

Submission
No 26

**INQUIRY INTO BIODIVERSITY CONSERVATION
AMENDMENT (BIODIVERSITY OFFSETS SCHEME) BILL
2024**

Organisation: The Ecological Consultants Association of NSW
Date Received: 6 September 2024

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ECOLOGICAL CONSULTANTS ASSOCIATION of NSW Inc.

6th September 2024

The Director

Portfolio Committee 7

Parliament House, Macquarie Street

SYDNEY NSW 2000

Ecological Consultants Association of New South Wales submission to the inquiry into the Biodiversity Conservation Amendment (Biodiversity Offsets Scheme) Bill 2024

The Ecological Consultants Association of NSW (ECA) was established 25 years ago to represent practising ecological consultants in NSW. The organisation currently has over 200 members actively working within the industry, from sole traders and small businesses, to employees and owners of large corporations.

The ECA of NSW currently has two key comments:

1. There needs to be a genuine and representative industry consultation framework to better manage future changes to the biodiversity legislation and instruments.
2. Changes to the BC Act that enable the NSW Government to issue directions to accredited persons relating to the preparation and modification of biodiversity assessment reports is inappropriate and unethical.

Insufficient detail has been provided to assess the suitability of the Bill's proposed changes to the Biodiversity Conservation Act 2016 (BC Act). Instead, relevant details have been deferred to other documents (regulations or strategies) that are not yet released for comment. Until these documents are released, the adequacy of the proposed changes to the BC Act cannot be fully reviewed. The lack of transparency is inappropriate and a more detailed level of industry consultation is expected by those affected by the proposed changes (all stakeholders). As with the introduction of the BC Act in 2016, the current amendment looks to be repeating the mistake of being rushed through without adequate consultation with key stakeholders (particularly practitioners).

There needs to be a genuine and representative industry consultation framework to better manage future changes to the biodiversity legislation and instruments.

A survey investigating the extent and causes of workplace stress was distributed through the ECA of NSW membership and the organisation's social media platforms, achieving a representative 141 responses.

The results of the survey are indeed alarming and indicate an industry reaching crisis point. Among Accredited Assessors, 63% have considered leaving the industry in the last 5 years due to workplace stress. This is directly linked to the implementation of changes to the BAM and delivery of the BOS.

On the 22 August 2024, the ECA of NSW sent a letter to Penny Sharpe requesting an urgent meeting and no response has been received to date (see attached).

Changes to the BC Act to enable the NSW Government to issue directions to accredited persons regarding modification of their biodiversity assessment reports should not be permitted.

An object of this Bill is to amend the BC Act to reform the biodiversity offsets scheme and, in particular, to:

“enable the Environment Agency Head to issue directions to accredited persons relating to the preparation and modification of biodiversity assessment reports,”

This proposed objective of the Bill has been created under the false pretence that it is addressing a recommendation from the Independent Review of the BC Act (the Independent Review). However, this is not the case. The Independent Review did not recommend that the Environment Agency Head issue directions to accredited persons relating to the preparation and modification of biodiversity assessment reports.

In the NSW Government response to the Independent Review, it is stated that this proposed objective of the Bill was to address the following recommendations:

Recommendation 15: Set a requirement in the Act to publish reasons for approving serious and irreversible impacts and maintain a statutory register of these decisions. All areas over which the Minister for the Environment considers a project would cause a serious and irreversible impact should be added to the single spatial tool as a ‘no go’ area.

Recommendation 27: For certain government priority projects that give primacy to the environment:

- amend the Biodiversity Conservation Regulation 2017 to provide an option to enter an agreement with the Minister for the Environment to deliver an offset obligation in a way that provides certainty for biodiversity conservation, is aligned with a regional offset investment plan, delivers on-ground actions and generates credits on a like-for-like basis through entry into Biodiversity Stewardship Agreements, acquisition of land and conservation measures*
- require the Minister for the Environment to publish details of any such decision and publicly report on the outcomes achieved*

Recommendation 34: Set a requirement in the Act for the Environment Agency Head to maintain a public register of biodiversity credit obligations and how credit obligations are met.

Recommendation 35: Set a requirement in the Act that relevant decision makers must provide the information required for any new statutory registers created, such as for credit obligations, avoided lands and projects with serious and irreversible impacts. Provide support and guidance to local councils and other decision-makers to meet this reporting requirement.

Recommendation 36: Develop fit for purpose digital systems that allow for consistent, real time and automated information collection for all statutory registers.

It is not ethical to enable the NSW Government to effect amendments of biodiversity assessment reports written by experienced ecologists who have been accredited by the NSW Government to prepare those reports. Without any details on how this would work, the ECA of NSW foresee (based on current experience) that this could result in an inexperienced Government employee ordering an experienced ecologist to change survey or assessment findings based on differing views. This is likely to significantly increase the stress on ecologists.

In addition, such changes could also invalidate a legal defence in the Land and Environment Court, where the ecologist has the ultimate ability to demonstrate their facts are correct against the Department and Consent Authority. ECA members can provide examples of where Department advice has been proven wrong in terms of Case Law (such as the site definition of an Endangered Ecological Community only being defined by Bioregion and floristic composition and structure, and not by these factors in combination with site edaphics; e.g. alluvial soils), literature review and evidence collected by standardised techniques (including the BAM) from the site.

Experience by many of our members reflects personal opinions of some Department officers overriding legal, scientific and even Department policies/advice, including clear statements in the BAM itself. It is not in the public interest to grant the Department the legislative power to force an accredited assessor to change a report unless there is a clear and objective demonstration that the BAM or its associated published guidelines and policies are not abided. All other matters are reserved for the Land and Environment Court if the issue cannot be resolved between the accredited assessor, the Department and the Consent Authority.

To our earlier point, the ECA of NSW has not been consulted on this proposed change. Some relevant comments from the survey investigating the extent and causes of workplace stress are as follows:

“The Government should not force ecologists to revise BDARs [Biodiversity Development Assessment Reports] and BSSARs [Biodiversity Stewardship Site Assessment Report] if they don’t agree with the findings of the report. Ecologists need to be respected by government reviewers rather than treated poorly because their opinions differ from the dodgy databases created by the Government.” – Ecological consultant.

“The professional opinion of consulting ecologists (and even experts!) is constantly set aside in favour of the BAM-C [Biodiversity Assessment Method Credit Calculator] and the strict rules in which it operates. It creates unnecessary work, perverse outcomes and disillusionment amongst experienced ecologists in the industry.” – Ecological consultant.

“Make it clear and not as rigid in that there are known experts out there that have a better understanding of targeted species (and their surveys). If you want us onboard you need to give the trust to the assessor if they come up with a better option.” – Ecological consultant.

“Professional judgement is ignored or undervalued - more flexibility should be given to consultants in regards to survey effort or survey exclusion where applicable – BCD [Biodiversity & Conservation Division now Biodiversity, Conservation and Science] require justification for any variation to survey guidelines, however they want this based on peer reviewed information, when often some species have hardly any reviewed literature to back up justification because there is no information available. More professional judgement and justification needs to be given to consultants.” – Ecological consultant.



