Forest Management
2018 Annual audit
Report for:

PF Olsen
In
Rotorua, New Zealand

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## Standard Conversions

<table>
<thead>
<tr>
<th>Unit</th>
<th>Equivalent</th>
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<tr>
<td>1 mbf</td>
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<tr>
<td>1 UK ton</td>
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*36
1. INTRODUCTION

The purpose of this report is to document annual audit conformance of PF Olsen Ltd, hereafter referred to as Forest Management Enterprise (FME). The report presents the findings of Rainforest Alliance auditors who have evaluated company systems and performance against the Forest Stewardship Council™ (FSC®) forest management standards and policies. Section 2 of this report provides the audit conclusions and any necessary follow-up actions by the company through nonconformity reports.

The Rainforest Alliance founded its previous SmartWood program in 1989 to certify responsible forestry practices and has grown to provide a variety of auditing services. Rainforest Alliance certification and auditing services are managed and implemented within its RA-Cert Division. All related personnel responsible for audit design, evaluation, and certification/verification/validation decisions are under the purview of the RA-Cert Division, hereafter referred to as Rainforest Alliance or RA.

This report includes information which will become public information. Sections 1-3 and Appendix I will be posted on the FSC website according to FSC requirements. All other appendices will remain confidential. A copy of the public summary of this report can be obtained on the FSC website at http://info.fsc.org/.

Dispute resolution: If Rainforest Alliance clients encounter organizations or individuals having concerns or comments about Rainforest Alliance and our services, these parties are strongly encouraged to contact Rainforest Alliance regional or Headquarters offices directly (see contact information on report cover). Formal complaints or concerns should be sent in writing.

2. AUDIT FINDINGS AND RESULTS

2.1. Audit conclusion

<table>
<thead>
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<th>Certification requirements</th>
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<tbody>
<tr>
<td>met, certificate maintenance recommended</td>
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<td>No NCR(s) issued</td>
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<td>Certification requirements not met:</td>
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Additional comments:

Issues identified as controversial or hard to evaluate.
2.2. Changes in FMEs’ forest management and associated effects on conformance to standard requirements:

There was no change/s since the last re-assessment in 2017 that has had any effect on the FME’s forest management system covering silvicultural and harvesting operations and its environmental, and group scheme management. However, the following positive and significant improvements were made on the FMEs management system:

- ProMap - almost completion of the great manual and procedure migration into ProMap;
- Tablets - the use of tablets to register Health & Safety and Environmental incidents;
- Noggin - the use of a new software known as ‘Noggin’ to record Health & Safety and Environmental incidents on tablets in the field, and for storing, analyzing and reporting of the same data on the central computer at the office;
- New FMUs - New FSC Group scheme resource member- China Forestry Group NZ (Ltd)

2.3 Excision of areas from the scope of certificate

☒ Not applicable. Check this box if the FME has not excised areas from the FMU(s) included in the certificate scope as defined by FSC-POL-20-003. (delete the rows below if not applicable)

2.4. Stakeholder issues (complaints/disputes raised by stakeholders to FME or Rainforest Alliance since previous evaluation):

Stakeholder communications were commenced prior to the audit and continued during the audit at the FME sites. Stakeholder contact details were in most cases provided by the FME (PF Olsen). A data base is maintained by the FME that includes all the contact details and names of stakeholders. All contacts with e-mail addresses were sent notification of the audit process and were invited to submit feedback. Other contacts were made by the audit team in person and via telephone. Over 90 individuals or groups were solicited. Stakeholder feedback was generally positive, especially from people who work with the FME on a regular way including contractors and regional council representatives. Some praised the FME for the high level of efficiency and positive work ethic and relationship and being very proactive about Health & Safety and ensuring this was a major priority going forward. One regulatory authority representative expressed appreciation with the FME’s performance and commended their environmental management to be the highest among similar organizations in the region. Some stakeholders had no further comments to make.

However, the following issues were raised by a stakeholder:

1. The stakeholder submitted a formal complaint to RA in in relation to harvesting activities for Waiake Forestry Ltd; and
2. The stakeholder submitted a formal complaint to FSC in relation to the storm and flood event of June 2018 in the Gisborne Region

A summary of the stakeholders’ complaints, FME’s response, and Rainforest Alliance’s (RA’s) response are presented in the table below.

<table>
<thead>
<tr>
<th>Complaints/disputes raised by the stakeholder to</th>
<th>RA’s response</th>
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### RA and FME’s response

**1. Compliant related to harvesting**

A stakeholder submitted the following complaint via email to RA on the 23rd March 2018.

The main point of the complaint was as follows:

“I am concerned about PF Olsen’s forest management performance in relation to harvesting activities for Waiake Forestry Ltd, one of its group members in Canterbury New Zealand.

Apparently after a period of heavy rainfall many tonnes of logs and slash were washed down local catchments causing considerable damage to downstream landholders’ pasture, lands and shelter. From my reading this has been attributed to inappropriate harvesting adjacent to waterways.

This is not the first incident of this type by forestry company in New Zealand by any means. Environmental damage seems to be synonymous with plantation forestry in the New Zealand publics’ mind, and so such incidents do little for the industry and certainly have the potential to undermine the credibility and integrity of FSC certification”.

The stakeholder also asks whether adequate follow-up steps were taken by the FME: “for example, removing the debris, repairing the damage to the catchment, repairing the damage to the downstream landowners’ property, and the provision of compensation”.

Further, the stakeholder quoting the Press newspaper (dated, 22nd March 2018) stated: “the landowners impacted by the PF Olsen managed operation are in litigation over the damage, i.e., there is an ongoing conflict situation, which is highly unsatisfactory for a FSC certified forest manager”

### FME’s Response

The FME’s Environment Manager who is also the FSC Management Representative submitted the FME’s response via email RA on the 27th March 2018 about the issue raised by the stakeholder.

“The situation is as follows:

1. The forest is not and never has been part of the Group Scheme.
2. The forest cutting rights were sold to a log buying company and PF Olsen was the harvest manager for that client.
3. The land – upon completion of harvesting, was handed back to the underlying landowner. That
land owner had a series of performance bonds in place to ensure the site was left in an environmentally sound state prior to bond release. The bond was released and PF Olsen had no further management obligations on the site.

4. The release of PF Olsen’s management obligation occurred over 12 months before the debris flow event.

In respect of the specifics of the event, there are two critical components.

1. The first is the regulatory framework.
   a. It is correct that PF Olsen proceeded to harvest without the necessary ‘Resource Consent’. However,
   b. PF Olsen, in line with its culture of working pro-actively with regulators had a representative of the regulator on site prior to the harvesting to discuss the way the operation was to be handled and to ensure that what was proposed met their requirements.
   c. Somehow in the course of that on-site meeting the regulators staff member and our staff didn’t reach a clear understanding as to what consents would be required and the individuals parted company in the belief that the operation was clear to progress.
   d. Environment Canterbury have acknowledged that there was a failing in the information provided despite the ‘good faith’ efforts to work together. It is for this reason that they would not take enforcement action on this technical breach.

