be ethical?’ can largely be avoided for the purposes of this research, because it is basically a circular argument with respect to professionals, and especially to the cohort of seasoned practitioners who agreed to be interviewed regarding their ethical principles. Individuals who define themselves as professional have *ipso facto* agreed to practice in an ethical manner, and even those who transgress ethical principles seek moral justifications to rationalise their behaviour.

### 6.6 Ethical Issues Theme

#### 6.6.1 Reconciling Personal Environmental Values

An environmental ethicist referred, at a 2004 meeting of the National Association of Environmental Professionals (USA), to:

… the ethical dilemmas every environmentalist has to face, sooner or later. The ‘rubber hits the road’, so to speak, when conflicts emerge between economic efficiency in the short run and environmental quality in the long run … Such conflicts invite rationalization by those who profit from environmentally dangerous actions … (Wogaman, 2004, p. 8).

The tensions between personal values and the professional responsibilities of environmental practitioners were discussed in Chapter 5, Section 5.2.1 and are broadly similar to those reported by Appleton (2012). Through semi-structured interviews with 19 academic environmental scientists from four public universities in south-western
USA, Appleton’s sociological study investigated the relationship between environmental science and policy advocacy, and the role of personal values in their decisions. Appleton reported tension and in some cases confusion among academic scientists regarding their contribution to policy and their commitment to scientific objectivity, representing a conflict between their support for environmentalist values and concerns about their academic and research credibility.

Several authors have examined the ethical obligations of forestry professionals and their ‘dual responsibilities’ to both society (including clients and local communities) and sustainable management of the forest ecosystem and its species. More than most professions, forestry has seen its ethical principles evolve from utilitarian exploitation of public resources, to concepts of long term stewardship and ecosystem integrity, influenced by environmental ethics (Angeloni, 2019).

Such conflicts are not restricted to the environment, forestry and natural resource professions. Several studies have examined the degree of alignment and conflict between the personal morals and values of practitioners in various professions and the ethical codes of their professional associations, for example in the accounting profession in the USA (Beets, 1991). Several studies, cited by English (2008) indicate that the commitment of engineers to their profession is higher in organisations with a ‘climate of ethics’. Of perhaps greater relevance to this study is the profession of social work, which experiences considerable organisational-professional conflict because it is a value-driven occupation and practitioners tend to internalise the values and moral principles of the profession (McAuliffe, 2007). Similarly, nurses experience considerable ‘moral distress’ (defined as being institutionally constrained from doing what one knows is right), as reported in Queensland by Burston and Tuckett (2013). However, conflict between the ethical values of (or lack thereof) of employing organisations and those of their individual practitioners is a separate issue from that facing many environmental practitioners viz. the ethical dilemma, often internalised, of being an objective scientist serving the truth without reference to (or imposing) one’s personal values, while at the same time acting professionally in the best interests of clients, and also using one’s expertise to reduce environmental harm.

When addressing environmental problems, most practitioners recognise that personal environmental values are linked to ethical principles, and both are taken into account when weighing up options and alternative solutions. Several of the interviewed practitioners resolve such tensions with respect to specific projects, clients or ethical
dilemmas, by reframing or ‘re-contextualising’ problems. An example of reframing might be to regard a client’s proposal to clear habitat for a residential project, not as a clash between profit and nature, but as part of an overall balance between biodiversity and affordable housing, agreed to by our society through legislation and planning schemes, in order to better achieve sustainable development. The question of whether or not the exercise of ‘re-framing’ an issue to fit within one’s ethical principles is per se morally valid, is one worth considering but may be regarded as a normal component of professional judgement. Careful consideration of whether or not one ethical principle out-ranks and takes priority over another is part of the self-reflection and ethical conversations associated with moral reasoning, but without rigorous examination of motives, can slide into self-serving rationalisation. Also, pressuring or manipulating another person to re-frame their ethical concerns, by changing his or her moral principles, may in some circumstances be an unethical abuse of an employment, consultant or facilitator relationship (Oschaudleus, 2012).

6.6.2 Reputation, Integrity and Resolve

As noted by many authors, reputation and integrity are linked but not synonymous as reputation is the public perception of one’s reputation, and may be a genuine reflection or a carefully-curated image. Professional reputation (both personal and corporate) is multi-faceted, not just ethical, as it also includes technical competence, reliability and client service. As discussed in Chapter 5, Section 5.1.3, the ethical component of reputation is important to all professionals, whose roles and identity rely largely on trust. The risk to reputation of behaving unethically, and being perceived as unethical, is in many cases an incentive for ‘doing the right thing’, and is also a source of team pride and marketing ‘angle’.

However, this can work both ways, in that ethical practitioners can get a reputation amongst clients and employers for ‘being difficult’, whereas unethical practitioners can gain a market advantage by being known to advocate vigorously for the best interests of their clients, and to prepare their expert opinions accordingly. Similarly, a reputation for providing ‘value for money’ may be compatible with ethical practice (e.g. where it is associated with providing cost-effective ‘fit for purpose’ services) or may indicate unethical behaviour such as methodological shortcuts and misrepresentation. The reputation enjoyed by practitioners amongst their peers (eg.
through professional associations and certification schemes) may be quite different to the opinions of regulators, employers and clients in the consultancy marketplace.

6.6.3 Professional Contribution

Although evidence of ethical professional practice is mainly revealed in a practitioner’s reputation and the trust of clients and agencies, there are other manifestations of ethical principles at work, as indicated diagrammatically in Figure 6 below. One is through the professional obligations for mentoring, teaching and advising, not only in relation to technical expertise (associated with a practitioner’s competence and capabilities) but also with respect to practice wisdom and ethical principles. Another ethical obligation of environmental practitioners is to make a professional contribution to society (through benefitting the environment or reducing environmental harm) and to the profession. Reputation, professional contributions and mentoring are important external manifestations of ethical practice. Figure 6 highlights some of the ‘internal’ outcomes, where firms, agencies and sole practitioners demonstrate ethical practice through professional judgement and practice wisdom, prudent assessment of risks and opportunities, and the myriad of daily practice decisions dealing with clients and problems in a competitive marketplace.

**Figure 6: Professional Contributions, in relation to Environmental Practice (see model in 6.6.5)**
6.6.4 From Compliance to Best Practice

While it is accepted by seasoned practitioners, at least tacitly, that ethical practice is more than simply obeying the law, and that decisions as to whether or not to comply with legal requirements are not ethical decisions, professional advice regarding compliance raises some ethical nuances. In the field of environmental practice, clients generally rely on professional advice to interpret the complexity of regulations and ensure they meet legislative requirements and several Court judgements have attributed ‘failure to appropriately advise’ responsibility to an environmental professional e.g. Clayton Utz (2010). This reliance by clients on expert advice is similar for many other professional disciplines. Professionals are duty-bound, within their area of environmental expertise, to advise clients of the laws and regulations which apply in various situations; but this responsibility is more a matter of competent practice than ethics per se (except inasmuch as a client is entitled to expect a high level of competence). A practitioner is entitled to assume that clients, having been advised of their legal obligations, will obey the law. It is not the role of an environmental practitioner to advise a client to do so, nor is it considered unethical if a practitioner has not specifically advised a client to comply with the law. That is the role of regulators, compliance officers and the courts.

In environmental assessments, the service standards required of practitioners (such as the methods, investigative rigour and degree of detail) may be the basis for regulatory requirements, or such standards may be recommended (but not legislated) as government guidelines. Alternatively, technical standards may be ‘best practice’ benchmarks established by international standards, by the profession or by discipline experts. Where these guidelines are non-mandatory, there is considerable scope for clients or agencies to adopt a lesser standard, irrespective of recommendations from an ethical environmental practitioner; and there is also scope for other practitioners to undertake work at a lower cost, or in a compressed time frame, which does not meet best-practice standards.

Ethical environmental practice includes going beyond compliance, and applying one’s professional expertise to seek sustainable solutions that minimise environmental harm and optimise environmental benefits. In addition, the expertise and experience of professionals puts them in a privileged position to advise clients, agencies and the community not only on factual matters and what will ‘work’ best under different conditions, but also on what is most appropriate and ethical. This involves managing
client expectations and taking them on a shared ‘journey’ of understanding regarding site values, project options for best-practice sustainability, and regulatory hurdles, as well as environmental constraints and opportunities.

Most seasoned practitioners interviewed for this research report that their role and responsibility, as ethical professionals, is to persuade and influence clients to make changes, in a manner analogous to a doctor advising patients regarding healthy lifestyle choices. The project changes recommended by an expert advisor may be to avoid, reduce, mitigate and offset environmental impacts, in effect ‘shifting’ project outcomes further along a sustainability gradient, as discussed in 6.6.9 below and illustrated as an ethical acceptability spectrum in Figure 8. Project amendment recommendations of this nature are not uncommon when environmental professionals are involved in multi-disciplinary environmental impact assessments (EIA), and especially if they are project-managing EIA studies. A common scenario in such studies is that a range of specialist experts provide technical assessments, each with their discipline-specific evaluation of environmental impact risks, and the project is iteratively amended to avoid, reduce or mitigate such impacts, and reduce the risk that a project may not be approved.

Notwithstanding the considerable efforts often undertaken to amend development projects to ‘soften’ or offset their impacts, some residual impacts cannot be avoided or further reduced (Noble, 2015). These environmental costs must be weighed against project benefits, bringing in best-available evidence as well as expert opinions, modelling and predictions, in order to make carefully considered recommendations to regulatory agencies. Multi-disciplinary inputs are required into sustainable development, projections of future performance, adaptive management, likely compliance with approval conditions and the acceptability of impacts, taking into account complex environmental interactions and the precautionary principle (Low, 2002). The assessment of overall project impacts and their acceptability requires professional judgement and practice wisdom, hence is inherently subjective. This is not an exact science and an alternative multidisciplinary team, led by a similarly experienced EIA project manager, may well recommend a different balance between development and environmental values. It is not surprising, given the number of decisions involved during the course of environmental assessments, and the number of different technical disciplines involved (each with their own ethical codes), that expert opinions and ethical principles overlap. In the team dynamics of balancing project feasibility, environmental protection, ecologically sustainable development (ESD) and
legal compliance, there are usually winners and losers and one or more of the environmental experts may find his or her ‘best practice’ recommendations overridden, with pressure to rewrite reports for consistency with a revised project description. A problem would arise if the environmental expert feels uncomfortable making those changes, and would become an ethical issue if doing so would compromise the expert’s ethical standards. In most cases, environmental practitioners can avoid potential ethical dilemmas associated with ESD trade-offs by honest and transparent reporting on the environmental values likely to be lost, and the legal requirements which will be satisfied, without specifically supporting or advocating for any ‘mere compliance’ solutions adopted for the project.

6.6.5 A Model for Professional Environmental Practice

Various elements come together in a professional environmental practice where day-to-day activities take place and decisions are made by practitioners. These elements may be portrayed conceptually as four overlapping influences, each resulting in a ‘building block’ of professional practice as follows:

- Qualifications and skills (resulting in competence and capabilities);
- Values and ethics (which form the basis for ethical practice principles);
- Influences and identity (which contribute to professional identity perspective);
- External manifestation (as professional reputation and contributions).