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ECA Administration

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20th August 2024

The Hon. Penny Sharpe, MLC

Minister for Climate Change, Minister for Energy, Minister for the Environment, and Minister for Heritage

52 Martin Place

SYDNEY NSW 2000

CC: Brendan Bruce - Deputy Secretary, Biodiversity Conservation & Science

David Gainsford - Deputy Secretary, Development Assessment and Sustainability - Department of Planning, Housing and Infrastructure

Mr James Griffin MP, Shadow Minister for Energy, Climate Change and Environment.

Dear Minister,

Re: Research Findings - ecological consulting industry in crisis with extreme levels of workplace stress and an unsustainable attrition rate.

The Ecological Consultants Association of NSW (ECA) was established 25 years ago to represent practising ecological consultants in NSW. The organisation currently has over 200 members actively working within the industry, from sole traders and small businesses, to employees and owners of large corporations.

Objects of the organisation include liaison with regulatory authorities and other bodies on matters relevant to the practice of ecological consultants in NSW. The organisation supports the development of guidelines and standards, has developed an accreditation scheme, and requires practising members to sign a Code of Conduct.

The ECA of NSW has been receiving concerning reports over the last year about the impact on consultant workplace stress and overall mental health by ongoing and frequent changes to instruments that underpin the NSW biodiversity legislation.

There are frequent updates without notice to ecological survey and assessment specifications set out in the NSW BioNet database, unexpected and often unannounced releases of updated or new procedures, and inconsistent imposition of new internal policies or requirements from Biodiversity Conservation and Science, Nature Markets and Offsets, and the Biodiversity Conservation Trust. These changes without formal notice are in addition to frequent lists of changes announced through monthly newsletters, emails, and webinars.

Anecdotally, the impacts of these changes raise concern about the ongoing ability of consultants to maintain a high work standard whilst meeting contractual obligations, and ultimately, are causing ecological consultants to re-consider their career path.

The ECA of NSW believe this to be an emerging issue that warrants attention, but before deciding on a course of action, sought to obtain a balanced understanding of the issue through a formal survey process, with assistance from a professional market researcher.

A survey investigating the extent and causes of workplace stress was distributed through the ECA of NSW membership and the organisation's social media platforms, achieving a representative 141 responses. 63% of the respondents are Accredited Assessors under the *NSW Biodiversity Conservation Act 2016*. 31% of respondents have more than 20 years of experience in the industry.

The results of the survey are indeed alarming and indicate an industry reaching crisis point.

The majority of respondents (91%) reported being stressed by the ongoing changes to survey and assessment processes, with 24% of these respondents saying they had sought help from a doctor to help manage their stress. Almost half of the respondents (48%) reported being very to extremely stressed.

Respondents reported a range of stress symptoms, with more than half feeling overwhelmed, dissatisfaction with work/life balance, fatigue, and experiencing sleep disturbance. 12% of respondents reported having panic attacks. The research found that the level of stress increased in line with the number of years of experience in the industry, and was higher amongst Accredited Assessors than those not accredited.

Of concern to the sustainability of the industry and ability of the industry to meet future demand for biodiversity assessment, 57% of respondents said they had considered leaving the industry in the last 5 years and 9% said they had left the industry. Respondents are also taking more time off work now to manage their stress than they were five years ago.

Among Accredited Assessors, 63% have considered leaving the industry in the last 5 years due to workplace stress.

The research also found a worrying proportion of respondents believe the ongoing changes are affecting the quality of assessment work (37%) and are negatively impacting on biodiversity outcomes (40%), with these factors contributing to consultant stress.

The research found that respondents believe the changes have significantly increased project expenditures (84%) and significantly delayed assessment and approval of developments (82%).

Several of the survey questions explored consultant opinion as to how changes could be better managed and implemented.

The research found a general consensus that more consultation with industry is required to ensure changes are practicable (87%), more notice is needed before changes are implemented (74%), and there needs to be protection for projects underway through savings provisions, such as the locking of legislative requirements upon commencement of a project rather than upon lodgement of an application (81%).

Attached are the full research findings report to this letter, and two case studies that illustrate how ongoing changes can affect individual projects.

The ECA of NSW requests an urgent meeting with yourself to discuss this critical issue.

The ECA of NSW demands a Government commitment to the development of a genuine and representative industry consultation framework to better manage future changes to the biodiversity legislation and instruments.

The framework must be transparent throughout the processes of consultation, decision-making, and implementation of changes. Consultation must engage across the entire industry (*ie* including field staff, project managers, Accredited Assessors, sole traders, small business, local Government, and corporations) to ensure changes can be applied effectively and consistently across the entire range of projects being assessed.

If no action is taken, NSW is at risk of:

- Rapid and unsustainable loss of experienced ecological consultants (*ie* those with more than 20 years of experience) from the industry. These consultants are relied upon for ensuring quality assessment work, supervising and managing projects, mentoring, and training new consultants.
- Reduction in the average quality of biodiversity assessment work across the industry.
- Poorer biodiversity outcomes and failure of the biodiversity legislation to meet its objectives.
- Substantial lengthening of assessment timeframes for all scales of development projects, from small private constructions to regionally significant housing and infrastructure projects.
- Increasing budget over-runs and substantially increased total costs on all scales of development projects.

The ECA of NSW is keen to work with Government for improved management of future changes.

We believe better change management can not only improve working conditions for ecological consultants, thus ensuring continuance of an effective and skilled industry, but also achieve improved and more consistent biodiversity outcomes.

We look forward to your response.

Kind Regards,

Rebecca Hogan
Vice President (outgoing President)
Ecological Consultants Association of NSW

Andrew Lothian
President (incoming President)
Ecological Consultants Association of NSW



RESEARCH FINDINGS

**Experiences with the changes that the NSW Government
makes to the ecological survey and assessment process
under the NSW Biodiversity Offsets Scheme**

Report prepared for Ecological Consultants
Association of New South Wales

Dani Smith
July 2024

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Executive Summary

The Ecological Consultants Association of New South Wales (ECA) sought to better understand whether the frequency of ongoing changes to the ecological survey and assessment process under the NSW Biodiversity Offsets Scheme is contributing to workplace stress for ecologists and consent authority assessors. This report presents the findings from this research.

The key research findings were as follows:

- 1. The changes that the NSW Government makes to the ecological survey and assessment process under the NSW Biodiversity Offsets Scheme caused stress amongst the majority of participants, often high levels of stress with varied symptoms, which resulted in many seeking help to manage the stress.**
 - The survey found that more than nine in ten (91%) participants felt stressed *to some extent* because of the changes. In particular, 20% felt *extremely stressed* and 28% felt *very stressed*.
 - For those currently working as ecological consultants, the vast majority (95%) were stressed *to some extent* because of the changes.
 - Of those currently working as consent authority assessors (n=21), 16 people (or 76%) said they were stressed *to some extent* because of the changes*.
 - The level of stress caused by the changes increased in line with years of experience. The level of stress was also higher amongst assessors accredited under the *NSW Biodiversity Conservation Act 2016* than those not accredited.
 - These participants reported various symptoms of stress, most commonly feeling overwhelmed (73%), dissatisfaction with work / life balance (66%), fatigue (58%) and sleep disturbance (55%).
 - Many of these participants said they had sought assistance to manage stress from the changes (44%), with 24% saying they had sought help from a doctor.
- 2. The changes caused stress for many reasons but mostly because they created uncertainty or confusion. Many also felt the changes caused stress because of the time spent reviewing them / keeping up to date, managing changes to expenditures and budgets, and time spent explaining changes to clients.**

* Take care when interpreting this result due to a small sample size.