2. Was the technical breach contributory or causative of the subsequent debris flow? The answer to this is No.
   a. Technically a consent was required because the local rules required a consent if more than 10% of the vegetation along a riparian reserve was to be damaged.
   b. In this forest, typically of most forests planted in that era, the only riparian vegetation was the plantation crop and this had to be harvested and removed along with the rest of the forest or else a narrow strip of trees left, once wind exposed, would likely be windthrown into the stream, pulling the banks in as they toppled.
   c. Consents granting the authority to undertake harvesting in this situation are normal and common.
   d. When such consents are given, they normally have conditions related to minimizing damage to stream banks and
avoidance or removal of harvest waste from the stream bed or any place where it may be carried into the stream during a flood.

e. The debris flow occurred after the wettest winter, possibly on record, for that region of NZ, followed by a storm that delivered a substantial rainfall (approx. 140mm) or more than a month’s rain in 12 hours or thereabouts. This is a very high rainfall for the Canterbury region with Christchurch City getting on average 600mm – 800mm/yr.

f. I personally undertook an investigation of the site – We were able to find and photograph definitive evidence that:

   i. The debris flows had been initiated by a significant landslide that delivered fluidized soil and tree waste from upslope in one case and the failure of a mass of already ‘entrained’ soil in the stream bed that arose from a landslide predating the establishment of the forest in the second case.

   ii. Both land failures filled the normally very small stream channel to a capacity many times higher than the largest flood that would have ever have occurred in those channels in any recent (200yrs) human history.

   iii. As the debris and fluidized mud proceeded down the valley, the banks were scoured clean of all soil and other logging waste that would normally have been well clear of any flood.

   iv. We were able to identify and photograph that above the land failure initiation points, the water flood flow was not mobilizing wood waste albeit the flood was a large one by the standards of that stream.

   g. The Regulator also undertook an investigation with a view to seeing if they should prosecute PF Olsen. Their own reports and investigations, without reference to PF Olsen, concluded that apart from the technical breach of the consent, there was no basis to prosecute and the incident was the result of the preceding significantly adverse weather, not due to poor or negligent practice.

h. We are aware that the downstream
neighbor is attempting to claim damages, however they are insured and if their insurer believes there to be negligence then their first step would be to try to obtain relief from the forest owner and land owner as PF Olsen had been released from all further management obligations for over a year. In NZ law, for the affected land owner’s insurers to have any chance of passing on their obligation to another party’s insurer(s), they have to be able to prove negligence. As stated by the regulator, the matter was an “Act of God” and from PF Olsen’s perspective, based on our internal assessment, we do not believe there is any chance of their being successful”

Further, on his email to the auditor (dated 04/09/18) the Environment Manager presented the following:

“The latest from this incident is that the affected party downstream has served papers on PF Olsen in an attempt to recover costs. As background:

- The forest owner sold the cutting Rights as Stumpage to a log buyer.
- PF Olsen was Agent for the log buyer, managing the harvesting for them.
- At the completion of harvest the forest/land owner, after satisfying themselves quite rigorously that the site was in good order, relinquished a substantial bond and the land was returned for replanting to the original forest/land owners (Waiake).
- PF Olsen’s association had been finished for over a year by the time of the Canterbury Storm.

The claimant is relying on:

The notion that PF Olsen:

1. was in breach of the RMA by operating without a Consent and in so doing caused the debris flow to occur by leaving slash in the stream.
2. Harvesting cause the deposition of woody material in the river that then lead to a debris flow because the slash blocked the stream – even though the rainfall event was only (according to them a 1 in 2year event.

PF Olsen has responded – fundamentally by providing the same information that was provided to the Regional Council when they conducted their investigation which ultimately concluded that the debris flow was caused by land instability not by forestry practice. Key additional point are:

a) At the preharvest planning stage – PF Olsen had the Regional Council out to look at the area to discuss management. There was no indication of any requirement for a consent. Subsequently after
the consent, the investigating officer sent a series of questions through that includes parts of the then applicable rules that seemed to indicate that we should have had a consent for operating within the riparian zone when harvesting the trees there. On that basis PF Olsen accepted the Councils word and acknowledged that we had operated without a consent. However subsequently, it became apparent that only part of the rule set had been sent to us and in fact consent for harvesting plantations pines in the riparian was not required provided the operation was conducted in accordance with the forestry code.

b) The Code requires generally that slash should be left in a stable position and not deposited in streams where it may mobilize. (The NES is now more specific talking about a 1:20 threshold)

c) Rain gauge data in the area is not close but based on my field investigation we located the point of initiation of the debris flows as there were two sub catchments both of which failed and coalesced (and indication that this could not have been some “average 2-year storm event). In the stream above one of the initiation points we were able to determine that the flood level was quite high but there was no evidence of material being moved or dislodged. While we have not calculated the capacity – from a photograph we have the capability to do a cross sectional analysis and flow regime. I am confident it will prove to be substantially more than stated by the claimants, but even if it were not it would be inconceivable that a debris event can be generated from a mere 1:2yr flood. Such a flood in such a small stream simply could not mobilize heavy woody debris even if light material built up behind.

d) From memory the closest official rain gauges put the rainfall and well above 1:2. This was on top of one of the wettest winters on record in Christchurch.

e) The triggers for the debris events were both fully identifiable. In one sub-catchment it was a large landslide direct to the stream bed which then flowed on down. In the other sub-catchment the initiation started at the failure face of a large stream bed ‘infill’ that dated back to landslides predating the establishment of the forest. This large volume of material had formed a gentle meandering section of stream bed that must have been held back by rocks or old (native) logs that finally gave way, releasing a large quantity of soil into the narrowing downstream channel. This began the debris flow. We have photographic evidence of this.

In summary we will defend this vigorously if required. While
sympathetic to the plight of the landowner;
- We are confident there was no malpractice.
- PF Olsen had departed the site for some months back and under tight oversight of the forest/land owner”.

**Correspondence with Environment Canterbury:**
The auditor also contacted Environment Canterbury (Ecan) Regional Council on the 4th of September 2018 and requested clarification if there was consent given to the FME during the harvesting operation. However, the information was not available at the time of this investigation. On their email of 4 September 2018 (LGOIMA Ref: 1437C - Compliance info PF Olsen query) the Local Government Official Information and Meetings Act 1987 (LGOIMA) Section of Ecan sent the following response:

“I refer to your email enquiry with (Ms X); this was received on 4 September 2018.

As you might be aware, LGOIMA applies to all requests for information that we receive. We are able to respond immediately to some requests, but in instances where we need to collate information we do so and respond in accordance with our specified process.

Under LGOIMA, Environment Canterbury has 20 working days to respond to your request. Your request has been passed to the person(s) responsible for responding and you will be contacted as soon as possible but no later than 2 October 2018.

Please be advised that we put LGOIMA responses that are in the public interest onto our website. No personal details of the requester are given, but we do summarise the essence of the request alongside the response”.

'Ms X = was added by the auditor to replace the name of a person.

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<th>Complaints related to storm, flood and debris</th>
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The same stakeholder shown above submitted a complaint on the 5th of June 2018, using the Dispute Submission Form, available on the FSC website: [ic.fsc.org/dispute-resolution.139.htm](ic.fsc.org/dispute-resolution.139.htm).

a. The issue concerns the very recent environmental, catchment, and public infrastructure damage caused by poor management of harvest residue (slash) from FMOs on the East Coast of North Island of NZ (including the FME and two other that FSC certificate holders) are involved as sources of

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The audit team carried out a thorough investigation of the issue raised by the complainant against the FME’s response. As part of this investigation, the audit team reviewed all the documents supplied as part of the evidence including copies of con; interviewed the management and operation staff, contractors and stakeholders.