While these four influences have been portrayed as separate diagrams in Figures 1 to 6 above, they are brought together as an integrated model for environmental practice in Figure 7, which shows how ethical decision-making relates to other aspects of practice.
Figure 7: Integrated Model of Ethical Environmental Practice

**Values & Ethics**

- **Ethical Theories**
  - Professional Ethics
  - Environmental Ethics
  - Personal Environmental Values & Moral Intensity

**INPUTS**

- Life Journey & Career Trajectory
- Professional & Assigned Roles
- Duty & Role - doing a good job
- Client satisfaction
- Better environmental outcomes
- Self motivation/team satisfaction

**ETHICAL PRACTICE PRINCIPLES**

- Ethical decision-making
  - Identifying Ethical Issues
  - Moral intent & judgement
  - Assessing options/consequences
  - Ethical decisions & evaluation

**PROFESSIONAL IDENTITY PERSPECTIVE**

- **Professional Ethics**
- **Environmental Ethics**
- **Moral Obligations, Integrity & Primary Ethical Responsibilities**

**# JOB-RELATED OUTCOMES**

- Professional judgement/practice wisdom
- Profits, Influence and Opportunities
- Daily practice decisions: dealing with clients, staff, competitors, risks, regulators

**# PROFESSIONAL ENVIRONMENTAL PRACTICE**

- Educational Qualifications
  - Work experience, CPD & on-the-job training
  - Practice skills (communication, management)
  - Research and current best practice

**COMPETENCE & CAPABILITIES**

- Educational Qualifications
- Work experience, CPD & on-the-job training
- Practice skills (communication, management)
- Research and current best practice

**# PRACTICE-RELATED OUTCOMES**

- Professional judgement/practice wisdom
- Profits, Influence and Opportunities
- Daily practice decisions: dealing with clients, staff, competitors, risks, regulators

**PROFESSIONAL CONTRIBUTION**

- Professional Reputation
- Marketing, image & Promotion
- Enhancing the profession
- Benefiting the environment
- Mentoring, teaching, advising

**CONTRIBUTION OUTCOMES**

- Professional Reputation
- Enhancing the profession
- Benefiting the environment
- Mentoring, teaching, advising

**REPUTATION OUTCOMES**

- Professional Reputation
- Marketing, image & Promotion

**EXTERNAL MANIFESTATION**

- Historical Context: Concepts of Professionalism
- Life Journey & Career Trajectory
  - Professional & Assigned Roles
  - Identity Theory

**INFLUENCES & IDENTITY**

- Group norms & Codes
  - Professional, Organisational and Public Sector
- Qualifications & Skills
  - Historical Context: Concepts of Professionalism
- Life Journey & Career Trajectory
  - Professional & Assigned Roles
  - Identity Theory

**COMPETENCE & CAPABILITIES**

- Educational Qualifications
- Work experience, CPD & on-the-job training
- Practice skills (communication, management)
- Research and current best practice

**EXTERNAL MANIFESTATION**

- Educational Qualifications
- Work experience, CPD & on-the-job training
- Practice skills (communication, management)
- Research and current best practice
As outlined in this model (and previous component Figures), each of these building blocks has inputs and outcomes, and two of them (ethics and identity) are based in substantial bodies of relevant theory and research.

The relevance of a single model of this nature is that it demonstrates the various influences on professional environmental practice, and how they affect each other. For example, professional reputation arises both from skills (competence and capabilities) and ethical practice, but is also influenced by professional identity perspective. While values and ethics are an important building block, they are not the only influence on practice, and interact with the other groups of factors to affect the judgement, contribution, strategic direction and daily decisions of each practitioner. Similarly, ethical decision-making is not the only (nor indeed the prime) outcome of environmental practice. The model also illustrates that professional practice has several broad categories of outcomes: practice-related (including quality outputs, client and employer satisfaction, profits, influence and opportunities), external (professional contributions and reputation) and ethical decisions, each of which influences the others.

6.6.6 Unethical Professional Conduct

Most of the private sector practitioners interviewed stated or implied that they considered themselves to be ethical, an unsurprising opinion given that they had agreed to be interviewed about their ethical principles. They also consider that their fellow professionals are generally ethical, and that failures to achieve high standards are likely to be caused by inexperience, lack of knowledge or appropriate skills (offering advice outside their area of expertise) or being misled by wily clients. In general, there is an inclination to think well of one’s professional colleagues, rather than accuse them of deliberate unethical conduct. This confirms Irland’s assessment that:

The assumption is that professionals don’t go to the office in the morning looking for something to do that is unethical. But, for lack of awareness and foresight, they may slide into a situation unknowingly, and commit an unethical act before they realize they have done something wrong … (Irland, 2019, p. 19).

However, the public sector practitioners who were interviewed do not, in general, share these charitable opinions, possibly because their roles require them to review development applications and impact statements, where consultants’ reports and opinions may suit their clients’ interests, or where skilled professionals may have
allowed their expertise or opinions to be misrepresented. Not surprisingly, ‘Lennon’
who identifies as an environmental advocate (and who had previously been both a
senior Council officer and a consultant) is also sceptical of environmental consultants
who ‘bend’ the truth to promote the interests of their clients’ projects.

Notwithstanding the generally charitable opinions of consultants towards their
colleagues, the practitioners interviewed are critical of other consultants regarding
marketplace competition, adopting and advocating the positions of clients (lack of independence) and covering up or misrepresenting environmental harm.

With respect to marketplace behaviour, the concept of a ‘level playing field’ is
important to environmental consultants, as it is in other areas of business, and
interviewees described several unfair competitive practices as unethical. These include
undercutting fees (‘buying’ commissions), reducing costs by using inexperienced
juniors, or by ‘cutting corners’ with respect to methodology. Breaches of these ‘rules of
the game’ are commonly cited in interviews as unacceptable professional conduct,
although no practitioner implied a direct correlation between high ethical standards and
high fees. Competition laws in Australia and New Zealand no longer allow professions
to set ‘standard’ or ‘recommended’ fees, although annual fee surveys and publishing fee
scales was formerly a cornerstone of professional institute services several decades ago.
However, two of the seasoned practitioners also concede that fee reduction through
cutting corners is widespread, and hinted that they themselves are prepared to take this
path, especially in times of economic downturn. At such times, consultants face ethical
conflicts between the maintenance of high professional standards and the need to win
work in a competitive marketplace. Several interviewees indicate that this conflict can
be and is resolved through being transparent with respects to any methodological or
procedural shortcuts.

An ethical issue of misrepresentation which appears to be frequently breached by
organisations when marketing their consulting capabilities, is that of including their
experts (with highly credentialled CVs) on project teams when bidding for work, when
it is intended that the work will be undertaken mainly by juniors at a lower rate. This is
an example where practitioners (mainly those in private practice) consider a practice to
be unethical, or at best borderline, because it confers an unfair advantage for less
scrupulous firms to undercut or out-compete their rivals. It also may be an example
where individual practitioners turn a blind eye to a possible breach of the
misrepresentation principle by their own organisations and marketing material. In this
case, the practitioner’s ethical principles, advice to juniors and criteria for identifying unethical practice may not be in alignment. However, a practitioner who wins work by quoting lower than rival firms may not be guilty of unethical practices, but rather may have innovative techniques, lower overheads (e.g. working from a home-based office) or be prepared to work at a lower hourly rate.

The issue of professional independence is more fundamental than breaching any marketplace ‘rules of the game’. Seasoned practitioners agree that individuals or firms may present themselves as ethical, but the test is in what they do, not what they say. One of the distinguishing attributes of an unethical practitioner is a willingness to allow the principles of truthful reporting and honest opinions to be overridden by the interests of a client, as discussed in Chapter 5, Section 5.5. In response to interview questions on judging other practitioners as unethical, answers commonly reflected a common theme that they have a reputation for misrepresenting the truth, altering their professional opinions, pushing boundaries or massaging evidence to benefit their clients. However, even when passing judgement on such practitioners as ‘hired guns’, there is explicit or tacit acknowledgement that these situations are not black and white, and that factual evidence can often be interpreted in several ways. Environmental consultants, individually or as part of a multi-disciplinary team, often present facts so as to put the best possible interpretation on their client’s application for project approval, without transgressing professional responsibilities for truth in reporting. Experience is needed to know when such ‘spin’ crosses an ethical line, but there is agreement among interviewees that the line is crossed when factual evidence is withheld, distorted or misrepresented. This corresponds to the legislative test of ‘false and misleading statements’ leading to prosecution under various Acts of parliament and regulations.

One example, where these boundaries between ethical and unethical practice can become blurred, was raised by one experienced practitioner who recounted occasions when preliminary meetings with clients caused an intuitive concern that their agenda may be to avoid complying with legitimate environmental requirements. One ‘business-like’ response to this sense of unease is to quote a fee that is higher than normal, based on the expectation that the professional services required will be more complicated and time-consuming for a ‘difficult’ project. However, the same approach of quoting high for a ‘dodgy’ client could be interpreted as an unethical practice of either hoping that the client will go away and engage someone else, or selling one’s own principles if the
price is high enough. The practice of ‘high fee deterrence’ is specifically identified as unethical by the Ecological Consultants Association of NSW.

Misrepresenting or hiding evidence, obfuscation and deliberate down-laying of environmental risks and impacts are inconsistent with one of the key ethical responsibilities of a professional, that their specialised capabilities will be employed consistently and in a dis-interested manner. This assumption is the basis of trust. Regulatory agencies, courts and the community rely on the assumption that skilled professionals apply their expertise in an even-handed manner and that the same advice would be given, based on the same facts, irrespective of who was paying.

However, a practitioner who avoids making false and misleading statements is merely obeying the law, which is not a matter of ethical choice. It is a basic tenet of the EIANZ Code of Ethics (and all professional codes of ethics) that compliance with legislative requirements is a fundamental requirement of professional conduct. On the other hand, the interpretation of factual evidence, and the expert opinions based on those facts, are matters where ethical considerations apply. Professionals are in possession of considerably greater knowledge and expertise regarding their specialist field than their clients, regulatory agencies and the lay community, and these audiences trust the expert interpretation and opinions of environmental professionals.

This is particularly evident in assessments of environmental impacts, where the conclusions of professional experts (following their comprehensive technical investigations and reporting of evidence) may be that the predicted impacts will be significant but manageable, or acceptably minor with recommended mitigation measures in place. Although agencies, published standards and professional bodies have published guidelines for impact significance (what type and level of impacts are acceptable?), there will still be disagreements between experts regarding risks to the environment. Such disagreements are common in any field of science (and in courtroom examination of expert witnesses) and may be legitimate expressions of conflicting opinions, rather than evidence of unethical practice. One of the indicators of legitimacy is transparency, revealing the factual evidence on which conflicting opinions are based, and the other is demonstration of independence, that is, whether or not the professional, faced with the same evidence, would give the same opinions to any interested party.

Another area where interviewees agree with respect to unethical conduct is that of conflicts of interest, especially those which compromise professional integrity, are undeclared or inappropriately managed. These not only undermine professional
credibility but in the worst manifestation, lead to distortion of evidence, bias in data collection and compromised expert opinions, deliberately or unconsciously.

A difference emerged in interviews between the opinions of public sector practitioners and those in the private and community sectors. As a generalisation, private consultants perceive unethical colleagues as ‘cowboys’ operating outside the accepted rules, and a threat because they represent unfair (lower fees) competition which drags the whole profession down i.e. there is a degree of self-interest in their condemnation of unethical practitioners. Those in the public and community sectors, on the other hand, do not appear concerned about competitive behaviour (except inasmuch as it is a motivation to cut corners and act in their clients’ interests), but perceive unethical practitioners as opposing and undermining the public interest by attempting to deceive or mislead decision-makers. Public sector practitioners also express concern about internal unethical conduct, for example how people within their organisation and the community are or have been treated (issues of fairness, respect, equity and procedural justice), whereas these issues are not identified by consultants as unethical professional practices. Only one example was raised alleging unethical behaviour from an agency officer and that was more a personal interaction than an issue of professional ethics.

There was an unexpected similarity in attitudes between public and private sector practitioners regarding whistle-blowing. Respecting the confidentiality of clients, as a principle of ethical practice, was mentioned only rarely in interviews (perhaps because it is a ‘given’) but several practitioners discussed case study examples where they wrestled with the ethics of whistle-blowing. The consensus appears to be that that whistle-blowing represents a major ethical dilemma, in that it may be justifiable (‘right’) or wrong, depending on the situation; and requires serious weighing up of risks to the environment, to the employing organisation and to one’s personal career. The EIANZ Code of Ethics (Appendix C), in common with most professional codes, is generally positive in tone i.e. it mainly sets out what is expected of members of the profession, rather than defining what is not acceptable, with two exceptions: conflicts of interest, and bringing discredit to the profession which the Code specifies as unethical. The remaining clauses exhort members to ‘do the right thing’, with a general catch all provision in the By-Laws regarding sanctions if alleged breaches of the Code are upheld. This is perhaps evidence that it is easier to define what is ethical conduct than to identify what constitutes unethical behaviour.
Several types of unethical conduct of concern to other natural resource professions, such as forestry (Irland, 2007) do not appear to be a concern for the environmental practitioners, for example finder fees or referral fees (accepting a commission for referring other consultants or suppliers to your clients) and dual advisor/contractor roles, whereby a professional consultant may assess a proposal, act as a client’s agent in obtaining approvals and then also undertake the work. These practices involve conflicts of interest, and professional associations usually develop codes that respond to the particular issues and risks which their members have faced. However, no code can ever cover all possible situations and in the case of EIANZ and other institutes that may not specifically refer to referral fees or dual roles, the generic provisions regarding conflicts of interest (i.e. that such instances must be declared transparently and managed appropriately) generally cover the situation.