-
- Of participants who felt stressed, three in four (76%) said that uncertainty or confusion caused the most stress.
 - Other common causes of most stress were time spent reviewing changes and keeping up to date (71%), managing changes to project expenditures and budgets (67%) and time spent explaining changes to clients (64%).
- 3. Stress caused by the changes led to many participants considering leaving the industry, while some said they had already left the industry. Others said they had taken time off work because of the stress.**
- Of participants who felt stressed because of the changes, more than one half (57%) said they had considered leaving the industry and 9% said they had left the industry.
 - Three in five (60%) ecological consultants who felt stressed because of the changes had considered leaving the industry.
 - Of the 16 consent authority assessors who had felt stressed because of the changes, 8 people (or 50%) had considered leaving the industry*.
 - Accredited Assessors who felt stressed because of the changes were more likely to have considered leaving the industry compared to those who were not accredited (63% vs 45%).
 - One in five (22%) participants who felt stressed because of the changes took more days off work compared to five years ago.
- 4. The impact that the changes had on project costs and timing of developments was concerning for most participants.**
- In the last five years, the majority of participants felt that the changes had significantly increased project expenditures (84%) and significantly delayed assessments and approval of developments (82%).
- 5. The current notice period to implement changes was not long enough, with most participants needing more time for implementation (most commonly 6- or 12-months' notice).**
- The majority (74%) of participants did not believe they had enough time to implement the changes within the required timeframes.
 - 6% of participants said they only needed 6 weeks' prior notice to implement changes. One-third (34%) of participants said they needed 6 months' notice, while 38% of

* Take care when interpreting this result due to a small sample size.

participants said they needed 12 months' notice. 8% of participants said they needed 24 or more months' notice.

- Common reasons for requiring either 6- or 12-months' notice were changed survey schedules / more fieldwork required; getting client approval of changes / additional costs; and personnel training / availability. Further, those who said they needed a notice period of 12 months or more, also commonly gave reasons relating to seasonality and consideration for larger projects.

6. There was very strong support for possible ways to improve how changes are made to the NSW ecological survey and assessment process.

- Of the presented solutions, support was highest for round table discussions prior to the release of changes (87% of participants agreed) and greater transparency and a formal process for changes (86%). This was followed by transitional provisions (84%), locked-in requirements at the start of projects (81%), and a periodic release of updates (78%).
- Many participants also offered ideas for improving how changes are made, with the most common suggestions relating to consulting with ecologists (as mentioned by 22% of participants who gave a suggestion).

7. The ECA was seen as an advocate for ecological consultants, in general, and in relation to their mental health and wellbeing, by the majority of participants.

- Nine in ten (90%) believed that the ECA should undertake advocacy on the part of ecological consultants working in NSW and four in five (81%) believed the ECA should undertake advocacy in relation to their mental health and wellbeing.

Introduction

Research Purpose

The Ecological Consultants Association of NSW (ECA) sought to better understand whether the frequency of ongoing changes to the NSW ecological survey and assessment process under the NSW Biodiversity Offsets Scheme is contributing to workplace stress for ecologists and consent authority assessors. The NSW Biodiversity Offsets Scheme, which was introduced in 2017, is established under the NSW *Biodiversity Conservation Act 2016*.

The ECA conducted quantitative research with the following objectives:

- To measure the level of workplace stress caused by the changes, including the extent of stress, its causes, its symptoms and help sought;
- To measure the potential impact that this stress is having on the ecological consulting industry;
- To measure the perceived impact of the changes on project costs and timing of developments;
- To determine the perceived time needed to implement changes;
- To gain feedback on proposed ways to improve the process and identify any other possible improvements;
- To identify the barriers to becoming an Accredited Assessor under the NSW *Biodiversity Conservation Act 2016*; and,
- To better understand the perceived advocacy role of the ECA.

The research results are intended to be used by the ECA to inform and support meaningful advocacy for ecological consultants and consent authority reviewers working in NSW. This report presents the findings from this research.

Research Methodology

The research methodology involved a 15-minute online survey, with fieldwork (the period in which the survey was open) conducted between 23 May and 19 June, 2024. The survey was anonymous and there was no incentive for participation. It was completed by 141 ecological consultants and consent authority assessors who were either currently working in these roles or had worked in these roles within the last five years. Participant profile information is shown in Table 1.

Table 1. Participant profile information (number of participants and % of sample)

Participant groups	n=	%
Ecological consultants		
Currently working as an ecological consultant in NSW	116	82
Previously worked as an ecological consultant but left role in last 5 years	18	13
Consent authority assessors		
Currently working as a consent authority assessor in NSW	21	15
Previously worked as a consent authority assessor but left role in last 5 years	5	4
Years of experience		
Less than 5 years	28	20
5-10 years	37	26
11-20 years	32	23
More than 20 years	44	31
Employers	22	16
ECA members	58	41
Accredited Assessors (under the NSW Biodiversity Conservation Act 2016)[^]	89	63
Total survey participants^{^^}	141	100

[^] Accredited Assessors under the NSW Biodiversity Conservation Act 2016 are referred to Accredited Assessors in this report.

^{^^} For ecological consultants and consent authority assessors, the numbers do not add up to n=141 because some participants had changed between these roles.

To ensure data reliability, results are typically only shown when the sample sizes are at least n=30. When they are less than n=30, such as the number of consent authority assessors (n=21), results are presented as participant numbers with percentages in brackets. This is because sample sizes which are under n=30 may not be representative of the corresponding population. Statistical significance testing (at the 95% confidence level) was carried out to determine whether observed differences between groups are reliable and unlikely to occur by chance. Statistical significance testing has only been conducted where the subgroup sample sizes are above n=30.

Detailed Findings

Overall Workplace Stress

Overall, the level of workplace stress for the majority of ecologists and consent authority assessors who participated in this survey was higher now compared to five years ago. Almost three in four (74%) participants said their level of workplace stress was higher now (*much higher* 39% and *somewhat higher* 35%), 20% said it was about the same, and only 6% said it was lower (*somewhat lower* 4% and *much lower* 2%).

The majority (77%) of participants who were currently working as ecological consultants said their level of workplace stress was higher now compared to five years ago (*much higher* 41% and *somewhat higher* 35%¹). Of the 21 participants who were currently working as consent authority assessors, 12 participants (or 57%) said their level of workplace stress was higher (*much higher* 24% and *somewhat higher* 33%)*. Due to the small sample size of consent authority assessors which may not be representative of the population, it's not possible to reliably compare the difference in stress levels between consent authority assessors and ecological consultants.