The audit team made the following conclusions:
the problems;
b. The most recent incidents took place over the weekend of 2-4 June 2018 in the Uawa catchment and hinterland, in Gisborne District.
c. There have been similar incidents of harvest residue and environmental damage earlier in February 2018 (in the Tasman District). In this case, a certified FMO (the FME is not part of this, only another forestry company is mentioned) appears to have been involved.

As part of the evidence the complainant presented the following news articles:

https://www.google.com/search?q=forest+slash+damage+site%3A.nz&ie=utf-8&oe=utf-8&client=firefox-b

http://gisborneherald.co.nz/localnews/3400886-135/questions-asked-over-huge-swath-of


FME’s Response

On his email (Dated, 27/07/18) the Environment Manager
Presented the following to the auditor:

“We and (‘another forestry company’)¹ have been in communication with the complainant. The tenor of his complaint was that he was concerned about the bigger picture in terms of what he had gleaned from the media in that it appeared the companies had done little to help the community nor mitigate the impacts and as such he was concerned for the credibility of the FSC process and how was the industry going to respond.

I had a long conversation with him and have explained further information re the background to this event. An incident has been created and remains open and will do for some considerable time because the actual solutions are complex and in many cases only addressable in the context of longer term adaptations because his main concern was general and FSC process related we have promised to keep him informed of developments as they occur and as

a. There was no any evidence showing the FME was in breach of the harvest operation consents given to it by the Gisborne District Council prior to the June storm event;
b. Whilst the movement of the forestry debris was mainly the result of heavy and unusual storm event in the Tolaga Bay and Tasman regions, the FME an “An incident” which will remain open until a permanent solution is found;
c. Also, based on the outcome its own initial investigations the FME have taken the necessary measures (i.e. outlining both short-term and long-term strategies) as part of the solution:

- As part of a short-term solution or prompt response to the situation the FME is training its staff about the appropriate management of post-harvest slash on skids located within high risk area; and
- As part of a long term solution the FME have outlined steps: (a) for full retirement of parts of the landscape; (b) planting of stream buffers with species which attain sufficient structural of similar strength in the event similar big storm; (c) adding another significant layer of protection from landslide access to rivers; (d) using of better design of debris control structures; and, making adjustments that might be beneficial to harvest layout and engineering.

d. The FME is also working with other forestry organizations (all FSC–certified) in the areas of challenging some of the current practices and on research and development of new methods as well as learning from past mistakes and about avoiding the repetition of blanket planting across the landscape (i.e. avoiding of high risk areas from planting).
In summary the situation is:

1. The complaint covers all companies involved but the extent of involvement is different in terms of the parties impacted and what is being done.

2. PF Olsen’s Paroa forest had only one downstream owner identifiable affected, that is Paroa station who are farm lessees over the same land ownership as the forest lessee. The two parties are in negotiation about the costs of clean-up but much of the clean-up on the farmland has been completed. There were no impacts arising from this forest in the other catchments in which the other forests operated.

3. Some of Paroa forests debris may have got beyond the station and contributed to the wood on the beach. All three forest companies through their owners contributed equally to the clean-up of the beach which involved somewhere between 16-30,000 tonnes and only a few days to clear less the burning of the heaps which will have to wait until the wood has dried somewhat. (During client review phase on 10 September, the FME provided information that it has become apparent that burning may not be an option as salt residues on the wood can, when combusted, produce some carcinogenic air contaminants. Options for disposal are now being reconsidered.)

4. Within the Forest we continue to clean-up and stabilize damage.

5. We informed the complainant that the industry was holding a steep land debris flow response and research needs workshop and we would keep him informed. That meeting has now been held but the write up of the outcomes is not yet available. This should provide some strong indications as to where the industry was headed in terms of responding to the issue.

6. On the 20th-21st Aug, the Forest Owners environment committee met in Nelson and the debris flow issue formed a significant part of the discussions. This was followed on the 21st by a field trip to the Cyclone Gita impacted Tasman forests with representatives of the main ENGO groups who are also members of the FSC standards development group (STG).

7. The issue of steep land harvesting and risk is a major item on the agenda for the STG.
meeting was a very important and very constructive day that should have laid the foundations for an informed discussion as to how the FSC standard can reflect the need to manage these events. My summary of this meeting as part of a prompt to PF Olsen staff is linked in here with the email “kit Richards shared”.

The (‘other forestry company’)\(^1\) on both of our accounts have written to the complainant recently asking what his expectations are in terms of how to “execute and close out the complaint”. A reply is awaited but at this point I am tending to focus on the outcomes of the STG and any specific management adjustments that we make on our own accord or in response to the STG as being the “end point” for the complaint”.

As per shown (in Point# 7) above, the Environment Manager presented to the auditor a SharePoint link which contains a training presentation to the FME’s staff as part the FME’s prompt response to the situation.

The Environment Manager explained that the full training is available on PF Olsen’s SharePoint.

**Abatement Notice by the Gisborne District Council:**
The auditor was aware the Gisborne District Council have served abatement notices to all the forestry companies operating in the region. The notice was following the storm, flood and debris incident in June. On his email (dated, 04/09/18) to the auditor the Environment Manager presented the following explanation:

“Further to your request – please find attached a copy of the Abatement Notice – there are actually two, one for each of the consents current in the forest but they are essentially identical.
As at Friday last this has been appealed. The principle basis is that the council has not specified where specifically there are definitive breaches of the consent and where they believe those exist, what they require to be done to be compliant. As an outcome of that appeal we are seeking clarity and certainty about the works required as failure to meet an abatement could lead to prosecution; a difficult situation if we don’t actually know what and where action is required.”
In essence the abatement refers to:

1. Lack of cut-off in haul tracks – this is acknowledged and being rectified in some locations but was not material to the events that unfolded. There are some locations – e.g. an old farm track which was in existence already. It may need monitoring now that the area has been harvested but in itself was not a haul or backline track and disturbing the surface may be more detrimental.

2. Lack of fluming on road cross culverts – this is also acknowledged - especially in respect of roads constructed 2+years ago. It is being addressed retrospectively and new roads constructed during the time of our new roading engineer over there have had them and or they were already on order to finish off some jobs. The lack of flumes was not material to the incident.

3. Lack of benching under roads – There are some old roads that invariably were not benched. IN more recent times there has been benching though it appears the benches have been overfilled and are not visible, especially given the ‘creeping’ nature of Gisborne soils when wet. In the prime example referred to in the abatement by reference to photos – this construction that was in progress as the storm hit was in fact benched and roller compacted – we have the photographic evidence. Sadly, because it wasn’t shaped, or water controlled by the time of the storm, the storm eroded all the surrounding land below the formation – but the formation held.