Most examples of unethical conduct and most of the issues listed in professional codes of ethics, address ‘sins of commission’ i.e. those things that a practitioner should not do. A three-part test of egregious unethical conduct by environmental practitioners (and other professionals) is when they:

- Intentionally do what they know is wrong;
- Do so for their own advantage or the benefit of clients; and
- By doing so, betray the trust of others who rely on them.

While the above example of pressure to ‘hide’ uncomfortable facts appear quite clear with respect to ethical responsibilities, there is a spectrum of situations where it is less clear. One is where a practitioner has been engaged to undertake only the technical investigation, and then all interpretations of the reported facts and opinions based on such data, are the responsibility of project managers, planners, lawyers or the client. While some practitioners report that they are comfortable with this role, and consider that it absolves them of ethical responsibility; it is not unethical to practice in this manner, but it can be perceived to be as avoiding the issue. As discussed in Chapter 5, experienced ecology consultant ‘Danny’ is aware of the risks involved in such situations, and does not accept commissions based on this arrangement.

The role of project manager in environmental studies, as reported by ‘Alex’, raises the difficult ethical situation of responsibility for managing separate studies by different technical experts and for integrating their sometimes contradictory recommendations. An example may be environmental assessments of a proposed rural-residential
development in bushland, where the fauna and visual impact specialists have assessed that impacts will be minimal and acceptable if most of the existing trees are retained, but the bushfire expert recommends that many of the trees be removed. In such cases, the study manager may be under pressure to override (or even rewrite) one or more expert opinions and to choose to resolve contradictions in a way favourable to a client’s interests. By giving more weight to one consideration than another (for example by prioritising bushfire hazard reduction over habitat retention), the role of a project manager can subtly facilitate more development, at the expense of native habitat. However, there may be other more ethical (or less unethical) solutions to problems such as these. As suggested by Irland (2007), ethical decision-making with appropriate levels of transparency can ensure project team collaboration in integrating recommendations, with all options openly considered and assessed.

6.6.7 Recognising Problems

As discussed in Chapter 5, Section 5.4.1 and considered (with examples) by Cohen (2004, p. 122), the first step in addressing ethical problems is to recognise that a problem exists or is about to arise, and secondly to identify that it is an ethical issue, rather than one of business management, prudence and risk management, or a conflict of personal loyalties and values. Not all problems are ethical, and not all ethical problems are dilemmas. If an environmental practitioner considers that a particular patch of forest has values worth conserving, but a client regards it as a constraint to a proposed development, this represents a conflict of values but involves no ethical dilemma. Similarly, if a practitioner finds methodological flaws in a survey undertaken by a respected colleague and ‘doing the right thing’ is likely to strain the friendship, it is a legitimate clash of loyalties, not an ethical dilemma.

A genuine ethical dilemma exists where a ‘moral agent’ (in this case an environmental practitioner) is required to choose between two or more alternative courses of action, each of which upholds or contravenes an ethical principle. In the above example, an ethical dilemma would arise if the practitioner is required to decide between emphasising the unique values of the forest as bird habitat, justifying its protection, or downplaying its ecological significance (without actually lying) because it is a good location for constructing water quality infrastructure. Both alternatives would have environmental benefits, but are mutually exclusive.

Although several philosophers have argued that sound moral theory should preclude genuine ethical dilemmas (McConnell, 2018), in practical applications such
dilemmas arise where there are conflicts between principles such as those of truth and loyalty, between short-term and long-term interests, and between the best interests of an individual and those of the community (McNeil, 2016). The moral responsibilities of humans towards nature and all living things, as recognised in environmental ethics, raise many other examples of ethical dilemmas for environmental practitioners, such as the above habitat-vs-infrastructure choice, especially when evaluating trade-offs between ecosystems, economic development and community values.

For most seasoned practitioners, the initial recognition of an existing or looming ethical problem is intuitive. Most interviewees report a ‘gut feeling’ that something’s not right or not appropriate, and that there is a principle at stake or a line which they are not comfortable with crossing. As outlined in Chapter 2, this is consistent with Singer (2005) who considers that intuition plays a significant role in normative ethics, although subconscious pattern-recognition is likely to be the basis of expert intuition (Easen & Wilcockson, 1996).

The early recognition of potential ethical issues is largely a function of experience and practice wisdom. Although there is little substitute for experience in developing and refining the ‘instincts’ to avoid problems, training in ethical decision-making and regular conversations regarding ethical implications, both within teams and with clients and regulators, are also helpful.

Almost every activity or problem that requires the input of an environmental expert involves some human impact which causes environmental harm, to a greater or lesser extent, and the role of the environmental professional is often to identify which of those impacts can be avoided and to reduce or mitigate (or in some cases offset) the remaining impacts. This risk management approach is an underlying modus operandus for environmental impact assessment, and the underlying principles also apply to most aspects of professional environmental practice: first, identify the potential risks and their significance (a function of risk likelihood and consequences), then seek to avoid, reduce, mitigate or offset either the likelihood or consequences.

### 6.6.8 Ethical Decision-Making

As discussed in Chapter 2 with respect to ethical decision-making, the cognitive process of determining the right thing to do starts with identifying the ethical problem. Although this initial feeling of moral unease is often intuitive, further analysis is required to explore the ethical dimensions involved in a problem, and the decisions which may be called for. In addition to the seven decision-making steps outlined by
(Kolb, 2018, p. 1227), this thesis recommends an additional early step to question whether or not a decision is required, and, if so, ‘is a decision required of me at this stage?’. In some cases, a problem may cause ethical anxiety, but logical analysis may reveal that no decision is needed. For example, professionals may feel morally uncomfortable that their expert recommendations had been ignored or overruled, or they may consider in retrospect that perhaps they should not have agreed to a compromise (as discussed further below in Section 6.6.9 and in particular Figure 8), but there is no ethical decision required of them. For environmental practitioners, their professional role may require only that they competently and honestly provide information on which others will base decisions – it is not usually the role of consultants or expert advisers to decide whether or not an environmentally damaging development proceeds, nor even to specifically make such a recommendation. The concept of ‘decision-scope’ is useful at the outset, for practitioners to identify whether or not an identified ethical problem actually requires them to make a decision.

In terms of the four components of moral psychology as defined by Rest (1994) the first step is recognising ethical issues (moral sensitivity), as addressed previously.

After a problem has been identified as ethical and the decision-scope has confirmed that an ethical decision is required, the next three components of moral psychology (moral judgement, moral motivation and moral character), and of Kolb’s step-by-step approach, are associated with responses to the identified issues i.e. what decisions and courses of action should be taken?

With respect to identifying ethical issues and deciding on appropriate responses, a risk matrix approach is useful for environmental practitioners, as suggested by ‘Taylor’, whereby ethical issues and potential problems are initially scanned with respect to their likelihood and consequences. Brainstorming various ‘what if?’ scenarios can suggest ways of dealing with conflicts of interest, value judgments and minor potential ethical issues (some of which can be resolved by ‘honest up-frontness’) allowing focus on any residual ethical problems.

However, the weighing up of ethical decisions in a matrix of probabilities and consequences is a consequentialist approach which takes into account, even if subconsciously, the chances that ethical breaches will be detected (Cooper, 2004; Schön, 1995). Two moral sensitivity safeguards can improve the moral robustness of a risk matrix approach: one is peer review by an experienced external ‘ethics auditor’ and
the other is to adopt a ‘virtue ethics’ perspective by reflective self-questioning as a validation check of the consequential approach.

Various frameworks exist for ‘ranking’ alternative courses of action in responses to ethical problems, and one of the simplest and most applicable to issues faced by environmental practitioners is that of Singer (2016), whose ethical scenarios are framed by considering if a particular action is (a) obligatory (b) permissible or (c) morally forbidden, notwithstanding that it may be legal. Examples of Singer-type hypothetical scenarios that could be used in training for ethical decision-making under this framework are:

- A ‘good’ client has been advised by lawyers that a loophole in the law will allow him to clear native vegetation from a known wildlife corridor, provided an ecological survey reveals no endangered species. Do you accept the commission?
- A planning authority intends refusing a high-density transit-oriented development, because local residents have objected. As a senior officer, you are asked to write a report justifying the refusal, but you consider that the project has environmental sustainability benefits with respect to urban transport efficiency. Do you express your opinion in the report?

In these two scenarios, the requests of a client or employer are permissible within the law, but the practitioner is not legally obliged to comply with the request, so any ethical dilemma associated with these cases are in Singer’s third category (an action may be legally permissible, but morally wrong).

In both of these cases, early identification of the practitioner’s personal values and the ethical dimensions of the situation would be valuable, not only to clarify one’s thinking and the options available, but also to avoid misguided effort (e.g. months of survey attempting to find any species listed as ‘endangered’) or frustration (e.g. trying to ‘prove’ to affected residents that the development would benefit the city).

Most environmental practitioners, public and private, face pressure to complete specified work in less time, or for less money, than they know is required to do the job properly. Such dilemmas often have an ethical dimension in addition to the practical management problems they present.

While technical competence and high standards of practice are central to professional identity and ethical principles, these are not always what a client needs or
is willing to pay for, in order to solve a particular problem. Many environmental consultants face pressure, including competitive pressure from professional colleagues, to undertake a cheap (‘quick and dirty’) assessment that does not meet current best-practice standards. For preliminary environmental assessments, where even regulatory agencies may expect nothing more than a data search and an expert opinion regarding likely issues of concern, such approaches may be justified provided the limitations are transparently stated. However, a client’s desire to reduce time and costs often conflict with a professional’s desire and ethical obligation to do the best possible job, and maintain a reputation for doing so. Where a regulatory agency, local Council or international funding body has specific standards (for example, the number of fauna survey field days required, in specified months, to determine the presence or absence of a particular threatened species), practitioners are obliged to comply. However, in the absence of specified standards, or instructions in the terms of reference, it is the role of professionals to advise on the level and standard of assessment (including surveys and modelling) appropriate for decision-making or to solve a client’s problems. Several interviewees indicate that experience and practice wisdom is required to know when and where to cut methodological corners, for example when clients require consultants to ‘cut their cloth to suit’ a constrained budget, in which case a professionally ethical response to such demands is transparency, for example through disclaimers and commitments to further investigation at a later stage.

The practitioner who suggests a risk matrix approach (‘Taylor’) also notes in interview the frequency of small ‘everyday’ ethical issues and decisions, generally of low consequence (such as in-office waste reduction and recycling) as daily habits which create a consistent ethical culture. Discussing and addressing such issues (together with hypothetical scenarios and role-playing to consider options and consequences) can establish patterns of thinking and ethical conversations that are effective training for the occasional larger ethical issue with significant consequences. When the big issues arise, ethical practitioners can then deploy their decision-making framework and their ‘ethical muscles’ developed in training on small day-to-day issues. It is known that many examples of large-scale fraudulent behaviour, for example those studied among accountants in the USA by Groves and Weirich (2012) start with small incremental incidents of unethical conduct. Raising small ethical issues in the office regarding hypothetical scenarios or purchasing decisions, with attentive listening and mutually
respectful conversations about the ‘right thing to do’ are examples of low-risk high-frequency ethical decision-making. Discussing ‘what if?’ ethical scenarios and sharing perspectives between senior and junior practitioners, also allows environmental professionals to consider and identify their ethical boundaries, as a group and as individuals. The intuitive ‘gut feeling’ that something is wrong, and that a line is being crossed, can be morally confusing unless one has previously considered hypothetical scenarios to clarify where one would draw the line. The spectrum of ethically acceptable compromises, as illustrated conceptually in Figure 8 below, may in these cases be a useful device in considering situations in which an individual practitioner (or a team) might chose to draw the line, and how and when that line might be different under different circumstances.

The ethical acceptability spectrum concept is also valuable in considering the responsibility of professionals to persuade (or attempt to persuade) clients and decision-makers to improve environmental protection, a responsibility alluded to in a code of ethics of ecological consultants (Ecological Consultants Association (NSW), 2002) but not specified. The process of ‘pushing’ (or dragging) clients towards better environmental outcomes is considered part of the professional obligations of an ethical environmental consultant (Jones, 2017) and is reported by most practitioners interviewed, both private and public.