Overall workplace stress was relatively similar between different groups of participants. However, when looking at high stress levels, that is, those who said that their workplace stress was *much higher* now compared to five years ago, there were significant differences between some subgroups. Participants with more than 20 years of experience were more likely than those with less than 20 years of experience to have said that their level of workplace stress was *much higher* now compared to five years ago (55% vs 32%). Accredited Assessors were more likely than those who were not accredited to have said that their level of workplace stress was *much higher* now compared to five years ago (48% vs 23%).

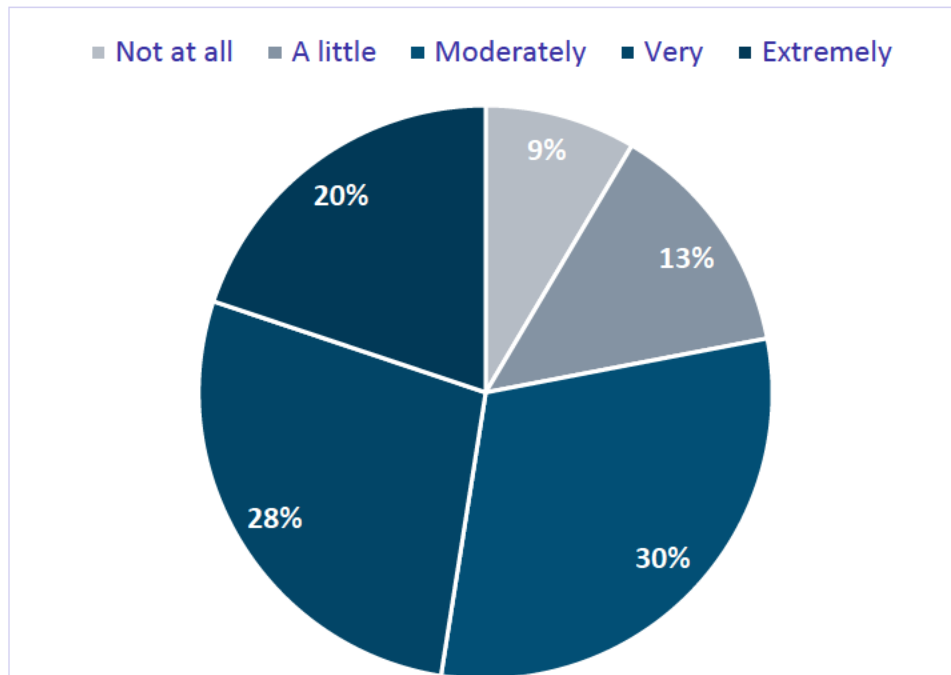
Stress Caused by Changes

Participants were asked to provide feedback on the changes that the NSW Government makes to the ecological survey and assessment process under the NSW Biodiversity Offsets Scheme. The majority (91%) of participants said they felt stressed *to some extent* because of these changes, with 20% *extremely stressed* and 28% *very stressed* (see Figure 1).

¹ Figures do not add up to 77% due to rounding.

* Take care when interpreting this result due to a small sample size.

Figure 1. How stressed do you feel because of the changes that the NSW Government makes to the ecological survey and assessment process?



Note 1: All participants n=141.

Note 2: Single response question.

For those currently working as ecological consultants, the vast majority (95%) were stressed *to some extent* because of the changes (20% *extremely stressed* and 29% *very stressed*). Of those currently working as consent authority assessors (n=21), 16 people (or 76%) said they were stressed *to some extent* because of the changes (19% *extremely stressed* and 10% *very stressed*)*. Due to the small sample size of consent authority assessors which may not be representative of the population, it's not possible to reliably compare the difference in the stress levels between consent authority assessors and ecological consultants.

A similar proportion of participants in each of the subgroups felt stressed *to some extent* because of the changes. However, when looking at those who felt *extremely stressed*, there were significant differences between some subgroups. Participants with 20+ years' experience were more likely to have felt *extremely stressed* because of the changes when compared to those with less than 20 years' experience (34% vs 13%). Accredited Assessors were also more stressed because of the changes. Of the Accredited Assessors who participated in the survey, more than one in four (27%) said they felt *extremely stressed* because of the changes compared to only 8% of those who were not accredited.

* Take care when interpreting this result due to a small sample size.

Of those who felt stressed because of the changes, more than one in two (55%) said this stress was higher now compared to five years ago.

Stress Symptoms

The symptoms of stress caused by the changes under the NSW Biodiversity Offsets Scheme were varied. Of those who had felt stressed because of the changes, at least one in two said the changes had caused feelings of being overwhelmed (73%), dissatisfaction with work / life balance (66%), fatigue (58%) and sleep disturbance (55%). Some others reported difficulty concentrating (36%), a negative impact on personal relationships (31%), difficulty coping with everyday situations (23%) and even panic attacks (12%).

“Permanent stress related migraines started 9 months ago (every waking hour).” – Ecological consultant.

“[I] have been sick due to fatigue / run down more often than in working career to date.” – Ecological consultant.

Help Sought to Manage Stress

Of those who felt stressed because of the changes under the NSW Biodiversity Offsets Scheme, more than two in five (44%) said they had sought assistance to manage the stress. For these participants, this assistance was mostly commonly from a General Practitioner (Doctor) (24%), followed by a psychologist (15%), Employee Assistance Program (EAP) (14%) or a counsellor (8%).

“The stress of not adequately covering survey and assessment requirements is high, with considerable personal impact. Individually, I take medications to manage this stress load (anxiety and depression management).” – Ecological consultant.