4. Lack of skid slash pullback. Consent conditions require that slash be stable but doesn’t specify how. It is fair to say slash management has historically been below standard across the industry in all of Gisborne. This fact was recognized and over the past year to 18months there has been a program to upgrade management, including retrospectively addressing skids that were seen as a potential hazard. In Paroa there were no catastrophic skid failures. One skid that had a large amount of bark carelessly pushed to the edge to allow trucks to turn around 180degrees to access another road did suffer some edge failure but none of this reached water and the site below was as yet unplanted. Another skid suffered some edge
failure and it is possible that a small amount of slash did reach the principal catchment however it would be miniscule in the scale of the event. All other skids (in the order of 20 or more) stood up to the deluge remarkably well remained intact although we are working around all of them to bring them to a very high standard to ensure there is no risk of failure in any second events. We believe the main matter of concern to Council was the belief that;

   a. Most of the slash somehow arose from mismanagement of skid slash.
   b. a major part of the woody debris at the bottom of the catchment arose from skids that were located on the valley floor (and were consented to be there) and that these release large amounts of slash – evidence being claimed that there were cut logs, processor head marks and solvent.

5. Our investigations lead us to believe that:
   a. the vast proportion of all slash in the catchment arose from complete and catastrophic levels of land failure leading to debris flows out of all the main tributaries to the main Tapuwae r flowing through the forest. We believe this can easily be proven as a close inspection on the ground revealed:
      i. Almost zero sign of any post processed logs or log remnants above or immediately below the contributing tributaries.
      ii. The tributaries exhibited all the signs of active and major debris flows.
      iii. Cross sectional measurements of the river beds analyzed through standard hydrological models indicated flood levels in excess of 1:100 year events
   b. Another major source of the slash including part processed wood arose from skids on the valley floor (i.e. the skid waste was piled up in the flood zone). From our investigations we are able to be quite certain that:
      i. The skids were located as consented.
      ii. Of the 5 skids, 2 were stable and remained above the flood zone –
(just – as water was lapping around them). The other 3 still had much slash in place though the flood had eaten away at some, resulting in wood transport, the likely source of the claimed processed wood.

iii. The catchment calculations reveal that none of the slash would have been at flood level in a 1:20 flood (the level now established in the NES) and probably not even at somewhat higher levels. However at a 1:100yr flood the whole lower valley disappeared under water.

6. Irrespective of the particulars of the Abatement notice, a prioritized plan for repair and remediation has been created and much progress has been achieved. Nevertheless there is significant land damage at the upper end of Paroa forest where is proximate to the boundary of Hikurangi Farms Forests. There is little doubt that a history of windthrow on shallow soils (which has contributed to the slash problem) combined with erosion and soil loss down to the mudstone basement means that retirement from production is really the only long term option for parts of this land. The forest owner and downstream Paroa Station owners and insurers are in negotiation over clean-up costs and remaining works – hopefully this will end with a satisfactory result.

7. Although it appears that little slash from Paroa actually made it to Tologa Bay, I understand that all forest owners contributed equally to an initial clean up and are undertaking to contribute 10c/ton to an annual fund for ongoing beach clean-ups in the region.

Below are some further notes provided to the Forest Owners legal advisors – the photos and map are also attached.
We undertook an extensive look around the areas impacted by the Tolaga Bay storm in terms of what actions can, should or could be undertaken to:

A) Address any abatement requirements as listed by council
B) Identify any specific outstanding hazards irrespective of the cause and ensure a safe situation ahead
C) Identify practical solution to some of the abatement requests in lieu of any direction from Council
We also took some cross-sectional measurements of stream channels to the identifiable flood levels in order to undertake calculations using recognized methodologies that would enable a cross check to be made on the likely size of the storm event”.

As a result of those investigations we can be quite firm about certain aspects of the event:

- We took cross sections at points A,B,C on the marked map. Hydrological calculations indicate all three locations were experiencing flood flows >1:100yrs.
- Cross section B was massively above confirming that it was in debris flow rather than carrying just flood water.
- Both tributary catchments (C1 & C2) to the main Tapuae stream had clear evidence of debris flows and it is these that have contributed the vast bulk of all debris in the lower main Tapuae stream bed.
- Skid sites with residual stored slash were located on the true right of the Tapuae both upstream and downstream of the tributary from catchment C1. It was possible to clearly distinguish that almost all if not all this material had remained stable but just at maximum flood level. The debris flow may have cut through the edge of the skid slash but otherwise it had not moved nor contributed to the downstream debris.
- Skid sites further downstream (X 1) adjacent to the farm were surrounded by flood waters and consequently had contributed some processor waste, cut logs and slovens, but much was also still in place.
- These skids were positioned as consented.
- Working back from the profiles at point C (we will complete a calculation for point A) we concluded that a 1:20 year event – the level regulated under the NES as being to magnitude of event that can reasonably be managed (GDC consents make no reference to what level of storm should be planned for) would have seen the river contained within its nominal bed and no slash would have been mobilized from these skids”.

The auditor also reviewed a copy of the abatement notices (a total of two (2): Abatement Notices 2018 /
A002 and 2018/A003), both specifying a time frame of 1st of October 2018. The auditor also reviewed the FME's response to the Council which was in line with the above email.

**FME's direct communication with the complainant:**

As shown above the FME and ('another forestry company')1 have been in direct communication with the complainant.

The Environment Manager confirmed that he has been in direct communication with the complainant by phone and email, and forwarded a copy of the email (dated, 12/07/18) he sent. The full content of the email is presented as follows:

"Further to our phone call the other day, I think I mentioned that before the Tologa Bay incident, some of us within the industry had got together to note down some key strategies we felt needed to be researched to address the apparent increasing risks arising from severe climatic events in highly erodible terrains.

Attached is a copy of that thinking which was presented at a workshop relating to research requirements for the 1 BT program. Essentially a clear recognition that we need to challenge some current practice and research new methods as well as simply learning from past mistakes and avoiding the repetition of blanket planting across the landscape that was the prior history of these forestry areas.

I have also attached 2 papers which give very good understandings of the historical context for these areas and the extreme nature of the problems the area presents.

See http://www.fao.org/docrep/004/y2795e/y2795e06.htm#

Overall the trees have worked very well except for this vulnerable post-harvest time window. It is here and much more precise identification of landforms that should be retired that is where the near terms changes will need to focus on I believe.

As far as our own situation goes the owner of our forest has assisted in equal share for the clean-up of the beach which is now done less the final burning of the wood piles. That effort only took 3-5 days with an excavator, 1. (during client review phase on 10
September, the FME provided information that it has become apparent that burning may not be an option as salt residues on the wood can, when combusted, produce some carcinogenic air contaminants. Options for disposal are now being reconsidered.)

The one farm property below the forest we managed has the same owner as the land underlying the forest and they have contractual arrangements between them and are also working through the issues with their respective insurers. Basic clean-up has already been completed by the farm manager.

Once the initial investigations from ourselves and any pertinent results from the Council are obtained, I will be holding a debrief with our staff to consider what things might and can be changed for the short-term future. These are likely to include;

1. Criteria for full retirement of parts of the landscape.
2. Additional planted stream buffers of species such as redwood, which if able to attain sufficient structural strength before the next big storm, might add another significant layer of protection from landslide access to rivers,
3. More use and better design of debris control structures
4. Adjustments that might be beneficial in terms of harvest layout and engineering, as well as recognizing and promulgating any knowledge about things that did work.