Another important professional obligation can be associated with the ethical acceptability spectrum in Figure 8. The ethical obligations of environmental professionals include advising on legal requirements (minimum compliant protection of environmental values), while at the same time advocating ‘best practice’ protection. However, in many situations, a ‘green-ish’ compromise emerges (or a ‘good enough’ outcome) (Kågström, 2016; Soltwisch, Brannon, & Iyer, 2020) which is more than compliance but less than a ‘best for environment’ solution, and the practitioner involved must consider the ethical implications of supporting the compromise, for example, through careful choice of words in an environmental report. There are important differences in meaning between terms such as ‘acceptable’, ‘compliant’, ‘balanced’ and ‘recommended’, depending on their context. The ethical principles of accountability, legibility and avoidance of misleading statements require practitioners to distinguish clearly between these terms to clarify their intentions, because the practitioner may be asked to justify a ‘green-ish’ compromise to a regulator or defend it in court. One
alternative is for a practitioner to present it as the client-preferred option, but refrain from advocating or defending it, in effect ‘washing one’s hands’ of the compromise. A more responsible and transparent alternative is to present both options: a ‘best practice’ mitigation measure which offers a high level of environmental protection, as well as a lesser (and probably more affordable) level of protection which on balance is still considered acceptable.

In choosing the appropriate and ethical course of action, it helps to know what the regulator expects, is prepared to push for or willing to trade off. For example, the regulator may be able to persuade the developer to move further along the acceptability spectrum. Irrespective of the level of support which a regulator may offer, misrepresenting a green-ish compromise solution as an expert’s ‘best practice’ recommendation would be misleading and a breach of professional ethics.

Distinguishing between ‘acceptable’ and ‘best practice’ in this manner is analogous with the ethical obligation to distinguish between factual evidence, expert opinions based on accepted theory, and expert conjecture.

The ethical acceptability spectrum also represents an extension of typical ethical decision-making models for professionals, such as those discussed in Chapter 2, Section 2.1.9, in that many environmental practitioners add the important extra step of persuasion. This is the extent to which a practitioner’s moral decisions and capacity to influence others, especially clients, to accept and adopt an ethically-based recommendation (‘Can I bring the client with me on this one?’). This is a complicated interaction of the technical authority and reputation (credibility) of the expert, the ethical principles of practitioner and client, risk management, personal persuasive skills, relationships and team dynamics. Having first recognised an ethical dilemma, choices are needed (do I risk this client and this financially-rewarding relationship by disagreeing with and trying to change this project?), which may be influenced by the ‘ground rules’ of the relationship established at the outset. If for any reason a practitioner cannot change the project (by moving it further along the ethical acceptability spectrum shown in Figure 8), the ethical dilemma takes on another dimension. Options for an ethical practitioner include resigning from the team, choosing whether to ‘blow the whistle’ or to maintain confidentiality, or to accept a ‘green-ish’ compromise, rationalising it as a ‘balanced approach’. Where a practitioner accepts a team compromise, another decision may present itself - whether or not to openly support the ‘green-ish’ compromise, or decline to advocate for it.
However, the distinction between technical feasibility and ethical acceptability is not clear-cut, e.g. a development proposal may be ethically acceptable, in that it will be environmentally sustainable with no long term irreversible detrimental impacts, but only if technical performance standards are met and maintained … and that may be technically difficult to achieve. Several seasoned practitioners noted that technical expertise and familiarity with the requirements and constraints of client projects are needed in practice, to ensure the feasibility of their recommended solutions to environmental management problems. If an environmental practitioner argues for ‘international best practice’ standards which cannot be practically implemented, their ethical high ground may be undermined.

In closing, it should be noted that neither the four moral psychology components of Rest (1994) nor the nine guidelines of Irland (2007) list ‘consistency’ per se as an ethical principle, although it is likely that any practitioner who develops a personal ethical framework is likely to make moral decisions on a consistent basis. In this respect, the principles and decision-making process of an ethical practitioner are likely to be consistent, both internally and with respect to their demonstrated moral coherence, although each ethical decision made by that practitioner may reflect different circumstances and considerations.

6.6.9 Persuading Others

Many seasoned practitioners report that their ability to bring clients with them, or take them ‘on a journey’, is valuable in responding to ethical challenges, withstanding pressure and sticking up for both the environment and one’s own principles. As reported in Chapter 4, Section 4.7.1 above, the soft skills of communication, assertiveness, ‘honest up-frontedness’ and negotiation capabilities are essential in order to discuss difficult topics. Interviewees such as ‘Alex’ also consider legibility as part of the ethical obligations of transparency and that the professional responsibilities of ‘Taylor’ include translating technical engineering and science language so that their implications are easier for lay audiences to understand and implement.

Typical scenarios where a practitioner’s ethical responsibilities may require persuasive ability are illustrated graphically in Figure 8 below. Environmental practitioners, both private consultants and agency officers, often deal with clients whose starting position (‘best for project’) is less than that required for compliance with applicable regulations and must advise them accordingly. Compliance with regulations is a legal requirement and does not involve ethical choices on the part of either the client
or advisers. However, ethical practitioners may also advise the desirability of ‘best practice’ approaches, for example, costly erosion control measures during construction and try to persuade their clients to ‘do the right thing’ for the environment. Clients and project proponents, guided by a range of professional advisers (not only their environmental consultants), may be persuaded to go beyond compliance and move part-way towards best-practice, agreeing to ‘green-ish’ measures. In this situation, the ethical problem for environmental practitioners is whether or not to support the compromise position and report that the resultant impacts on the environment are acceptable, notwithstanding that they may have promoted ‘best practice’ environmental protection to the client and project team and had been in effect over-ruled. This is referred to by Kågström (2016, p. 173) as the environmental consultant’s quandary between ‘best’ and ‘good enough’.

**Figure 8: Ethical Acceptability Spectrum of responses to environmental constraints by proponents and professional advisers**

![Ethical Acceptability Spectrum](image)

Most of the seasoned practitioners interviewed mentioned practice situations where they had been able to persuade clients to make changes to proposals in order to improve environmental outcomes but also the converse, situations where, despite their advocacy, the outcomes were sub-optimal for the environment. Approximately half the practitioners interviewed consider that their professional input to proposals had improved environmental outcomes, despite having to make compromises to suit clients and they regard this as a central part of their professional role.

The concept of an ethical acceptability spectrum of responses, as shown in Figure 8, also illustrates varying degrees of acceptability, not only to project proponents and their professional advisors, but also to others involved in ‘shaping’ projects, such as designers, financiers, regulatory agencies and affected stakeholders. From an
environmental practitioner perspective, the moral acceptability of any ‘green-ish’ compromise is likely to depend on their assessment of risks, ethical ideology, experience and capacity for ethical judgements, and differences in decision-making styles between ‘maximisers’ and ‘satisficers’ as outlined by Soltwisch, Brannon & Iyer:

Maximizers tend to search exhaustively to find the best outcome. Satisficers, on the other hand, are more likely to settle for options that are ‘good enough’ … By comparing options, satisficers select alternatives that meet their minimum criteria rather than searching for ‘the best’ option … (Soltwisch, Brannon et al., 2020, p. 79).

In this context, the practice wisdom of ‘Chris’, based on many years of experience across a range of projects, clients and issues, includes professional judgement on when to ‘hold firm’ with respect to environmental recommendations, when to keep pushing for more, and when to ‘back off’.

6.6.10 Ethical Contradictions and Rationalisation

Moral appraisal of any sort implies a procedural sanction against self-deception that avoids false moral judgements: Honesty effectively corrects for bias in describing maxims, allowing immoral proposed actions to be proscribed (Sack, 2005, p. iii).

Comparison of practitioner responses in Chapter 5, Section 5.1.2 (‘Managing Pressure’) and Section 5. (‘Identifying Unethical Practices’) reveals an apparent ethical contradiction, or at least an incongruity, with respect to cutting corners in professional practice. In most fields of environmental practice, cutting corners may range from deliberate methodological short-cuts and submitting quick cheap assessments heavily qualified by disclaimers, to premature recommendations based on preliminary findings, or simple laziness with respect to citing sources and confidence limits. In general, if one practitioner accepts a commission to provide specified services for significantly lower fees than other similar professionals, or within a shorter time frame, it is likely that some corners are being cut, although there are exceptions and situations where this is justifiable (for example, where a practitioner is transparent about what services are excluded or deferred).

In both public and private practice, senior professionals may be tempted to cut corners (perhaps more so than their junior colleagues) because professional judgement based on extensive experience allows short-cuts to be identified and taken advantage of. Several interviewees said, in effect, ‘we all do it’. However, most also identified it as a
characteristic of unethical practice, reflecting a desire to have a ‘level playing field’ for fair competition. Nevertheless, client expectations for professional outputs to be delivered within time and cost constraints may lead practitioners to cut corners where they can.

Similarly, the practice of fee undercutting is regarded by many seasoned practitioners as unethical or at least unprofessional behaviour, notwithstanding that proposal-writing and competitive fees are part of daily practice for most environmental consultants. These two issues (short-cutting and fee undercutting) are related in that there appears to be a widespread assumption among consultants that any competitor who wins work by quoting lower fees than other practitioners must be planning to cut corners in methodology. That assumption may not be correct, for example, young consultants trying to get established in the market may be prepared to work long hours for little financial return, without cutting methodological corners. In both Australia and New Zealand, competition legislation prohibits fee setting by professions but experienced practitioners with paid employees may still regard fee undercutting as unprofessional.

Shortcuts and fee undercutting are two examples of inconsistency between what practitioners identify as unethical practice by others, but necessary and justified by circumstances in their own practices. Authors, such as Bowers (2019) highlight the tendency for professionals, and all humans, to rationalise ethical lapses or lack of moral engagement. Rationalisations are self-justifications, succinctly defined as ‘… lying to yourself about what you are doing …’ (Saul, 1994, p. 249). They are:

… fabricated (hence, false) justifications we make to ourselves and others when we want to do or have done something we know we shouldn’t. We go to all the trouble to make up these stories because we care what others think of us and, more important, we want to think well of ourselves … (Josephson Institute of Ethics, 2020, p. 1).

Several authors have described the various self-deceptions involved in rationalising decisions and actions inconsistent with personal moral principles (Josephson Institute of Ethics, 2020; Muller & Schafer, 2016). Rationalisations used by practitioners to explain decisions contrary to their own principles, or to justify practices which would be considered by other environmental professionals to be unethical, are listed below, generalised from interview responses and case study examples.

- I act for any client on a ‘first come first served’ basis, this shows that I am unbiased;
- If I don’t do this job, someone else will; and the outcomes won’t be as good;
• I compete in a marketplace: I need this work to be viable and keep paying staff; and
• I am loyal to my client or employer, who does good things most of the time, so now and again I’ll support something I’m uncomfortable with.

Several other excuses are particularly applicable to and used by environmental professionals (again, as generalisations drawn from interviews and case studies):
• I have a specific technical job to do, it is not my responsibility to consider other factors, someone else interprets the data and makes recommendations;
• The project is compliant with all laws and regulations - these represent the community’s intended balance between development and environment;
• Some environmental values must be sacrificed for development and progress, my role is to identify and help protect the ‘best’ features and special places;
• In the long term, my inputs and opinions make no difference – new technology will solve industry’s environmental problems; and
• Regulators have a ‘scatter-gun’ approach to environmental requirements – I focus on the significant issues which represent real threats to the environment, and cut some corners on matters I consider to be unimportant.

However, when considering whether other environmental practitioners adopt unethical practices (see Chapter 5), interviewees rarely refer to the above justifications but instead commonly refer to competitive issues such as fee undercutting and willingness to change opinions at the behest of clients. Interestingly, several refer to the prevalence of unethical behaviour by ‘cowboy’ practitioners as a reason for them to join their professional institute and support its codes of ethics, implying that institute members are more likely to be ethical than practitioners with no professional membership. Unsurprisingly, that opinion is shared by EIANZ member interviewees, but not by those who are not members.