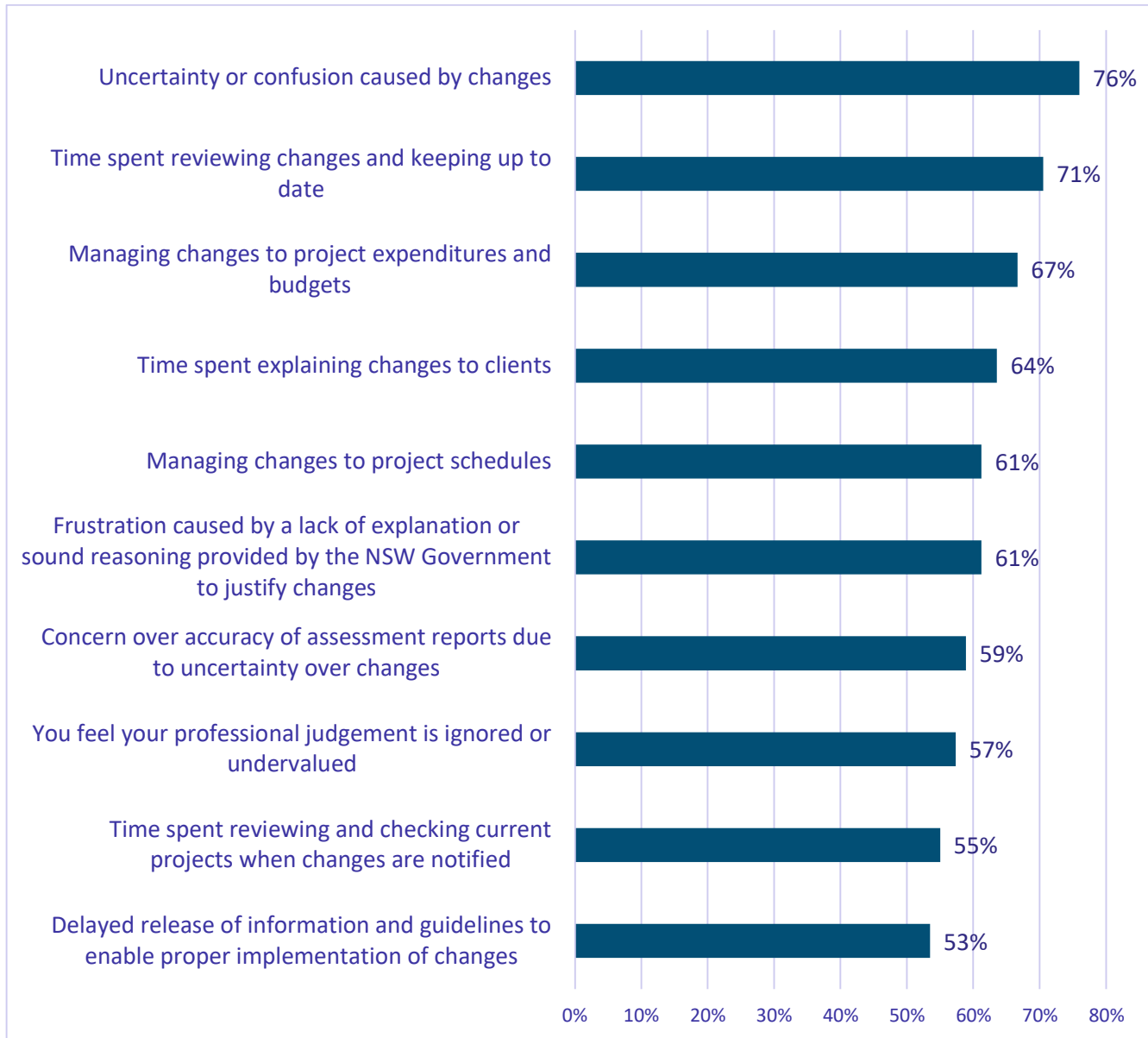
“My psychologist considered my description of ecological consultancy a good reason to discontinue working in the sector.” – Ecological consultant.

How the Changes are Causing Stress

Uncertainty or confusion caused by the changes (76%) was the leading cause of most stress amongst participants who said they felt stressed because of the changes under the NSW Biodiversity Offsets Scheme. This was also supported by the finding that two-thirds (66%) of all participants did not think that the changes were easy to understand.

Other common causes of most stress were time spent reviewing changes and keeping up to date (71%), managing changes to project expenditures and budgets (67%) and time spent explaining changes to clients (64%). See Figure 2.

Figure 2. What is it about the changes that causes the most stress? (Top 10)



Note 1: Participants who said they felt stressed at least to some extent because of the changes n=129.

Note 2: Multiple response question.

The majority (79%) of participants said they were unable to keep up to date with all of the changes to the ecological survey and assessment process.

Potential Impact on the Ecological Consulting Industry

Within the last five years, more than one in two (57%) participants who felt stressed because of the changes under the NSW Biodiversity Offsets Scheme said they had considered leaving the ecological consulting industry.

“[I] feel the changes have resulted in my skills being redundant and thus am seeking a new career.” – Ecological consultant.

Three in five (60%) ecological consultants who felt stressed because of the changes had considered leaving the industry. Of consent authority assessors who had felt stressed because of the changes (n=16), 8 (or 50%) had considered leaving the industry*. Due to the small sample size of consent authority assessors which may not be representative of the population, it's not possible to reliably compare the difference between consent authority assessors and ecological consultants.

Of those who felt stressed because of the changes, Accredited Assessors were more likely than those who were not accredited to have considered leaving the ecological consulting industry in the last five years (63% and 45% respectively).

Of those who said they had felt stressed, 9% said they had already left the industry in the last five years because of the stress.

“[The] high level of stress caused me to leave.” – Previously an Ecological consultant.

“The work stress led to mild depression, which ultimately led to my decision to retire from the consultancy industry about three years ahead of schedule. It took about 12 months post-retirement to recover from depression and return to good health.” – Previously an Ecological consultant.

“I left ecological consulting with a private consulting to work in the public sector because being an BAM AA [Accredited Assessor] is ridiculously difficult and stressful. I took a pay cut in exchange for less stress.” – Consent authority assessor.

* Take care when interpreting this result due to a small sample size.

Almost one in two (48%) of those who felt stressed because of the changes said they knew someone who had left the industry in the last five years because of stress from the changes.

Four in five (80%) participants believed they did not have the opportunity to provide input into the changes. More than one in two (55%) participants who felt stressed because of the changes said their job satisfaction had decreased in the last five years. For some, the stress had led them to take time off work, with one in five (22%) reportedly taking more days off work compared to five years ago.

“Multiple staff at my workplace have had to take months off on stress leave.” – Ecological consultant.

The survey also explored employer perceptions of retaining and employing qualified ecologists. While only 22 employers participated in the survey, they still provided some insight about potential issues. Of these 22 participants, 20 (or 91%) said it was difficult to employ and retain suitably qualified and experienced ecologists, while 18 (or 82%) said they felt *at least a moderate amount of pressure* (moderate/a lot/extreme) to employ ecologists who are less skilled than is fitting in order to meet project workloads and timing*.

“There are not enough people in the industry to complete the prescribed workload. We are having to train large numbers of juniors and keep on top of their training while constantly having to manage an increasing administrative and higher-level reporting requirements.” – Ecological consultant

“Being an ecological consultant has become a highly stressful job, and many of us work considerable amounts of overtime, not only in the survey season, but also behind the desk. It's not just contributed from constant updates in legislation and guidelines but also from a lack of consultants in the industry comparable to the development industry and the timeline pressures.” – Ecological consultant

“It has left me feeling that ecological consulting in NSW is unsustainable for the individuals who are expected to implement the unrealistic current legislation, and for what seems to me to be no real protection given by the BOS [Biodiversity Offset Scheme] towards meaningful conservation outcomes in NSW.” – Previously an Ecological consultant

* Take care when interpreting this result due to a small sample size.

On average, participants work on 24 survey or assessment reports each year. More than one in three (38%) participants believed the changes had reduced the accuracy of assessment reports in the last five years.

Around one in three participants said that during this five-year period the changes had reduced the overall quality of projects (37%) and negatively impacted on biodiversity outcomes (40%).

“The system is trying to conserve biodiversity but I do not see that happening.” – Ecological consultant.

“There is strong sense that the guidelines and principles behind the methods are not based on sound information and data so a feeling that the aim of no net loss to biodiversity is not being achieved despite our efforts...” – Ecological consultant.

“Survey guidelines should stop misuse of scientific references to support over the top requirements.” – Ecological consultant.

Potential Impacts on Cost and Timing of Developments

Many participants had concerns about the impact that the changes were having on project costs and timing of developments. Around four in five participants felt that, in the last five years, the changes had significantly increased project expenditures (84%), and significantly delayed assessments and approval of developments (82%).