As noted previously there is much yet to be worked through to crystallize these sorts of ideas into workable actions in the field. However a start has been made and we will keep you informed. I gather you have also heard from a representative from ('another forestry company') as well. We are keeping close contact and will be sharing knowledge and ideas to address these problems”.

1('another forestry company') was added by the auditor to replace the name of the forestry company used in the email.

<table>
<thead>
<tr>
<th>2.5. Conformance with applicable nonconformity reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>The section below describes the activities of the certificate holder to address each applicable nonconformity report (NCR) issued during previous evaluations. For each NCR a finding is presented along with a description of its current status using the following categories. Failure to meet NCRs will result in nonconformances being upgraded from minor to major status with conformance</td>
</tr>
</tbody>
</table>
required within 3 months with risk of suspension or termination of the Rainforest Alliance certificate if Major NCRs are not met. The following classification is used to indicate the status of the NCR:

<table>
<thead>
<tr>
<th>Status Categories</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Operation has successfully met the NCR.</td>
</tr>
<tr>
<td>Open</td>
<td>Operation has either not met or has partially met the NCR.</td>
</tr>
</tbody>
</table>

☐ Check if N/A (there are no open NCRs to review)

<table>
<thead>
<tr>
<th>[MAJOR] NCR#: 01/17</th>
<th>NC Classification:</th>
<th>Major</th>
<th>Minor X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard &amp; Requirement:</td>
<td>National Standard for Certification of Plantation Forest Management in New Zealand, FSC-STD-NZL-01-2012 New Zealand plantations EN (version 5.7 dated September 2013), 1.6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report Section:</td>
<td>Appendix II</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description of Nonconformance and Related Evidence:**

1.6.3 “The policy shall be communicated throughout the organization and to contractors”.

During the field visits the Assessment Team identified the following issues:

a. Two of six harvesting contractors interviewed were unable to demonstrate any knowledge of FSC as it may affect their operations and could not even say what the initials stood for; and

b. Other contractors asserted that they only knew of FSC from induction training when first established as PFO contractors.

**Corrective Action Request:** Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the nonconformance.

**Timeline for Conformance:** By the next annual audit.

**Evidence Provided by Organization:** The FME supplied a training pamphlet that was given to all of its contractors and the audit team interviewed contractors in the field.

**Findings for Evaluation of Evidence:**

The audit team reviewed the 1-page a pamphlet the FME have been given to all of its contractors, entitled, “FOREST STEWARDSHIP COUNCIL (FSC®) CERTIFICATION - HOW IT CAN IMPACT YOU & YOUR OPERATIONS”. At the top of the page the pamphlet starts with a question: “What is FSC?” and gives a brief description and explanation about FSC.

On the main body of the training pamphlet the following are presented:

**Environmental Code of Conduct**

As PF Olsen contractors we ask that you:

- Act professionally, legally and responsibly at all times.
- Follow PF Olsen policies and procedures and adhere to all operational conditions and constraints as relayed by managers, work prescriptions or contracts.
- Constantly review your operations and reflect on how they might be managed with less impact on the environment.
- Report all environmental incidents and notify us of any concerns where actual or potential adverse effects are recognised or anticipated. Respect our forest environment – don’t dump waste
and rubbish.

- Undertake environmental training opportunities when provided.
- Respect our neighbours, landowners and stakeholders.
- Report sightings of rare species.
- Contribute to our success with your knowledge and experience.

**Your obligations under FSC?**

Achieving and maintaining certification is a team effort that requires conscientious awareness and effort from everybody at all times. To help employees, contractors and FSC Group Scheme Managers, PF Olsen has made a significant investment in and continues to invest in management systems that:

- Define procedures for undertaking our management operations.
- Record, collate and report environmental monitoring and performance data.
- Assist our employees in achieving compliance with the law.
- Assist in recognising, protecting and / or avoiding damage to vulnerable ecosystems or species.
- Assist in avoiding harm or inconvenience to our neighbours.

Also, the audit team interviewed contractors and confirmed they were given a copy of the training pamphlet.
The audit team concludes the FME have implemented appropriate corrective action.

<table>
<thead>
<tr>
<th>NCR Status:</th>
<th>CLOSED</th>
</tr>
</thead>
</table>

**[MAJOR] NCR#:** 02/17  
**NC Classification:** Major

**Standard & Requirement:** National Standard for Certification of Plantation Forest Management in New Zealand, FSC-STD-NZL-01-2012 New Zealand plantations EN (version 5.7 dated September 2013), 4.4.5

**Report Section:** Appendix II

**Description of Nonconformance and Related Evidence:**

4.4.5 “There shall be a database or other record (such as Terraview, an external database) of neighbours and other stakeholders.”

The FME have supplied the stakeholders register to the assessment team. However, the team found that the OTPP NZ Forest Investments Ltd landowners or their representatives were not included within the stakeholders register.

**Corrective Action Request:** Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.

Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the nonconformance.

**Timeline for Conformance:** By the next annual audit

**Evidence Provided by Organization:** At the commencement of the audit the FME produced a series of documents to close out all previous non-conformances. These included a completely new and updated Stakeholder list.

**Findings for Evaluation of Evidence:** The new Stakeholder list is produced as an Excel spreadsheet. This now contains a new section titled 'FSC Group Scheme Specific' which amongst various other contacts also contains the full details of OTPP and their representatives Hancock Forest Managers.
The audit team concludes that the FME have implemented appropriate corrective action.

**NCR Status:** CLOSED

**Comments (optional):**

<table>
<thead>
<tr>
<th>[MAJOR] NCR#</th>
<th>NC Classification:</th>
<th>Standard &amp; Requirement:</th>
<th>Report Section:</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/17</td>
<td>Major</td>
<td>National Standard for Certification of Plantation Forest Management in New Zealand, FSC-STD-NZL-01-2012 New Zealand plantations EN (version 5.7 dated September 2013), 6.2.16</td>
<td>Appendix II</td>
</tr>
</tbody>
</table>

**Description of Nonconformance and Related Evidence:**

6.2.16 "Employees and contractors shall be encouraged to report the presence of rare, threatened or endangered species".

A contractor interviewed in the field confirmed he had sighted a falcon (probably nesting) in the previous year and that he had seen the same bird again recently. He also confirmed that he had reported this sighting a Department of Conservation (DOC) employee who was on site at the time of the first sighting.

However, no records show that the above sighting was reported via the PF Olsen reporting system and no follow up of the sighting had been conducted by the FME.

**Corrective Action Request:**

Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.

Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the nonconformance.

**Timeline for Conformance:**

By the next annual audit

**Evidence Provided by Organization:**

At the commencement of the audit the FME produced a series of documents to close out all previous nonconformances. This included a record of the roll out of a poster to all staff and contractors.

**Findings for Evaluation of Evidence:**

The Audit team reviewed the poster which was designed to remind all involved of the requirement for them to record and report all RTE sightings. Evidence of numerous sightings records were observed by the audit team. These involved the use of the FME’s ‘Rare Species Sighting Form’. Also, several contractor employees were interviewed by the audit team and all were fully aware of this process and were actively enthusiastic about it. The audit team concludes that the FME have implemented appropriate corrective action.