The perception that members of professional institutes are more ethical than non-member practitioners, or conversely that institutes attract those practitioners who place more value on ethical practice, is difficult to validate. Institute membership adds an extra layer of ethical obligations associated with a code of ethics and accountability for breaches of the code (in addition to legal requirements, professional reputation and personal morality), but at least one seasoned practitioner noted that institute codes and
certification may offer unscrupulous practitioners a ‘cloak’ of respectability and apparent credibility.

Many professionals appear to overlook, or fail to perceive, the ethical shortcomings of their own profession:

... they justify their own misbehaviour as if they’re just occasional aberrations, or that everyone else doesn’t understand. One of the goals of ethical decision-making is to make people aware of the kinds of insider assumptions that they make, the excuses, the rationalizations … (Josephson, 2002, p. 17).

The principles adopted by environmental practitioners are practical ethics which meet their needs, and which have been derived from various sources, theories and codes. They have generally not been integrated into a morally-coherent framework, so it is not surprising that there are logical inconsistencies. Ethical inconsistencies and rationalisations also arise because practitioners function in different roles, assume different professional identity perspective according to the situation and role, and because they are human. However inconsistencies in ethical decision-making, and self-serving rationalisations, can cause confusion and undermine both reputation and mentoring of juniors. Effective ways to build consistency in ethical decision-making include regular team conversations concerning ethical issues, discussion about the ethical aspects of current environmental controversies and hypothetical case studies.

6.7 Ethical Advice Theme

As detailed in Chapter 5, Section 5.5, many of the interviewed senior practitioners reported in-office discussions with junior team members regarding ethics, commented on the importance of ethical considerations for newly graduated or early career environmental professionals, and noted the need for guidance, continuing professional development, mentoring and forums for discussing such issues. It is particularly heartening that this cohort of seasoned practitioners, most of whom established their environmental careers de novo with little professional mentoring, place such importance on mentoring subsequent generations.

One of the most important roles in mentoring early career professionals is to help them clarify their career direction and aspirations, not only with respect to technical skills and professional development, but also in matters of judgement, practice wisdom, ethical decision-making (where would they draw the line?) and virtue ethics (who do they wish to become?). In this context, continuing professional development, mentoring
and exposure to multi-disciplinary teams not only have benefits in technical and project management skills, but also expose juniors to new ideas. As noted by one interviewee, when environmental practitioners see problems and ethical issues from a range of different perspectives, they become less judgemental. Taken to the extreme, tolerance and understanding of various perspectives could however, lead to a relativist approach, wherein all opinions on ethical issues are equally valid. This risk can be reduced by ethics-centred mentoring to encourage junior professionals to develop and maintain a strong focus on their core moral identity, for example, by exploring not only the question of ‘where would you draw the line ethically?’ but also ‘why? What is your justification for making that ethical decision?’

The value of ethical conversations has been discussed by many authors, citing a range of benefits, ranging from training, understanding differences in the ethical frameworks of different professions (McAuliffe, 2014) and allowing values to be openly discussed and tested in a safe and supportive environment. Seasoned practitioners, particularly those who have employed younger professionals, agree that it is important to discuss ethics, although genuine ethical dilemmas are relatively rare in most fields of environmental practice. As noted previously, regular discussion of small day-to-day ethical decisions and role-playing in ethical scenarios can provide practitioners with the issue-recognition skills and decision-making tools necessary to deal with occasional larger ethical problems.

Interviewees also report that in-office ethical discussions are often two-way, in that juniors teach seniors as much about identification of ethical issues from their perspectives, as they learn from seniors about how to deal with them. One supportive approach is a combination of open discussion on ethical issues, combined with ‘helicopter’ mentoring, whereby junior and mid-level practitioners are encouraged to explore their own ethical boundaries and to occasionally make mistakes, allowing senior practitioners to intervene when necessary, according to risk.

Ethical conversations also normalise the topic of ethics, and make it acceptable, rather than a taboo or unmentionable subject, and create an ethical climate in which early career professionals find it comfortable to raise issues of concern (Jordan, 2002). This applies not only within the office, but also between practitioners and clients, in multidisciplinary teams, in discussions with regulatory agencies and more broadly in the community. Opening up the window of ethical discourse (Brown, 2019) adds a
valuable perspective regarding environmental issues to the more usual technical and cost-benefit discussions.

However, most seasoned practitioners in private consultancy report discussions with early career professionals who cannot reconcile their pro-environmental values with helping developers gain approvals to remove habitat, creating ethical dilemmas. In general, the advice given to juniors in these situations, based on practice wisdom and their own experience wrestling with similar issues, are to re-contextualise the problem and to help them reframe the issues. However, several practitioners state or imply that, if young professionals find it difficult to reframe their ethical objections in this manner, they will probably find a career in private consultancy uncomfortable, and should seek employment elsewhere.

6.8 Participant Recommendations

During interviews, several participants made recommendations regarding their professional institute (EIANZ) and ethics education. Two practitioners express concern that the Institute’s Code of Ethics and Professional Conduct required additional governance and discipline, such that unethical practice will carry consequences, and one of these participants also suggested establishing an EIANZ hotline service for members to discuss and seek guidance on ethical issues. Other suggestions for Institute facilitation of ethical decision-making by practitioners include a webpage or social media sites with two-way conversations and suggestions regarding cases, and this could build up a database of ethical issue examples and EIANZ Statements of Good Practice, suitable as benchmarking as well as for teaching and mentoring.

With respect to education of future environmental professionals, specific ethics training was recommended, but taught with a practical rather than theoretical emphasis, using case study examples and hypotheticals scenarios drawn from environmental practice.

6.9 Ethical Principles for Environmental Practice

A comparative analysis of codes of ethics of 46 scientific societies and associations, mainly in America but also sampling organisations in Canada, Australia, Britain and Singapore, undertaken and reported on by (Bullock & Panicker, 2003) found common underlying themes. As may be expected, all organisations enshrined
within their codes the general encouragement of good conduct by their membership, briefly paraphrased as strictures to behave:

- Honestly and fairly (by maintaining integrity in conducting and reporting research, in giving expert consultation, and in delivering service);
- Competently (by remaining within the boundaries of trained competence, and following all applicable rules, regulations, and procedures); and
- Benignly (by doing no harm to the discipline, to research participants, to institutions, to clients, or to society).

Interviews with seasoned environmental practitioners for this research, reported in Chapters 4 and 5 and analysed in Chapter 6, indicate that the ethical principles guiding the profession and forming the basis for its pledge of service may be grouped under six broad headings, three of which address integrity issues, and the others relate to environmental ethics, decision-making and competitive fairness:

1. **Professional Integrity**: central to the ethical obligations of any profession are honesty and truthfulness, both with respect to factual evidence and expert opinions. For the environmental profession, and others with a basis in science, an allied ethical principle is that of impartiality and personal disinterestedness, including objectivity where that can be achieved or at least full transparency where personal values are involved, so that a relationship of trust in a professional’s advice and results can be assured. The principle of transparency also includes a range of issues related to the use of information, including client confidentiality, data integrity, acknowledgment of sources and limitations. At a more individual level, professional integrity also includes accountability and taking responsibility for one’s actions, decisions and mistakes, and personal virtues of resolve and persistence. Lastly, but arguably of the highest level of professional integrity, environmental practitioners have a moral obligation to contribute to community wellbeing and benefits (the ideal of service), primarily through minimising harm to the environment.

2. **Technical integrity**: as a distinctly separate set of ethical obligations, professionals’ obligations include, either explicitly or implied, a pledge of service that they are sufficiently qualified, competent and experienced to meet the standards expected by clients, regulators and the community, and that they maintain their ‘best practice’ skills through continuing professional development. The credibility of their professional services, also a factor in the trust relationship, depends on their expertise. All participants in this research expressed pride in ‘doing a good job’ as
an essential part of their professional identity, job satisfaction and practice ethics. Their role carries an assurance that professional services will be delivered with accuracy, rigour and quality, that their expert opinions will be based on evidence, and that practitioners will take the broader sustainability and environmental context into account where appropriate. However, technical integrity also includes practicing only within one’s field of expertise, avoidance of misrepresentation (including ‘switching’ project responsibilities to junior staff with inadequate experience) and recognising the need for inputs from other disciplines and professions. Other professional responsibilities associated with multi-disciplinary collaboration include an ethical obligation to treat others with respect and collaborate as equals, as covered by ‘process integrity’ below.

3. **Process integrity**: in parallel to the principles of professional and technical integrity are a number of other aspects of ethical practice raised by participants as important to their practices, related broadly to personal interactions and professional judgement. These include respectful communication with all parties (staff, agencies, clients, colleagues, opponents and the community) and persuasive capabilities, essential if a practitioner is to influence environmental outcomes. Also essential in most areas of environmental practice is a commitment to consultation with stakeholders, generally defined as all those who may be affected by decisions associated with the practitioners’ outputs, but may be more specifically defined by a client brief or agency requirements. The processes involved in seeking an appropriate balance between competing interests, and between environmental sustainability and commercial or political outcomes, also involve the application of ethical principles (especially fairness), as well as negotiation skills. Lastly, the category of ‘process integrity’ includes the development and application of practice wisdom, including prudent judgement and effective management.

The three-part integrity principles (professional, technical and process integrity) are in some ways analogous to the ‘head, heart and hands’ dimensions of community building referred to in the social work profession (Kelly, Sewell, & Jackson, 1988), notwithstanding that the latter is a framework for teaching and learning, not for practice ethics.

4. **Environmental ethics**: While the objective of environmental harm reduction is an accepted principle of environmental practice ethics, it does not represent the
range of values and moral obligations which many practitioners express regarding the natural environment, sustainability and the impacts of development. A commitment to reducing the environmental harm associated with human activities, where possible (in effect applying a number of ‘band-aid’ solutions), does not adequately incorporate the principles of environmental ethics and associated values and obligations felt by many environmental professionals. However, even among those people who place high priority on environmental ethics (in the community generally, as well as among environmental practitioners), the wide range of values and moral weighting associated with different elements (e.g. animal rights, climate change, biodiversity conservation, Gaian philosophy and ocean protection) make agreement and codification of ethical principles almost impossible.

Nevertheless, an appropriate unifying ethical principle is required which is more meaningful than mere harm-reduction but includes obligations to use one’s professional expertise to protect and enhance the environment and help ensure sustainability. This thesis proposes that Kant’s principle be re-interpreted as a ‘categorical sustainability imperative’ viz. *act only according to that maxim that your actions, if adopted universally, would sustain human society and all forms of life indefinitely.*

While this maxim is a broad principle capable of being applied to one’s personal life, application to professional practice is likely to require consideration of trade-offs and overall nett environmental effects. Applying this maxim to professional practice may also require transparency regarding values-based advice (perhaps a standard disclaimer regarding one’s commitment to global sustainability) and separation of a practitioner’s actions from those of clients.

5. **Ethical decision-making:** the above four ethical principles suggested for professional environmental practice will be of little practical application without appropriate ethical decision-making. Before practitioners have an opportunity to apply their principles, they need to recognise ethical issues, identify dilemmas and assess their decision-scope, and do so in a timely manner allowing due consideration of options and consequences. This may be difficult when confronted with emerging situations requiring quick ‘yes-no’ answers, but training and practice with hypothetical scenarios can develop the professional judgement, moral character and ethical ‘muscles’ necessary to deal with such situations. A supportive workplace culture is also helpful, as is moral motivation from professional institutes such as
EIANZ. Although rapid ‘on-the-spot’ review of options and consequences may sometimes be necessary, it is no substitute for a more considered, transparent and collaborative approach to open conversations and ‘bringing others with you’ in principle-based decisions. As the last stage of an ethical decision-making process, the decision and its consequences (for all parties) should be reviewed, especially in relation to lessons learned for next time.

6. **Competitive fairness**: in addition to the moral principles relating to professionals in their relationships with clients, other stakeholders and the community, and in their responsibilities to the environment, there is a group of ethical principles (common to most professions) which address the way in which practitioners relate to each other. Environmental consultants tacitly agree to compete with each other commercially on the basis of expertise, experience and methodology (this is the ‘level playing field’) although familiarity with the site, project type and client are also valid ways of achieving a competitive advantage. Environmental practitioners (in common with most professions) are uncomfortable competing on the basis of fees, and are suspicious that any fee reduction probably means that the scope of work is being reduced, methodological corners are being cut or junior inexperienced staff are being used (in place of the experienced experts listed in ordered to win the job). Accordingly most practitioners interviewed regarded certain ‘rules of the game’ as ethical principles, including scope of practice (non-misrepresentation of expertise) and avoidance of the various ways by which consultants may unfairly compete with colleagues.