“Telling a client these changes have to be made is an awful conversation, where you have no real answers as to why it applies to their project 3 years after lodgment.” – Ecological consultant.

“The BAM [Biodiversity Assessment Method] requires so much survey for species and seems to ignore experts that say the species is absent. It’s frustrating not being able to exclude species on available habitat it seems that NSW DCCEEW [Department of Climate Change, Energy, the Environment and Water] have the "survey for is anyway" approach and sometimes don't even take your survey as valid even though you followed their methods! Way too much budget is spent looking for things that are not there and even if they were, their impact would be very minor when it could be spent on conservation outcomes like reveg [revegetation]...” – Ecological consultant.

“The constant changes make it impossible to maintain work schedules and meet project timing commitments...” – Ecological consultant.

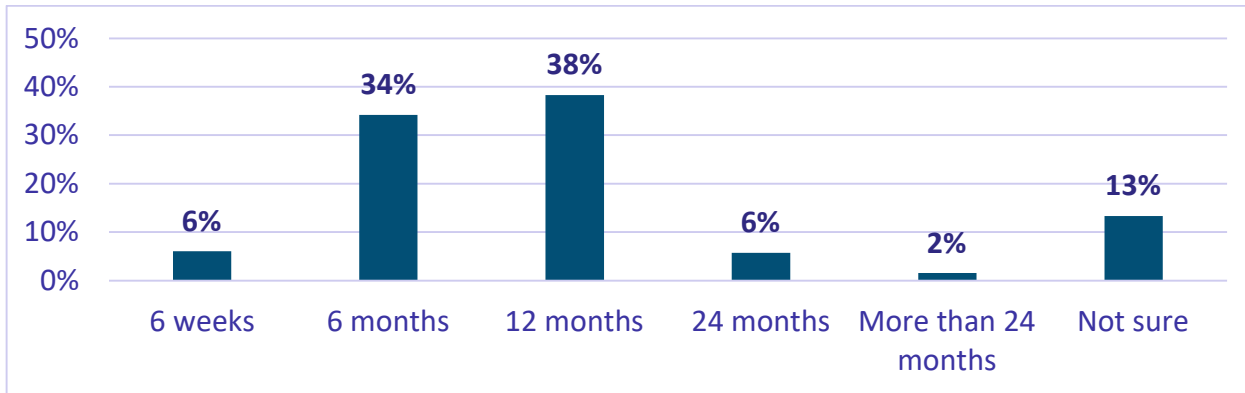
“The most common issue I face with changing survey requirements is managing relationships with clients who tell you that the changes and variations are a result of your own incompetence. Often these clients pay for detailed surveys to be undertaken (of which are often a large proportion of their budget) only to have survey effort to be changed or deemed unconfirming based on BCDs [Biodiversity & Conservation Division now Biodiversity, Conservation and Science] changes halfway through the project assessment phase...” – Ecological consultant.

Time Required to Implement Changes

Participants were asked a range of questions about the notification of changes and the time required to implement changes. Almost three quarters (74%) of participants said they did not believe that there is adequate notification of the changes before they are made. Further, only 12% of participants believed they are given enough forward notice of other changes that might be released each year.

The majority (74%) of participants did not believe they have enough time to implement the changes within the required timeframes. Participants were asked how much prior notice they felt they needed to implement the changes. The most common responses were 6 months (34% of participants) and 12 months (38% of participants). See Figure 3.

Figure 3. Generally speaking, how much prior notice do you need to implement these changes?



Note 1: All participants n=141.

Note 2: Figures do not add up to 100% due to rounding error.

Note 3: Single response question.

Participants were then asked why they needed this much notice to implement the changes.

6 weeks' notice (6% or 9 participants)

A couple of participants who selected six weeks' notice said the time required depended on the change and how it impacted projects.

"6 weeks with an opt in / out period of 6 months." – **Ecological consultant.**

Two other participants said they considered the changes to be just part of the job.

"Changes should be anticipated as science is an evolving practice, changes to reflect the most up-to-date knowledge and best practice should be expected and planned for. Changes should be included in initial project planning, staff resourcing and budgeting and be included as an important part of good project management. It should be clearly communicated to clients that additional works will likely be required and need to be budgeted for." – **Consent authority assessor.**

6 months' notice (34% or 48 participants)

The most common reasons given for needing 6 months' notice were:

- Changed survey schedules / more fieldwork required (52%)
- Client approval of changes or additional costs (27%)
- Personnel training / availability (25%)

- Project planning (23%)
- Report updates (23%).

“To allow for revised survey schedules, resourcing, client approval of additional costs, project management and contract admin and report updates. n.b. I have selected 6 months as a generally reasonable amount of notice. Under certain circumstances we could respond much quicker (e.g. rollout of version 1.2 benchmarks) however changes to the TBDC [BioNet Threatened Biodiversity Data Collection] survey windows for threatened species, species credit vs ecosystem credit type threatened species designation etc could require up to 12 months' notice to ensure responses don't adversely affect project delivery.” – Ecological consultant.

“This period allows both our team and our clients to adequately plan and budget for the additional costs associated with BAM [Biodiversity Assessment Method] charges. It ensures that financial allocations can be adjusted without disrupting ongoing or planned projects.” – Ecological consultant.

“Depending of the species or survey effort you / your client may have invested a lot of time or money in surveys only for them to change and be pointless. The recent changes to owl surveys requirements was a mess that impacted multiple site and cost a lot of time and money. When the surveys impact a study / report (BDAR [Biodiversity Development Assessment Report] etc) that runs for 8-15 months, you need time to manage changes, incorporate new effort / survey requirements and know that you are meeting the benchmark.” – Ecological consultant.

“Changes to requirements often means changes to accepted quotes and existing staff plans, requirement to up-skill staff, purchase additional equipment... Really - the main time-consuming part, which is most impacted by frequent changes, is ensuring the staff are briefed and trained in the new requirements.” – Ecological consultant.

12 months' notice (38% or 54 participants)

The reasons for needing 12 months' notice were similar to the reasons for needing 6 months' notice, however, these participants also commonly mentioned seasonality and consideration for larger projects. The most common reasons provided for needing 12 months' notice were:

- Changed survey schedules / more fieldwork required (70%)

-
- To allow for seasonality (28%)
 - Client approval of changes or additional costs (24%)
 - Large projects / long project duration (20%)
 - Additional costs (15%).

“Typically, this is to enable seasonal survey requirements to be met, also for understanding implications to project timeframes, communications to clients and associated costs.” – Previously an Ecological consultant.

“Because some species survey requirements are seasonal dependent. An example of this was the recent changes to the forest owl survey guidance. These changes were advertised say 6 weeks in advance, they didn't allow for any transitional arrangements for exiting projects, including projects that have finalised BAM – C [Biodiversity Assessment Method Credit Calculator]. All BAM-C cases will be automatically updated when any cases are re-opened (in this case the BAM-C had to be opened as part of the RTS [Response to Submission] stage). These changes required survey methods to confirm to these changes and to inform species polygons. This therefore required additional survey to be undertaken during the revised survey period, if this is missed due to the updates, it could be a year later when surveys could commence (pending on the species).” – Ecological consultant.