**NCR Status:** CLOSED

**Comments (optional):**

<table>
<thead>
<tr>
<th>[MAJOR] NCR#</th>
<th>NC Classification:</th>
<th>Standard &amp; Requirement:</th>
<th>Report Section:</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/17</td>
<td>Major</td>
<td>National Standard for Certification of Plantation Forest Management in New Zealand, FSC-STD-NZL-01-2012 New Zealand plantations EN (version 5.7 dated September 2013), 6.7.2</td>
<td>Appendix II</td>
</tr>
</tbody>
</table>

**Description of Nonconformance and Related Evidence:**

6.7.2
“There shall be documentary evidence of a request to chemical suppliers and/or applicators requiring in descending order of preference that agri-chemical containers be re-used, recycled or triple rinsed prior to disposal to an approved facility.”

During the inspection of a chemical store located at the FME’s Head Quarter in Rotorua a Terbutylazine container was found kept outside (in front of) the chemical store. Upon inspection, it was found that the container contained liquid and had not been triple rinsed and handled as per the FME’s procedure.

Corrective Action Request: Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.

Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the nonconformance.

Timeline for Conformance: By the next annual audit

Evidence Provided by Organization: At the commencement of the audit the FME produced a series of documents to close out all previous nonconformances. This included a reminder to all staff about the importance of storing chemicals. This also contained links to where the relevant information could be found.

Findings for Evaluation of Evidence: The audit team reviewed the circular notice given to all staff reminding them about the importance of storing chemicals. This also contained links to where the relevant information could be found.

The auditor also inspected the Rotorua office chemical store where all was found to be in order. Chemicals held in stock matched the register and there were no empty containers of any description.

The audit team concludes that the FME have implemented appropriate corrective action.

NCR Status: CLOSED

Comments (optional):
<table>
<thead>
<tr>
<th><strong>Timeline for Conformance:</strong></th>
<th>By the next annual audit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evidence Provided by Organization:</strong></td>
<td>The FME supplied a training pamphlet that was given to all of its contractors and the audit team interviewed contractors in the field.</td>
</tr>
<tr>
<td><strong>Findings for Evaluation of Evidence:</strong></td>
<td>The audit team reviewed the 1-page a pamphlet the FME have been given to all of its contractors, entitled, “FOREST STEWARDSHIP COUNCIL (FSC®) CERTIFICATION - HOW IT CAN IMPACT YOU &amp; YOUR OPERATIONS”. At the top of the page the pamphlet starts with a question: “What is FSC?” and gives a brief description and explanation about FSC. On the main body of the training pamphlet the following are presented:</td>
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</table>

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- Follow PF Olsen policies and procedures and adhere to all operational conditions and constraints as relayed by managers, work prescriptions or contracts.
- Constantly review your operations and reflect on how they might be managed with less impact on the environment.
- Report all environmental incidents and notify us of any concerns where actual or potential adverse effects are recognised or anticipated. Respect our forest environment – don’t dump waste and rubbish.
- Undertake environmental training opportunities when provided.
- Respect our neighbours, landowners and stakeholders.
- Report sightings of rare species.
- Contribute to our success with your knowledge and experience.

**Your obligations under FSC?**
Achieving and maintaining certification is a team effort that requires conscientious awareness and effort from everybody at all times. To help employees, contractors and FSC Group Scheme Managers, PF Olsen has made a significant investment in and continues to invest in management systems that:
- Define procedures for undertaking our management operations.
- Record, collate and report environmental monitoring and performance data.
- Assist our employees in achieving compliance with the law.
- Assist in recognising, protecting and / or avoiding damage to vulnerable ecosystems or species.
- Assist in avoiding harm or inconvenience to our neighbours.

Also, the audit team interviewed contractors and confirmed they were given a copy of the training pamphlet and demonstrated awareness of their respective responsibilities.

The audit team concludes the FME have implanted appropriate corrective action.

<table>
<thead>
<tr>
<th><strong>NCR Status:</strong></th>
<th>CLOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comments (optional):</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Description of Nonconformance and Related Evidence:

Section 3.1 "For material sold with FSC claim the FME shall include the following information on sales and shipping documentation:

3.1.1 FME FSC certificate registration code, and
3.1.2 FSC certified claim: FSC 100%"

PF Olsen have included the above information correctly in their sales documents.

However, the following information was included on an invoice on the OTPP Forest New Zealand Forest Investment Ltd:

a. The Name of OTPP New Zealand Forest Investment Ltd instead of PF Olsen Ltd; and

b. There is a reference ‘SmartWood Certified Forestry Registration Code’ instead of FSC registration Code.

### Corrective Action Request:

Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the nonconformance.

### Timeline for Conformance:

By the next annual audit

### Evidence Provided by Organization:

The FME supplied copies of amended invoices

### Findings for Evaluation of Evidence:

The audit team reviewed several invoices and verified all invoices include the FME’s name, PF Olsen Ltd, and the correct FSC Group Scheme Registration Code: RA-FM/COC-000190.

The audit team concludes the FME have implemented appropriate corrective action. The audit team also interviewed key staff members involved in the COC system and confirmed they have a clear understanding about the requirement of the FSC Standard related to the application of the FSC registration code on invoices.

### NCR Status:

CLOSED

### Comments (optional):

2.6. **New nonconformity reports issued as a result of this audit**

None

2.7. **Audit observations**

**Observations** can be raised when issues or the early stages of a problem are identified which does not of itself constitute a nonconformance, but which the auditor considers may lead to a future nonconformance if not addressed by the client. An observation may be a warning signal on a particular issue that, if not addressed, could turn into a NCR in the future (or a pre-condition or condition during a 5 year re-assessment).
3. AUDIT PROCESS

3.1. Auditors and qualifications:

<table>
<thead>
<tr>
<th>Auditor Name</th>
<th>Addis Tsehaye</th>
<th>Auditor role</th>
<th>Lead Auditor</th>
</tr>
</thead>
</table>
| Qualifications: | • Has PhD and M.For.Sc (Distinction) Degrees from the University of Canterbury, New Zealand and a B.Sc (Honors) Degree from the University of Wales, UK.  
• Is currently working as Forestry Field Officer and Auditor with a New Zealand Government Enterprise organization, AsureQuality Ltd. He is a professional forester and specialist in wood products processing industries with over 25 years experience in the field.  
• He has been Auditor and Lead Auditor with Rainforest Alliance for 43 FM/COC and 135 COC audits and assessments in New Zealand and Australia. |