6.10 Discussion and Reflections Summary

In summary, interviews with seasoned environmental practitioners reveal a range of formative influences on their ethical principles and environmental values, and indicate five professional identity perspectives. These differences, as well as the various roles and sectors of environmental practice, contribute to the range of ethical principles and approaches to decision-making expressed by practitioners. The model of professional environmental practice proposed in this thesis suggests that ethical principles and role identities (together with qualifications and capabilities) influence the job-related and practice-related outcomes of practice, and also reputation and professional contributions. The ethical obligations and integrity principles of
professional environmental practitioners, emerging from interviews and a review of ethics literature in this thesis, have four primary responsibilities at their core:

- Responsibilities to the client
- Responsibilities to truth
- Responsibilities to reduce environmental harm
- Responsibilities to one’s own conscience and highest moral principles

Analysis of data and the literature indicates that these four primary ethical responsibilities are equal in importance for the environmental profession, such that none overrides another. Accordingly, practitioners are obligated to ensure their practice balances and implements all four of these primary responsibilities.

A fifth responsibility, that of competitive fairness, also emerges from the data as an important ethical principle for private sector consultants concerned with obligations towards the profession and colleagues. However this research suggests that this principle is a ‘level playing field’ consideration (one of the ‘rules of the game’) rather than a moral obligation.

Also excluded from the list of four primary ethical responsibilities is the ‘categorical sustainability imperative’ proposed in this thesis (‘act only according to that maxim that, if your actions were to be adopted universally, the Earth’s environment would sustain human society and all forms of life indefinitely’). While this may be appropriate as a personal maxim for those committed to global environmental sustainability, opportunities are likely to arise only rarely where practitioners can apply it to professional practice situations.

Nevertheless, the practitioners interviewed for this study are committed to incremental steps and localised actions towards broad sustainability goals, through environmental harm reduction project-by-project, as expressed by one practitioner:

... I like to make a difference and influence good outcomes on projects – [that] is really why you’d choose this career.... making better outcomes in projects ... making it more sustainable (‘Cameron’).

This commitment to environmental harm reduction appears to be the main principle of professional ethics which distinguishes environmental practice from other professions.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS
“Are we professionals in the trade that is the environmental industry, or are we scientists employed as the market allows – as consultants, agents, witnesses, educators, NGO officers? This ethic raises a second one, that of simply knowing who we are and where one’s allegiance lies” (Cuba 2004)

7.1 Introduction

The growing professionalisation of environmental practice has received little academic attention to date, and requires more attention by researchers, regulatory agencies, professional associations and industry. This study has been a qualitative investigation of the ethical principles of environmental professionals in Australia and New Zealand, using interpretive phenomenological analysis of semi-structured interviews with 14 practitioners each with more than 20 years experience, to explore the role of ethics in their practices.

This research aimed to clarify ethical issues associated with professional practice in the environmental field, where practitioners often face ethical dilemmas and tensions associated with adversarial roles. The environmental profession is relatively young and diverse, and at an early stage in its process of professionalisation, in which shared values and ethics are still developing. At this stage of growth of the profession, research into the ethics of professional environmental practice is highly relevant to the Environment Institute of Australia and New Zealand (EIANZ) and the credibility and standing of the profession generally.

Although this study sampled only a small number of seasoned practitioners (as is appropriate for phenomenological research), the results indicate that their ethical principles and implied pledge of service are broadly similar to other science-based professions. Honesty, competence, impartiality (or at least personal disinterestedness) and using expertise to help others are the basis of the trust relationship between clients and professionals. In environmental fields, trust between regulatory agencies and practitioners is also based on professional ethics.

This preliminary study also indicated a general consistency of ethical principles across the various sectors of environmental practice, viz. private consultancy, public sector regulatory and resources agencies, academia and research, non-government organisations (NGOs) and the community sector. Each sector has a broadly similar ‘moral compass’, including a general commitment to reducing environmental harm, but may prioritise ethical obligations differently. If these and other differences are validated by further research (see Section 7.7 below), they have implications for practitioners
moving between sectors throughout their careers, for codes of ethics and dealing with complaints, and also for teaching.

### 7.2 Professional Identity and Ethical Principles

The analysis undertaken in this study indicates that some underlying moral principles, as well as beliefs and values regarding science and the environment, are formed prior to career selection, influenced by parents, teachers and childhood experiences. Later influences on practitioners’ ethical practice principles, at university or in early careers, may include professional and environmental ethics as incorporated into codes of practice of professional institutes and employers (corporate and public sector), as illustrated diagrammatically in the integrated model Figure 7 in Chapter 6. This model also indicates the influence of ethical theory in both professional and environmental ethics. In general, this study concludes that the principles of professional ethics are more codified and shared as group norms, whereas selective elements of environmental ethics are adopted as practice principles, based on personal values.

Other influences also shown conceptually in this model are qualifications and skills, and identity. This research identified five broad ‘professional identity perspectives’ (objective scientists, problem-solvers, balance-seekers, environmental advocates and practice managers) which generally influence the priorities accorded by each practitioner to various ethical principles, depending on the situation and the role of the practitioner in each case.

The ethical principles described by interviewees as applying to their own practices, and reinforced by what they would advise junior professionals (and also reinforced conversely by what they consider as unethical practice), are described in Chapter 6 as contributing to professional reputation. In general these are consistent with a positivist problem-solving epistemology of practice (‘technical rationality’), whereby professionals apply theory and skills to solve problems. These principles are discussed in more detail in 7.3 below.

### 7.3 What is Ethical?

There is broad agreement among seasoned practitioners that environmental practice has an ethical dimension, even in specialised technical fields where professional obligations are mainly scientific rigour and honesty. This ethical dimension is a factor in considering the various fields and disciplines of environmental practice as
a profession, although the criteria for selection of interviewees for this research sampled only practitioners who consider themselves to be professionals. Professional identity is important to these practitioners (individually and as corporate entities), especially in the private sector where ethical principles are challenged by market forces and productisation of expertise. In a commercial and competitive context, the concept of professionalism and associated ethical principles represent a bulwark against client pressure, and a line in the sand which practitioners are loathe to cross, lest they be regarded in the marketplace (and perceive themselves) as ‘unprofessional’. This is strongly linked to the agreed importance of professional reputation, both in relation to technical competence and ethical integrity. The central role of professional identity is also associated with virtue ethics, in that ethical practice is not only what you do but also what you are: being ethical is acting in accordance with one’s truest principles.

The ethical responsibilities of practitioners comprise two broad elements, those of professional ethics and environmental ethics. On one hand, environmental ethics express one’s personal values towards the environment, whereas professional ethics are shared (group) expressions of obligations towards one’s client. In principle, ethical professionals are obliged to ‘do the right thing’ by their clients, the public interest and the environment, but in practice these elements may compete and give rise to genuine ethical dilemmas.

The environment profession must balance the competing obligations of professional and environmental ethics. Most environmental professionals are engaged, directly or indirectly, to assess, implement or regulate the effects of development activities on the environment. The demand for professional expertise in environmental disciplines and the very existence of environmental practice as a profession, are largely driven by the scale and pace of human activities that degrade the natural environment to varying degrees. Accordingly, this study has found that most environmental professionals, whether consultants or regulators, deal with a tension between ‘best for proponent’ and ‘best for environment’ outcomes.

Given the need for each practitioner to consider the moral obligations of professional and environmental ethics in each situation, there is no one ‘right’ way to practice in an ethical manner. A practitioner may be influenced more by the obligations of professional ethics, and perform an assigned role to the best of his or her professional capabilities, irrespective of the ‘worthiness’ of a client or project, without revealing or proselytising any personal environmental values. Alternatively, a practitioner whose
moral principles are more aligned with environmental ethics may choose to use their skills and capabilities to benefit the environment and advocate for the common good, in accordance with (and openly declaring) their personal ‘green’ values. It is likely that professional identity perspective affects the weighting of these competing principles in ethical decision-making. A practitioner with an ‘objective-scientist’ identity perspective may generally choose to give more weight to professional ethics than would (say) someone with an ‘environmental-advocate’ perspective. This research indicates that ethical practitioners can take either path, and can still be guided by valid moral principles.

However, the process of ethical decision-making, from recognising an ethical issue (usually intuitive, in the first instance) through to choosing a course of action, is situation-dependent and practitioners are unlikely to be consistent under all circumstances. Even if an individual practitioner identifies the ethical issues of an emerging situation, he or she may not always choose to make an ethical choice, and such choices may not be consistently aligned with either professional or environmental ethics, or even with their own professional identity perspective. The weighting afforded to professional or environmental ethics may vary according to situation, role, the decision-scope (as discussed in Chapter 2) and the stakeholders involved. Nevertheless, when decisions have ethical dimensions, environmental practitioners have a professional obligation to take these into consideration and address issues appropriately, including ethical conversations and decision-making.

The above three approaches (consistent application of either professional or environmental ethics, or applying principles which best fit the role and situation) can each find validation in ethical theories, and all can be considered equally moral, provided the choices are based on one’s ethical principles. Another important proviso is that the basis of trust between practitioner and client is maintained by transparency, such that all ‘audiences’ of professional advice (clients, junior staff, colleagues, regulators, courts and the community) are aware of the practitioner’s environmental values and ethical framework that may affect decisions and advice. Several practitioners reported relying on principles of transparency and honesty to balance the competing obligations of professional and environmental ethics. These principles are particularly important with respect to advocacy, in that ethical practitioners will act as an advocate only with respect to opinions that they honestly hold, and can support with evidence, rather than arguing a case for their clients.
In general, the multi-pronged approach adopted in semi-structured interview questions, whereby practitioners were asked to identify their own ethical principles, what they would advise early career practitioners, and what they consider to be unethical practice, yielded agreement on the principles listed in 7.2 below. However, one significant discrepancy emerged, with respect to the balance between environmental and professional ethics. While several seasoned practitioners revealed that they choose not to work for or in certain industries (for example, coal mining or coal seam gas extraction) because it would conflict with their environmental values, none stated or implied that they judge other practitioners as unethical if they practice in those areas. Values-driven practitioners may draw ethical ‘lines in the sand’ with respect to their own practices, based on their personal environmental values, but there appears to be no criticism, at least not from this particular cohort of practitioners, of professional colleagues who make a different decision. While this difference between what practitioners personally consider ethical (for themselves) and what they consider unethical (in others) may be partly a reticence on the part of professionals to criticise colleagues, it also reinforces the distinction between professional ethics on one hand as a set of shared (group) principles and environmental ethics on the other as a set of personal values.

7.4 Ethics for Environmental Practitioners

Interviews with seasoned practitioners indicate that the following represent a framework of ethical principles for environmental professionals:

- **Professional Integrity**: honesty and truth-telling, impartiality and personal disinterestedness (and objectivity where appropriate), accountability and taking responsibility for one’s actions, decisions and mistakes, information use and transparency, personal virtues of resolve and persistence, contribution to community and ideals of minimising harm to the environment;

- **Technical integrity**: accuracy, rigour, quality, competence and doing a ‘good job’, basing opinions on evidence, keeping up to date (professional development), consideration of broad environmental context and multi-disciplinary collaboration;

- **Process integrity**: communication, consultation, respect and influence, seeking balance, fairness and sustainability in outcomes, practice wisdom, prudent judgement, and effective management;
- **Environmental ethics**: An appropriate unifying ethical principle which takes into account is required which is more meaningful than mere harm-reduction but includes obligations to use one’s professional expertise to protect and enhance the environment and help ensure sustainability. The following categorical sustainability imperative is suggested in Chapter 6: *act only according to that maxim that, if your actions were to be adopted universally, the Earth’s environment would sustain human society and all forms of life indefinitely*; although application of this maxim to environmental practice would require careful consideration of personal values in relation to one’s professional advisory role;

- **Ethical decision-making**: issue recognition, consideration of options and consequences, transparency and avoidance of conflicts of interest, open conversations and ‘bringing others with you’ in principle-based decisions; and

- **Competitive fairness**: ‘level playing field’ considerations regarding fees, use of inexperienced personnel and methodology (not cutting corners) and scope of practice (non-misrepresentation of expertise).