“12 months represents one year of survey periods. Better more reasonable transitional arrangements should be in place for all material changes to BAM [Biodiversity Assessment Method] assessments to allow consultants and proponents to adequately prepare. E.g. recent immediate changes to the survey and species polygon methods for forest owls was not helpful.” – Ecological consultant.

“Large SSD [State Significant Development] projects can take years to assess and approve, some of these guidelines pop up with no prior warning, then we are expected to go back to the client, who is already paying thousands of dollars for our services and tell them that we need to go out and survey again or that they will have to pay more to assess a species. It's so unreasonable.” – Ecological consultant.

“Working on major projects which are multi-year campaigns require much greater notice of material changes. 12 months minimum is recommended, particularly for changes to seasonal threatened species surveys.” – Ecological consultant.

24 months or more notice (8% or 11 participants):

These participants tended to give similar responses to those who said they needed 12 months’ notice, which related to changed survey schedules, seasonality and consideration for larger projects.

“For large jobs at least a 2-year timeframe is required for planning surveys, completing seasonal surveys, using that information to inform avoidance, impact assessment and supplementary surveys to address information gaps. Changing survey requirements during this process is very detrimental to achieving avoidance outcomes as baseline information changes.” – Ecological consultant.

“This is a typical timeframe from providing a quote to a client to the lodgment of a report. Having to implement changes mid-stream can blow out time-frames, costs, and cause significant delays to a project. 24 months also allows for an assessment to be based on surveys that have been conducted during the preceding year under guidelines current at that time. Changes can otherwise render previous surveys invalid and require a project that was all but complete to need to wait for the survey period to come around again.” – Ecological consultant.

Support for Proposed Improvements

There was majority support for a range of possible ways to improve the way that the NSW Government makes changes to the NSW ecological survey and assessment process. See Table 2.

Table 2. How strongly do you agree or disagree with the following statements? (Total Agree)

	Somewhat agree	Strongly agree	Total agree
Representatives of the ecological consulting industry should be included in round table discussions with NSW Government prior to the finalisation and release of any changes to ensure the changes can practicably be implemented and achieve their intended purpose.	19%	68%	87%
There should be greater transparency and a formal process for changes to the suite of laws, guidelines, and databases that govern biodiversity survey and assessment.	21%	65%	86%
There should be a set period of time for ecological consultants to review, understand, and prepare to implement changes prior to them becoming a requirement, that is, transitional provisions.	25%	59%	84%
Requirements should be locked in at the start of a new Project (for example, when a BOAMS case is created), rather than continually changed during assessment of a Project, or imposed at a point where the surveys and assessment may be near complete.	18%	63%	81%
Progressive changes across the suite of laws, guidelines, and databases should be held/delayed to enable periodic release in a coordinated manner, with a comprehensive and complete list of changes provided before each new release.	27%	51%	78%

Note 1: All participants n=141.

Note 2: Single response per statement.

Participants were also asked if they had any other suggestions for ways to improve how changes are made to the NSW ecological survey and assessment process. More than one-third (38%) of participants responded to this question (while 62% did not respond).

The most common suggestions related to consulting with ecologists, as mentioned by 22% of participants who gave a suggestion. This was followed by simplifying processes (17%), providing greater flexibility (11%) and providing more guidance / support (9%).

Consulting with ecologists

There were many suggestions for the NSW Government to consult with ecologists and give greater consideration to their professional opinion.

“Consultation with consultants about implications of survey guidelines is imperative. Many new survey guidelines have not been practical to implement.” – Previously an Ecological Consultant.

“The Government should not force ecologists to revise BDARs [Biodiversity Development Assessment Reports] and BSSARs [Biodiversity Stewardship Site Assessment Report] if they don’t agree with the findings of the report. Ecologists need to be respected by government reviewers rather than treated poorly because their opinions differ from the dodgy databases created by the Government.” – Ecological consultant.

“The professional opinion of consulting ecologists (and even experts!) is constantly set aside in favour of the BAM-C [Biodiversity Assessment Method Credit Calculator] and the strict rules in which it operates. It creates unnecessary work, perverse outcomes and disillusionment amongst experienced ecologists in the industry.” – Ecological consultant.

“Make it clear and not as rigid in that there are known experts out there that have a better understanding of targeted species (and their surveys). If you want us onboard you need to give the trust to the assessor if they come up with a better option.” – Ecological consultant.

“Professional judgement is ignored or undervalued - more flexibility should be given to consultants in regards to survey effort or survey exclusion where applicable – BCD [Biodiversity & Conservation Division now Biodiversity, Conservation and Science] require justification for any variation to survey guidelines, however they want this based on peer reviewed information, when often some species have hardly any reviewed literature to back up justification because there is no information available. More professional judgement and justification needs to be given to consultants.” – Ecological consultant.

Simplifying processes

There were also many suggestions for simplification, such as the NSW Government to document changes in a single location.

“There needs to be a formal process for any changes to Bionet with changes publicised in a table format so all changes, dates, reasons etc can be seen.” – **Ecological consultant.**

“Changes are document in single location, rather an across BOS updates in separate documents. It takes ages to go through them all to find the advice you read months earlier.” – **Ecological consultant.**

“Keep a patch notes similar to how the software troubleshooting / video game updates are preserved- that updates every change and has a timeline of all changes as they were implemented, also keep archived copies of each iteration of policy in the patch notes.” – **Ecological consultant.**

“Changes to species survey requirements in the TBDC should be tracked by date and be recorded in a transparent manner.” – **Ecological consultant.**

“Provide one location where all changes which may impact the stakeholders or newly released guidelines are listed chronologically with links to their location so this list can be referred to throughout the life of a project.” – **Ecological consultant.**

“Ditch the BDAR [Biodiversity Development Assessment Report] template. While we were assured this was intended to be guidance and not mandatory, the requirement to use it is creeping into SEARs. It does not represent a well-structured report.” – **Ecological consultant.**

Providing greater flexibility

There were some suggestions related to providing greater flexibility, such as in guidelines and assessments.

“The guidelines issued for targeted surveys are generally inflexible. There are many cases where species survey requirements are driven by a handful of database records within a region and PCT [Plant Community Type] association rather than actual likelihood of occurrence. Greater flexibility is needed as the need for survey is not evidence based in these situations (noting the cost of survey can be considerable).” – Ecological consultant.

“Specific consideration given to large scale projects and defining a level of flexibility to the assessment process for these projects.” – Ecological consultant.

Providing more guidance / support

There were some suggestions related to providing more guidance.

“Currently it is an all or nothing approach and there is very little guidance regarding strategies to meet emerging guidelines, particularly for projects that commenced prior to their introduction...” – Ecological consultant.

“State Government needs to provide more support to consultants when a Council assessor asks for a report change that is not justified.” – Ecological consultant.

Barriers to Accreditation

More than three in five (63%) participants said they were an Accredited Assessor under the NSW *Biodiversity Conservation Act 2016* (37% were not accredited).