<table>
<thead>
<tr>
<th>Auditor Name</th>
<th>Graeme Gillies</th>
<th>Auditor role</th>
<th>Auditor</th>
</tr>
</thead>
</table>
| Qualifications: | • Forester, NZCF, NCFPI, Dip. Rur. Stud. Graeme has been in forestry since 1977, specializing in establishment and silvicultural management.  
• He has been a Forest Manager and Consultant to private and commercial owners before starting as the lower North Island Forestry officer with AsureQuality.  
• Graeme has a wide range of experience in Harvesting, Silviculture, Forest Quarantine, Quality Assurance, Sawmilling and Timber Processing.  
• He has successfully completed a QMS Lead Auditor course accredited by IRCA and IATCA.  
• Graeme has also recently studied full time to attain the Diploma in Rural Studies (specializing in Natural Resource Management) from Massey University. He has been involved in FSC Forest Management and Chain of Custody assessments/audits for 16 years. |
### 3.2. Audit schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Location / Main sites</th>
<th>Principal Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/06/18</td>
<td>PF Olsen Head Office Rotorua</td>
<td>• Opening Meeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• PF Olsen Senior management presented a comprehensive overview of the organization and any changes to the company's operations over the previous 12 months.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Audit team reviewed documentation against FSC Principles and criteria as applicable to this audit and review of conformance documents for open NCRs during the 2017 Re-assessment.</td>
</tr>
<tr>
<td>12 – 14/06/18</td>
<td>Field visits in the following four regions:</td>
<td>• Meeting with operation and planning staff to discuss aspects of operations.</td>
</tr>
<tr>
<td></td>
<td>Northland</td>
<td>• Review of documentation against FSC Principles and criteria as applicable to each forest and this audit.</td>
</tr>
<tr>
<td></td>
<td>Bay of Plenty</td>
<td>• Assessment of plantation forests, reserves and HCVs</td>
</tr>
<tr>
<td></td>
<td>Waikato</td>
<td>• Assessment of active operation sites and interview of contractors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Assessment of soil and water and riparian zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Assessment of wood tracking system (COC)</td>
</tr>
<tr>
<td>15/06/18</td>
<td>PF Olsen Head Office Rotorua</td>
<td>• Continuation of document review and staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Assessment of Chemical storage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff interview;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Closing Meeting</td>
</tr>
</tbody>
</table>

Total number of person days used for the audit: 10

= number of auditors participating 2 X average number of days spent in preparation, on site and post site visit follow-up including stakeholder consultation 5

### 3.3. Sampling methodology:

The audit team applied a comprehensive strategy to achieve results through review documents, direct observation in the field and interview of staff and contractors and other stakeholders. The documents reviewed includes the sustainable forest management plan policies and procedures covering land preparation and plantation establishment; logging and transportation; road and bridge construction; environmental management (natural vegetation and reserves, monitoring of water quality and pest management strategy); employment policy and contracts and financial documents. The audit team reviewed and examined all documents which are closely related to the FSC Principles and criteria for this audit.

The following sampling methodology was applied to select FMU samples in the field. The minimum sampling rate was calculated according to the following table:

<table>
<thead>
<tr>
<th>Size Class</th>
<th>Annual Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;10,000 ha</td>
<td>$X = 0.8 \times y$</td>
</tr>
<tr>
<td>1,000 – 10,000 ha</td>
<td>$X = 0.2 \times y$</td>
</tr>
<tr>
<td>100 – 1,000 ha</td>
<td>$X = 0.6 \times \sqrt{y}$</td>
</tr>
<tr>
<td>&lt; 100 ha</td>
<td>$X = 0.3 \times \sqrt{y}$</td>
</tr>
</tbody>
</table>

**Stratification of FMUs:**
According to the information sent to RA by the FME on 29th April 2018, the current listing of the group members include 103 FMU’s which are stratified by their size as follow:

<table>
<thead>
<tr>
<th>Size class</th>
<th>Number of FMU</th>
<th>Formula</th>
<th>Minimum sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1,000 – 10,000 ha</td>
<td>13</td>
<td>X = 0.2 * y</td>
<td>3</td>
</tr>
<tr>
<td>&gt;100 - 1,000 ha</td>
<td>45</td>
<td>X=0.6*\sqrt{y}</td>
<td>10</td>
</tr>
<tr>
<td>&lt; 100 ha</td>
<td>40</td>
<td>X = 0.3 * \sqrt{y}</td>
<td>4</td>
</tr>
<tr>
<td>New FMUs (&gt;100-1000)</td>
<td>2</td>
<td>X=0.6*\sqrt{y}</td>
<td>2</td>
</tr>
<tr>
<td>New FMUs (&gt;1,000 - 10,000)</td>
<td>3</td>
<td>X = 0.2 * y</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total group member</strong></td>
<td><strong>103</strong></td>
<td></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

The minimum FMU to be visited were 20 FMUs, and the list selected based on the above stratification were Four (4) FMUs from OTPP and two (2) from New FMUs (i.e. owned by China Forestry Group, CFG) with areas between 1,000 and 10,000. Seven (7) FMUs of OTPP and two (2) from New FMUs with areas >100-1,000 ha. Four (4) FMUs of OTPP and 1 FMU of other (iwi) manager/owner with area less than 100 ha.

### 3.3.1 List of FMUs selected for evaluation

<table>
<thead>
<tr>
<th>Size class</th>
<th>FMU/Group Member Name</th>
<th>Rationale for Selection* (Overall Summary only)</th>
</tr>
</thead>
</table>
| >1,000 – 10,000 ha   | OTPP Forests CFG (New FMUs) | • Assessment of various age-class plantation forests  
• Assessment of native vegetation including reserves, HCVs , RTEs, riparian vegetation, wetlands and native vegetation restoration;  
• Assessment of active operation sites, covering harvesting, skidding and forwarding operation, thinning to waste operations and interview of logging, forwarding and transportation contractors and employees;  
• Assessment of post-harvest sites  
• Assessment of road and bridge construction and culvert installation and soil drainage systems;  
• Assessment of silvicultural activities (including land preparation, plantation re-establishment, pruning, weed and pest management and Dethistroma control).  
• Examine environmental impacts (including soil, water and plants) caused by the FME forest operation activities; assessment of riparian zone management;  
• Assessment of chemical storages |
| 100 - 1,000 ha       | OTPP Forests CFG (New FMUs) |                                                                                 |
| < 100 ha             | Parawai and Ruahihi (iwi) |                                                                                   |

* The detail Rationale for Selection is presented in Appendix II of this report for each of the sample FMUs.
3.4. Stakeholder consultation process

<table>
<thead>
<tr>
<th>Stakeholder type (i.e. NGO, government, local inhabitant etc.)</th>
<th>Stakeholders notified (#)</th>
<th>Stakeholders consulted or providing input (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government and Local Government</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>NGOs, Societies, Trusts</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Maori organizations (Iwi)</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Local inhabitants (including contractors)</td>
<td>52</td>
<td>25</td>
</tr>
</tbody>
</table>

3.5. Changes to Certification Standards

- Forest stewardship standard used in audit:
  - FSC-STD-NZL-01-2012 New Zealand plantations EN (September 2013);
  - FSC-STD-30-005 (V1-0) EN: FSC standard for group entities in forest management groups;
  - FM-35: RA Chain-of-Custody Standard for Forest Management Enterprises (FMEs) (August 2013)

- Revisions to the standard since the last audit: □ No changes to standard. ☒ Standard was changed (detail changes below)

- Changes in standard: ADVICE-20-007-018 V1-0: Advice Note for the interpretation of the default clause of Motion 65 (IFL)

- Implications for FME: Conformance to new requirements verified

3.6. Review of FME Documentation and required records

a) All certificate types

<table>
<thead>
<tr>
<th>Required Records</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complaints received by FME from stakeholders, actions taken, follow up communication</td>
<td>Y ☒ N □</td>
</tr>
</tbody>
</table>

Comments: FME keeps a record of stakeholder engagements on its ‘Safety and Environment Summary Report’. This report is kept on the FME’s central computer system which allows all operation staff to add and track information and update the status of all stakeholder engagements including any complaints received. The auditor found no evidence of complaints directly reported to the organization in the last 12 months.