Many of the above principles combine to engender trust in a professional’s ‘pledge of service’, whether explicit or tacit. The integrity principles relating to honesty, personal disinterestedness and ethical decision-making are common to most professions, as are technical competence, accuracy and all the other attributes of ‘doing a good job’, which are important to environmental practitioners. Also important is truth-telling (‘telling it like it is’) which goes beyond honesty and even beyond truthfulness.

The principle of reducing harm to the environment encompasses the general moral obligations of non-maleficence (doing no harm), but in a manner particularly relevant to environmental management where causing deliberate targeted harm may be appropriate, for example in culling foxes and other feral pests as part of ecosystem restoration. However, even if the ‘do no harm’ principle is specifically linked to environmental effects, ethical decisions regarding trade-offs will still be required, such as balancing loss of habitat in order to achieve a more compact energy-efficient urban form. When dealing with complex trade-offs, especially where expert opinions are involved, ethical practitioners may need to define their bottom-line (non-negotiable) acceptability limits to the ‘reducing environment harm’ principle. Examples of unacceptable environmental
trade-offs may be extinctions at regional or national scale, and irreversible degradation at natural systems level.

The principle of transparency is listed above in relation to both professional and process integrity, as it covers ‘honest upfrontness’ about personal environmental values as well as methodology, data and scientific repeatability. The use of transparency was cited by several interviewees as a means of reconciling professional ethics and personal environmental values, and also (not necessarily by the same practitioners) as a way to facilitate ethical conversations and bring others along on the journey to discussing moral obligations.

The practitioners interviewed express divergent opinions on advocacy, impartiality and activism and on whistle-blowing exceptions to the general principle of client confidentiality. They also differed with respect to the value and effectiveness of institute codes of ethics in setting ethical benchmarks for the profession, compared to other arbiters of ethical standards such as peer review, agency checking, courtroom scrutiny and marketplace reputation.

A recurring theme from these environmental practitioner interviews is the professional responsibility to persuade others, particularly clients and development proponents, of ‘environment-friendly’ measures and improved outcomes. This is related to another common theme, that of knowing where and when to draw the line and hold firm, and when to ‘back off’. Conceptually, this is represented in Chapter 6 Figure 8 as an ethical acceptability spectrum, particularly appropriate in multi-disciplinary team situations, common in environmental practice. One implication of this spectrum is that a practitioner’s persuasive capabilities and assertiveness may affect the degree and frequency he or she is faced with ethical problems, when a decision is required whether or not to accept a compromise ‘good enough’ (‘green-ish) outcome. Training and practice in hypothetical scenarios can also assist by clarifying one’s position on various professional and environmental ethical principles and anticipating situations where an ethical decision may be required. An appropriate moral response to an emerging situation, or an uncomfortable compromise, can be more readily formulated if one has practiced similar situations beforehand, developed a position (‘What would I do if …?’), and anticipated one’s response. Similarly, regular conversations and consideration of the ethical choices involved in even small everyday decisions and situations can help a practitioner and professional teams prepare the occasional major ethical dilemma or conflict of interest.
7.5 Implications for the Profession

Professions generally are facing many challenges - from widespread distrust of science, from hybridisation of professional and managerial roles, from productisation of expertise and from the claims of professional status from a myriad of technical disciplines. In this context, emerging professions must earn and maintain moral legitimacy and the trust of both clients and the community. For the environment profession, this requires a legitimating ethic, addressing not only what environmental practitioners do (what distinctive expert services are being offered?) but also clarity regarding professional responsibilities (not just to the client’s interests, but also towards the environment) and the community benefits provided by the profession. In order to claim professional status, the services and responsibilities must be more than regulatory compliance, even though a high level of technical expertise is often needed to interpret and implement legislated requirements and conditions. The expertise of the environment profession lies in understanding and analysing complex environmental problems associated with client needs, knowing what is best or optimal for the environment and in recommending measures or trade-offs to reduce environmental harm which are compatible with client interests.

While each practitioner needs to determine their own balance between professional ethics and environmental ethics, this study highlights that it would be helpful for the professional institutes such as EIANZ to identify the common ground between environmental ethics and professional ethics. Findings from this preliminary research also indicate the need for further surveys of ethical principles among practitioners in all sectors of environmental practice, to better align institute ethical codes with the experience and practice wisdom of practitioners, the requirements of agencies and courts, and community expectations. An ethical ‘mapping’ exercise of this nature would assist graduates and early career practitioners in their sometimes-difficult transition into environmental practice. One of the most important roles of a professional institute is to ‘professionalise’ each incoming generation of practitioners, including assistance with ethical principles, decision-making guidelines and mentoring. ‘Danny’s’ advice to young professionals, to wisely choose one’s first employers on the basis of their ethical track-record, is relevant in this respect.

This study also indicates that professional institutes could usefully correlate and benchmark their codes of ethics (and ethical training) with those of related professions,
and provide practitioners with clear guidelines for ethical decision-making, preferably with input from regulatory agencies and ethics NGOs such as Transparency International. Such guidelines could help identify conflicts of interest, transparency regarding environmental values which may affect professional advice, ethical obligations over and above those addressed in project scope and compliance documents, case studies and practice notes. Collaboration with regulatory agencies is especially suggested with respect to peer review, as the additional costs involved in independent external reviews are rarely agreed to between consultants and clients unless they are an agency requirement. An additional service which could be considered by institutes such as EIANZ, to reinforce their reputation as representing high standards of ethical practice, is to appoint a panel of senior practitioners available for external independent peer reviews, on request from practitioners, clients or regulators. However, such reviews (and the panel) would have greater credibility and moral influence on environmental practice if ethical breaches could be identified and sanctions recommended, as an outcome of the peer review process, rather than waiting for a third party to lodge specific complaints through institute procedures.

The credibility of the environmental profession could also be enhanced by greater transparency in disclaimers fronting reports and advice, not only with respect to the qualifications, certifications and experience of the individual professionals responsible for the data and opinions therein, but also regarding their association with or independence from project proponents. The same principle should also be considered by professional institutes with respect to conference papers, whereby a declaration of conflicts of interest would help organisers to decide whether to accept or reject submitted abstracts. With respect to institute conferences, credibility could be improved by selection criteria emphasising professional issues and avoiding self-promotion of the speaker(s) or publicity for client projects and implied endorsement of sponsor environmental credentials.

7.6 Implications for Education and Training

The ethical issues which arise in environmental practice, and the expectations of colleagues, agencies and the community, as discussed in this thesis, highlight that those entering this profession (especially those graduating in accredited courses) are exposed to ethical theory and decision-making during their training, and that such education includes both environmental ethics and professional ethics. Such programs can provide
the basis language of ethics and a framework for identifying ethical problems, an understanding the overlap and interplay between moral obligations and personal values, and an appreciation of the value-base and ethical principles of science and related professions. For those early career professionals who enter the broad environment profession from non-accredited courses, or who have no prior exposure to ethics training, relevant professional institutes and training providers (including universities) have an opportunity to make such training available to the profession. In Australia and New Zealand, certification as a CEnvP requires referee statements regarding ethical practice as well as an interview that explores candidate responses to hypothetical ethical scenarios. However, environmental associations and certification schemes should also consider mandatory pre-admission training in ethics for those applicants who have not had prior exposure at a university.

Ethical mentoring by senior practitioners is also essential post-graduation, and during work experience, as the first few years of practice is formative with respect to dealing with ethical conflicts. Mentoring is one of the benefits of belonging to a professional institute, in that senior members are expected to make themselves available to assist early career professionals and guide their professional development. Ideally, the mentor-mentee relationship should be confidential and encourage review of ethical issues that arise in the workplace or elsewhere, as well as addressing technical skills, job opportunities and career paths.

In both teaching and mentoring, the importance of both professional ethics and environmental ethics (and their differences) require explanation and exploration, especially in relation to personal environmental values. Ethical conversations with early career practitioners and hypothetical scenario training can provide opportunities to critically reflect on their values and professional responsibilities, and understand where and under what circumstances they might draw the line. Without such training, practitioners can find themselves unprepared for the ethical decisions in professional practice, such as those involved in judging the acceptability or otherwise of compromises and trade-offs, as discussed in Chapter 6, Figure 8.

This research has highlighted the importance of persuasive capabilities in the skillset of ethical practitioners, in that the achieving environmentally acceptable outcomes (and avoiding having to accept ‘green-ish’ compromises) often depends on one’s ability to managing expectations and persuade others, be it clients, other multi-disciplinary team members, regulators and the community. A persuasive practitioner
who can successfully prosecute an argument based on moral principles is likely to face fewer ethical dilemmas in practice than one who is repeatedly faced with unacceptable compromises. For this reason, ethics education could include communication, rational argument and debate techniques to equip future environmental professionals with training in how to influence others in team situations.

7.7 Implications for Further Research

The preliminary findings of this research require validation or amendment by future surveys of environmental professionals, both qualitative and quantitative, with respect to differences between ethical principles of the various sectors of practice. Given that these interviews of 14 seasoned practitioners sampled only a particular cohort of professionals in Australia and New Zealand, further investigation of other age groups within the profession is also recommended, and in different countries. It is considered likely that differences between generations will emerge, especially in relation to the balance sought and achieved between professional and environmental ethics, among those practitioners who have developed their careers under the shadow of climate change threats. Differences may also emerge if interview respondents include those in various professional institutes (not just EIANZ) and those who may be ‘non-joiners’. Research of this nature may also indicate whether or not practitioners undergo shifts in their ethical priorities and what they consider acceptable or unacceptable ethically, over the course of their careers.

Of particular interest for future investigation are the preliminary findings in relation to professional identity perspectives among environmental practitioners. While five types of professional identity perspectives have been identified in this study, these need to be confirmed or amended and probably extended by further interviews, preferably using similar interpretive phenomenological analysis techniques. Further research is needed into the degree to which these identity perspectives affect ethical decision-making.

In parallel to these future studies into practitioner perceptions of their own ethical principles and practices, clients and regulatory agencies should also be surveyed regarding their perceptions and expectations of ethical environmental practice. Establishing and maintaining trust in the environmental profession requires common ground between the profession, regulatory agencies and clients regarding the ethical principles of environmental practice.
7.8 In Conclusion

The systems and processes involved in identifying and managing the natural and social environment, and regulating the impacts of development so as to reduce environmental harm, have grown over the past 50 years. The associated legislations and regulations have created a number of industries including the need for environmental expertise and advice. The field of environmental practice is emerging as a profession at a time when environmental problems are increasingly complex, intransigent and divisive, and professionalism per se is under challenge, not only in Australia and New Zealand but worldwide.

The most effective response to these challenges by the profession and the most useful service it can provide to the community generally is to enhance the trustworthiness of practitioners. Better science, increased government regulation, a more transparent project approval system and a well-informed community would all help society make better decisions with respect to development and environmental management, but documentation and on-the-ground implementation rely on the expertise and honesty of environmental practitioners to assess and advise on what’s best for the environment. An ethical profession, trusted by all parties, is critical to effective processes for managing our environment and achieving more sustainable development.

This research concludes that personal integrity, fairness and ethical decision-making are the fundamental components of ethical professional practice. However, environmental professionals may practice in an ethical manner by prioritising either professional ethics or environmental ethics, or balance the two, provided the value base of their technical advice, decisions and compromise trade-offs is transparent. They may also function in one or more roles or sectors and may adopt one of several professional identity perspectives, but ethical principles remain a cornerstone of professional obligations in all roles, and are the basis of trust and ‘pledge of service’ on which professional relationships depend.

The opportunity to explore ethical principles of practice with reflective environmental practitioners in this study has been an insightful journey. It has been particularly encouraging, to me as an environmental profession ‘insider’, to confirm that practitioners share core principles of ethics and a commitment to reduce environmental harm. As the interview series progressed, it became clear that practitioners construct meaning and ethical principles in their practices in different ways, which later data
analysis identified as ‘professional identity perspectives’. During the course of this research, my early tendency to judge the ethics of one practitioner against those of others, for example by thinking ‘your practice examples would probably be considered unethical by your colleagues’, declined as these differences emerged. The range of ethical principles developed by this cohort of experienced practitioners, and their approaches to ethical decision-making, are all likely to be valuable guideposts for graduates and young professionals struggling to reconcile environmental values with professional practice.
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Appendix A: Semi-Structured Interview Questions

APPENDIX A:

SEMI-STRUCTURED INTERVIEW QUESTIONS
PhD Research (The Ethics of Professional Environmental Practice) Questions v.6

Research Questions (and dot point prompts for discussion)

NB: “Practice” includes field, area of expertise, role, sector etc.