The most common reason for not being accredited was that the accreditation was not required for their work / area of expertise, as mentioned by 31% of participants who were not accredited. This was followed by a lack of confidence in the accreditation (15%); a belief that the process of becoming accredited was too onerous (10%); they did not meet requirements e.g. experience (10%); someone else in their team was accredited (8%); and challenges in training / assessment availability (6%).

A further 17% of these participants said their accreditation was in progress.

ECA and Advocacy

Two-thirds (67%) of participants were aware that the ECA are currently involved in advocacy with Government agencies.

Nine in ten (90%) believed that the ECA should undertake advocacy on the part of ecological consultants working in NSW and four in five (81%) believed the ECA should undertake advocacy in relation to the mental health and wellbeing of these ecological consultants.

“The NSW Biodiversity Offset Scheme and BC Act [Biodiversity Conservation Act 2016] are failing because the NSW Government has not effectively consulted with ecologists. The NSW Government should be consulting with the NSW ECA (ecologists) on all changes to the NSW Biodiversity Offset Scheme and BC Act.” – Ecological consultant.

CASE STUDY 1 – BIODIVERSITY ASSESSMENT

Major project, direct footprint largely located in cleared agricultural land with scattered paddock trees, areas of ripped ground, and improved pasture, surrounded by native forest in the buffer zone.

Date	Process change	Project actions	Budget	Timeframe
2022				
Sep		Commence baseline study	\$172,000	6 months
Nov	Introduction of reptile survey guideline. Some methods no longer accepted for some species, some additional methods/effort required for other species.			
2023				
Mar- Apr	Update to east coast PCTs, including update of threatened species associations which changed survey requirements for some species. Changes to Glossy Black-Cockatoo survey guidance (no consultation or notification).	Additions to quote required to address changes to PCT associations and update vegetation mapping. Revise costing for habitat mapping to address new Glossy Black-Cockatoo survey guidance. Update baseline fauna report.	+\$72,000	+3 months
May	Further changes to PCT associations for species (no notification- you often find these have been changed when you get to entering data in the calculator to wrap up the project).	Additional assessment required based on results of GBC potential breeding habitat mapping. Additional assessment for reptiles based on new (November 2022) guidelines. New species added to assessment based on changes to PCT associations. Update baseline fauna report.	+\$363,000	+10 months

2024				
Apr	<p>Further updates to PCT mapping and classification.</p> <p>Change to owl survey guidance (released via TBDC rather than as a separate guideline document).</p>	<p>Ongoing work to meet GBC requirements- additional cost to finish GBC hollow watching (over-estimated the number of trees we could survey at once).</p> <p>Re-survey entire area for Owls due to changes in survey method, survey effort and survey timeframes in new guidance. An enquiry was made with BOS helpdesk as to whether we could use previous survey data, response received in July (after surveys have already finished) and matter still not resolved.</p> <p>Additional deployment to survey frog species that require large rainfall events – due to lack of suitable rainfall events in the preceding 18 months, despite the La nina conditions.</p> <p>Update baseline fauna report.</p>	+\$206,000	+3 months
Aug	Uplisting of BC Act species - Large-eared Pied Bat, Pilotbird	Update baseline fauna report (re-write all tables, update BAM-C reports, review of updates by client).	+\$3,000	+1 month
Sep	Anticipate BCD comments	Report revision post submission, usually requiring re-opening of the BAM-C case. This then exposes the project to interim changes potentially leading to a requirement for updated or additional surveys and amendments for species that had otherwise completed assessment.	?	?
			Total additions = \$644,000	Total additions = 17 months

CASE STUDY 2 – BIODIVERSITY ASSESSMENT

Major project. Footprint divided into 8 discrete locations, with some parts removed due to design changes and avoidance of threatened species habitat. Footprints are generally either historical grazing land (all improved pasture and weeds) adjacent to the existing mine footprint, some contain scattered paddock trees, and some are areas of planted pine forest.

Summary of legislative and policy changes implemented during the life of the project that directly affected costs and timeframes for this project.

January 2019	Project commenced
March 2020	SEPP44 replaced by Koala SEPP 2019 and a new Koala survey guideline
September 2020	Introduction of frog survey guidelines
October 2020	Koala SEPP 2019 replaced by Koala SEPP 2020 and release of new Koala Habitat Protection Guideline
October 2020	BAM 2017 replaced by BAM 2020
February 2021	Revision to bat survey guidelines
March 2021	Introduction of Koala SEPP 2021 (subsequently incorporated into SEPP (B&C) 2021
June 2022	Introduction of new Koala survey guidelines
November 2022	Introduction of reptile survey guidelines
April 2023	Update to east coast PCTs, including revision of threatened species associations and revision of survey requirements
December 2023	BCD comments requiring re-opening of the BAM-C case. This exposed the project to interim changes leading to a requirement for additional surveys and amendments for species that had otherwise completed assessment.

Additional comments:

- * Changed footprint by the client to achieve greater avoidance of areas with high vegetation integrity and threatened species habitat (based on survey results) resulted in the number of BAM vegetation plots and some other surveys becoming inadequate (due to plots and surveys having been conducted in areas no longer part of the footprint). The whole idea underpinning the BOS is to avoid areas of high biodiversity value. Avoiding high value areas should not then result in having to go back and add more vegetation plots in areas of lower value. This causes delays, requires additional survey work, and also forces the BAM-C case to be re-opened, which exposes the project to interim system and database changes leading to yet further surveys and amendments for threatened species that had otherwise completed assessment.

- * Due to lack of clarity/consistency around how to apply vegetation mapping to paddock trees that form habitat to threatened species, BCD required revisions to the BDAR, such that the exotic grassland with a few native trees was changed to a degraded woodland. This then meant that the original survey effort became inadequate as it was based on the originally mapped area of habitat. It also required the the BAM-C case to be re-opened – see comment above.
- * PCTs selected based on Bionet profiles to match vegetation data were inexplicably absent from the BAM-C. An eventual call from BOS helpdesk (18 months after making enquiry) said it was a missing link in their back end database. This was not resolved before the area was removed from the footprint. I know of this situation occurring on another of my projects, and at least one of another colleagues projects.
- * Ongoing changes to PCT associations for threatened species occurred throughout the project lifetime, generally with no notification given. You often find these have been changed when you get to entering data in the calculator as you go to wrap up the project.
- * There were multiple changes to specific species guidance in the Bionet Threatened Biodiversity Data Collection over the project lifetime, for species including the Gang-gang Cockatoo, Glossy Black-Cockatoo, Large-eared Pied Bat, Superb Parrot, Koala, Brush-tailed Phascogale, Key's Matchstick Grasshopper, Bathurst Earless Dragon, Powerful Owl, Barking Owl and Masked Owl (to name a few).
- * The project budget started at \$23,000, and ended at \$350,000 (just the fauna component).
- * The project has been running for well over 5 years. At the five year mark, some of the survey data becomes invalid and needs to be repeated.
- * The changes imposed on this Project have not resulted in more threatened species being identified or an improved environmental outcome.
- * A side issue to this is that in the 3 year BAM accreditation period, there is little scope for an accredited assessor to meet the requirements of 3 BARs per year if the individual projects keep growing exponentially, as there is only so much work a business can take on.