1. Firstly, can you tell me about your practice:
   • Can you describe your general area of environmental practice?
   • Do you consider yourself an environmental professional? For what reasons?
   • Do you belong to a professional institute / association or certification / registration scheme? Which ones?

2. What are your main motivations for practicing in this area?
   • Why or how have you chosen this career? If you have a passion for this area of work, what is the source of that passion?

3. How would you describe your personal values regarding the environment, and regarding professional conduct??
   • What is the source of those values?
   • How have these values informed your sense of ‘right’ and ‘wrong’ regarding professional environmental practice?

4. Are ethical considerations important or frequent in your area of professional practice?
   • Have these changed over the course of your career?
   • In your area of practice, are ethical standards subject to scrutiny by others?
   • Who or what body is the arbiter of what is ethical, and what criteria would be applied?
   • Do you discuss ethical considerations in your practice, and with whom?
   • How do you assess the ethical standards of other environmental practitioners? What are your criteria for judging others?

In responding to Questions 3 – 6, please consider any ‘critical incidents’ which have shaped your approach to ethics in practice, and/or which could offer case study guidance to others. These may be ethical dilemmas which you recall (would you resolve these differently now?), issues raised by other people or lessons.
5. **How do you deal with ethical issues?**
   - Have you had any training or mentoring in ethics? How do you recognise an ethical dilemma? What are the ‘signals’ which indicate that there may be an ethical issue?
   - What are your guiding principles and/or codes which you rely upon to resolve an ethical dilemma? Do you have some ‘rules of thumb’ which you have found to be useful?
   - What is the source of these principles/codes?
   - Have these changed over the course of your career in the environment profession? If so how?
   - How useful have you found Codes of Ethics in your practice? Have you adapted standard Code(s) to suit your practice, have you found some clauses more important/useful than others, and are there clauses which you consider to be impractical or unworkable?

6. **What would you advise a young environmental professional regarding ethical practice?**
   - Have you supervised or mentored early career professionals?
   - What are the ethical tensions are they likely to encounter?
   - How can they resolve the tension (if any) between being passionate about the environment, and being a ‘dispassionate’ professional?
   - What resources should they call upon?
   - How should they recognise an ethical dilemma?
   - What principles, codes or ‘rules of thumb’ would you recommend?

Alan Chenoweth  12/10/17
S2766392
Appendix B: Information for Interview Participants

APPENDIX B:
INFORMATION FOR INTERVIEW PARTICIPANTS

• Letter of Invitation to Participants
  • Information Sheet
  • Informed Consent Form
Dear **

**Student Research: The Ethics of Professional Environmental Practice**

I am currently undertaking PhD research into the Ethics of Professional Environmental Practice, and propose conducting additional interviews with senior environmental practitioners in Australia and New Zealand (in a range of sectors and disciplines) in early 2018. A semi-structured interview format has been prepared and trialled in pilot interviews, and I would appreciate your participation to explore these issues, and to discuss a personal ethical decision case of your choice.

If you agree, and a mutually convenient time and place can be arranged, I would like to interview you for up to 90 minutes duration, and attach an Information Sheet and Informed Consent form for your consideration and signature. I draw your attention in particular to the “Risks to You” and the “Your Confidentiality” sections of the Information Sheet, and consider that adequate safeguards have incorporated in the proposed interview, transcription and data storage procedures. However if you have any concerns in this regard, please contact me or my research supervisors Professor Low Choy or Associate Professor McAuliffe, as listed on the attached Information Sheet.

I will be in ** on ***, and plan to interview a number of experienced *** practitioners. If you kindly agree to participate, and if one of those days is convenient, I will make further contact within a week to arrange a suitable date and time.

Thank you for your cooperation.

Yours faithfully

Alan Chenoweth
The Ethics of Professional Environmental Practice
INFORMATION SHEET (Interview Participants)

Who is conducting the research

Senior Investigator
Prof Darryl Low Choy
Griffith School of Environment (Nathan campus)
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Co-supervisor:
Prof Donna McAuliffe
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Student Researcher:
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Griffith School of Environment
0418 780755
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Why is the research being conducted?
This research will examine the role of ethics in the relatively young and developing profession of environmental practice, by interviewing senior practitioners in various specialist disciplines and areas of practice in Australia and New Zealand regarding their understanding of professional ethics, and how their ethical principles have developed and have influenced their practices. The interview responses will be analysed in order to provide guidance for young and early career practitioners, in a profession with many ethical challenges. The research question is "How do leading environmental practitioners construct meaning for their practices with respect to ethical principles and codes."

What you will be asked to do
You are invited to participate in a semi-structured one-on-one interview by the student researcher, including discussion of a personal ethical decision case of your choice. The interview will be of up to 2 hours, with opportunity for follow-up extension by mutual consent. The interview will be recorded then transcribed and sent back to you for checking, prior to analysis for thematic content.

The basis by which participants will be selected or screened
You are among a group of senior experienced* professionals practicing in environmental fields in Australia and New Zealand, selected by searches of the public directory of the Certified Environmental Practitioner scheme or company/agency profiles accessed via internet searches. As far as possible, selected invitees include a range of geographic areas of practice, and representation across gender, discipline and sector.

* ‘experienced’ means generally >15 years experience (preferred), but in order to sample a range of disciplines and sectors, practitioners with >10 years experience may be included.

The expected benefits of the research
This research aims to clarify ethical issues associated with professional practice in the environmental field, where practitioners face ethical dilemmas and tensions. The environmental profession is relatively young and diverse, and at an early stage in its historical process of professionalisation, in which shared values and ethics are still developing. This research will contribute to improving the standards of environmental practice and the credibility of the profession, by helping to develop a robust set of ethical principles applicable across various jurisdictions, which combines codes with real life practical experience and guidelines for ethical decision-making. The outcomes are also intended to help guide young and early career professionals in both the private and public sectors.

Risks to you
Participation in this research involves minimal risk to you. Confidentiality of participant responses, and of the identities of nominated practitioners, will be assured (see below) thereby minimising risks associated with disclosure of information and opinions regarding your current and past environmental practice, and/or instances of unreported environmental harm or other actions or omissions contrary to regulations. You are advised that no information should be conveyed during interviews which could lead to legal action or liability.

Your confidentiality
All information collected is confidential and will not be disclosed to third parties without your consent. No individual will be identified (by name or by position and circumstances) in any written material about the project without specific written consent, and identifying details of individuals will not be kept with the audio recordings or transcripts. Data from interviews, and from the participant nomination/selection process, will be stored in a secure database for the period of research, but will coded (eg. by pseudonyms) to protect confidentiality. Interviews will be transcribed and returned to participants for checking and confirmation of accuracy, and for follow-up interviews if agreed, so the researcher alone will maintain the information linking the coded names to individual participants. Following interviews, one copy of each audiotape will be made and securely stored, prior to transcription. Both the original audiotapes and the secure copy of recorded interviews will be erased after transcription and checking. Once the research is completed, all personal data will be destroyed without copying. Until their destruction, the audio recordings and personal details will be available only to the research team.

The student researcher is currently Chair of the Certified Environmental
Practitioner (CEnvP) Scheme Board, which approves applications for certification, but undertakes to abstain from voting or comment on applications from any research participant or nominee. Board members regularly declare conflicts of interest with respect to applicants known to them, or for whom they have been part of interview panels, and abstain from voting or comment on such applicants.

**Your participation is voluntary**
Your participation is voluntary, and you can choose to withdraw from the study at any time before or after interviews. In addition, your decision to participate will not be communicated to any other person, organisation or certification / registration process.

**Questions / further information**
For further information regarding this research project, please contact Professor Donna McAuliffe (see contact details above).

**The ethical conduct of this research**
Griffith University conducts research in accordance with the *National Statement on Ethical Conduct in Human Research*. Any concerns or complaints about the ethical conduct of the research project should be directed to the Manager, Research Ethics on 3735 5585 or research-ethics@griffith.edu.au.

**Feedback to you**
In addition to sending transcripts of interviews back to you for checking and confirmation of accuracy, a summary of the thematic analysis will be sent to all participants on completion of the research. If you wish, you may also request that a link to the final thesis (once accepted) be sent to you by e-mail.

**Privacy Statement**
The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes, but your anonymity will at all times be safeguarded. For further information, please consult Griffith university’s Privacy Plan at www.gu.edu.au/ua/aa/vc/pp or telephone 3735 5585.
The Ethics of Professional Environmental Practice
Informed Consent Form (Interview Participants)

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By signing below, I confirm that I have read and understood the information package and have had any questions answered to my satisfaction. In particular I understand the risks involved and am aware that:

- My involvement in this research will include participation in an interview
- There will be limited direct benefit to me from my participation in this research except for the opportunity to share views related to professional environmental practice
- My participation in this research is voluntary
- I may receive a small gift in thanks for my time in participating
- If I have any additional questions I can contact the research team
- I am free to withdraw at any time, without comment or penalty; and
- I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee on 3735 5585 (or research-ethics@griffith.edu.au) if I have any concerns about the ethical conduct of the project.

I agree to participate in the project and to be interviewed by a member of the research team:

Participant’s Name .................................................................
Signature .................................................................
Date .................................................................
Appendix C: EIANZ Code of Ethics and Professional Conduct (2012)
CODE OF ETHICS AND PROFESSIONAL CONDUCT
ADOPTED AT THE EIANZ ANNUAL GENERAL MEETING, 24 OCTOBER 2012

Compliance with this Code of Ethics and Professional Conduct is central to sound environmental practice and the credibility of the profession, and is required for persons who are members of the EIANZ and also for Certified Environmental Practitioners.

Environmental practitioners are committed to practice in accordance with this Code of Ethics and Professional Conduct, and accept personal accountability for professional conduct. This Code commits environmental practitioners to:

PROMOTE ENVIRONMENTAL PRINCIPLES
(a) Advocate the integrity of the natural environment and the health, safety and welfare of the human community and future generations as being central to environmental practice;
(b) Advocate the protection of environmental values and the mitigation of environmental harm, based on objective scientific and technical knowledge;
(c) Advocate and undertake environmental practice in accordance with principles of environmental stewardship, resilience and sustainability, with a view to achieving no net loss of environmental values and preferably a net gain, and to an appropriate standard.

DEMONSTRATE INTEGRITY
(a) Be honest and trustworthy, avoid misrepresentation or obfuscation, distinguish between fact and opinion, and state opinions which are honestly held;
(b) Respect obligations of confidentiality and privacy;
(c) Be objective, seek peer review and other quality assurance of work as appropriate, and accept as well as give honest and fair criticism when required;
(d) Avoid or manage conflicts of interest, and make all relevant parties aware when there is such a conflict;

REPRESENT AND PROMOTE THE PROFESSION
(a) Promote and provide leadership in the adoption of high standards of environmental practice;
(b) Contribute to the development and maintenance of knowledge about environmental practice and standards of professional competence;
(c) Support others in their development as environmental practitioners;
(d) Do not advertise or represent services, or those of another, in a manner that may bring discredit to the profession.

PRACTICE COMPETENTLY
(a) Provide services at an appropriate standard as required to achieve or foster optimal environmental outcomes;
(b) Only practice and offer services in functional areas and specialisations in which one is appropriately qualified, experienced and competent;
(c) Comply with all applicable governing laws and statutory requirements, and actively discourage non-compliance by others;
(d) Promote the involvement of all stakeholders and the community in decisions and processes that may impact on environmental values;
(e) Respect the contribution of other professionals and collaborate in multi-disciplinary approaches;
(f) Be diligent in practice, providing accurate, up-to-date, objective, impartial and unbiased advice;
(g) Acknowledge data and information sourced from others, and be accountable for data collected, analyses performed and conclusions drawn or plans developed as part of an assignment;
(h) Be prepared to explain work and conclusions drawn, and provide the evidence on which the work is based;
(i) Continuously update and develop skills through relevant professional development as a basis for competent practice.