- Accident records

Comments: The audit team reviewed the FME’s accident records for its employees. All accidents are collected on an electronic system known as Noggin using tablets in the field and transferred onto the central computer. The audit team verified that no serious accidents or fatalities were recorded during the audit period.

- Training records

Comments: Training records for all staff members are on file in the FME head office. All records of training for contractors and their employees are held by the individual contractors. The FME holds a register of all contractors and their employees.
Evidence was supplied to the audit team showing the FME’s refresher training programme for regional staff and contractors which covers the FSC objectives was completed during the audit period.

Operational plan(s) for next twelve months

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>

Comments: FME has prepared an operational plan for the next twelve months, covering a wide range of activities including land preparation and planting, fertilization and harvesting and log transportation, environmental maintenance. The audit team also reviewed the next 12 months financial budget, allocated to each operational activity and confirmed that the budget is in line with the expected output.

Inventory records

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>

Comments: FME has permanent sample plots (PSP) for continuous growth assessment and monitoring. Two inventory records are taken during the rotation age of the forest. The first of these inventories is conducted at the age of 10, but it is not done for each forest block. The pre-harvest inventory is the second and main inventory taken prior to harvesting. The pre-harvest inventory record for each block of forest measured shows tree height, basal area (BA) and volume. The forests are harvested between ages 14 to 15, depending on the location of the forest within the FMU.

Harvesting records

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>

Comments: Harvesting records contain the following information about the area of blocks harvested, species, volume recovery (m3/ha), green logs recovery (GMT/ha), green metric ton (GMT) in forest, Estimated GMT at road side, total green logs (GMT) and green chip recovery (GMT).

b) Group Certificates

<table>
<thead>
<tr>
<th>Required Group Records</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group management system</td>
<td>Y □ N □</td>
</tr>
</tbody>
</table>

Comments: The audit team reviewed various documents which comprise the group management system including the Group Member Manual, Resource member agreements and the Group member pre-compliance checklists and all documents confirmed the Group entity has fulfilled the requirements of FSC-STD-30-005

Rate of membership change within the group

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>

Comments: There has addition of one (1) Group member in the past 12 months. Also, the group register records show that 7 members had been removed from the group register during the audit period. A full list of members is included in Appendix vii(a) of this report.

Formal communication/written documentation sent to members by the group entity during the audit period

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>

Comments: Only 2 of the 21 Group members are independent members. The 19 Group members are within the Group entity’s resource management scheme and these do not require any written communication/documentation regarding certification. The audit team verified that the 2 independent group members have been notified about the audit and necessary documentation required for the audit sent to them.

Records of monitoring carried out by the group entity

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>□</th>
<th>N</th>
<th>□</th>
</tr>
</thead>
</table>
Comments: The Group entity has established the required procedures with an annual audit system. Once the initial corrective action requests (CARs) are met by the group member, the group member’s continuous conformance is monitored through periodic sample audits by the Group entity. The audit team have reviewed samples of these monitoring records known as ‘Certification Maintenance Checklist’ for independent Group members.

Records of any corrective actions issued by the group entity

Y ☒ N ☐

Comments: Records reviewed during the audit (incident reports) show that the Group entity has issued corrective actions to address non-compliance on its group members in the past 12 months. These CAR(s) have been followed up and appropriate corrective actions taken and verified by staff members using the correct procedures.

Updated list of group members

Y ☒ N ☐

Comments: The updated list of Group members was provided to the audit team during the audit. The list shows that of the 21 group members 19 were part of the Group entity’s resource management scheme and only the remaining 2 were independent Group members.

APPENDIX I: FSC Annual Audit Reporting Form:

(Note: form to be prepared by the client prior to audit, information verified by audit team)

Forest management enterprise information:

<table>
<thead>
<tr>
<th>FME legal name:</th>
<th>PF Olsen Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>FME Certificate Code:</td>
<td>RA-FM/CoC – 000190</td>
</tr>
<tr>
<td>Reporting period</td>
<td>Previous 12 month period</td>
</tr>
</tbody>
</table>

1. Scope of Certificate

Type of certificate: Group Scheme

SLIMF Certificate: not applicable

New FMUs added since previous evaluation

Yes ☒ No ☐

Group Certificate: Updated of FMU and group member list provided in Appendix VII-a:

Multi-FMU Certificate: List of new FMUs added to the certificate scope:

<table>
<thead>
<tr>
<th>FMU Name/Description</th>
<th>Area</th>
<th>Forest Type</th>
<th>Location</th>
<th>Latitude/Longitude¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rototuna</td>
<td>6,644.9 ha</td>
<td>Plantation</td>
<td>36.25905</td>
<td>174.0454</td>
</tr>
<tr>
<td>Waitangi CFG</td>
<td>2,224.8 ha</td>
<td>Plantation</td>
<td>35.24709</td>
<td>174.0013</td>
</tr>
<tr>
<td>Mahoe</td>
<td>681.4 ha</td>
<td>Plantation</td>
<td>35.62426</td>
<td>173.8015</td>
</tr>
<tr>
<td>Houto</td>
<td>985.3 ha</td>
<td>Plantation</td>
<td>35.77457</td>
<td>174.0022</td>
</tr>
<tr>
<td>Pouto</td>
<td>3,172.3 ha</td>
<td>Plantation</td>
<td>36.36101</td>
<td>174.1</td>
</tr>
</tbody>
</table>

2. FME Information

☐ No changes since previous report (if no changes since previous report leave section blank)

Forest zone

Temperate

Certified Area under Forest Type

- Natural 0.0 hectares

¹ The center point of a contiguous FMU or group of dispersed properties that together comprise a FMU in latitude and longitude decimal degrees with a maximum of 5 decimals.
| Plantation | 48,787.40 hectares |
| Stream sides and water bodies | 1,182.98 Linear Kilometers |

3. Forest Area Classification

- No changes since previous report (if no changes since previous report leave section blank)

<table>
<thead>
<tr>
<th>Total certified area (land base)</th>
<th>59,798.2 ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total forest area</td>
<td>59,798.2 ha</td>
</tr>
<tr>
<td>a. Total production forest area</td>
<td>48,787.4 ha</td>
</tr>
<tr>
<td>b. Total non-productive forest area (no harvesting)</td>
<td>11,010.8 ha</td>
</tr>
<tr>
<td>- Protected forest area (strict reserves)</td>
<td>11,010.8 ha</td>
</tr>
<tr>
<td>- Areas protected from timber harvesting and managed only for NTFPs or services</td>
<td>0.0 ha</td>
</tr>
<tr>
<td>- Remaining non-productive forest</td>
<td>0.0 ha</td>
</tr>
</tbody>
</table>

| Total non-forest area (e.g., water bodies, wetlands, fields, rocky outcrops, etc.) | ha |

4. High Conservation Values identified via formal HCV assessment by the FME and respective areas

- No changes since previous report (if no changes since previous report leave section blank)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description:</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV1</td>
<td>Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).</td>
<td>160.5 ha</td>
</tr>
<tr>
<td>- Semi-wetland, Sedge &amp; Fernlands (154.4 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Adventive and Exotic Weeds &amp; Grasses (6.1 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCV2</td>
<td>Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.</td>
<td>0 ha</td>
</tr>
<tr>
<td>HCV3</td>
<td>Forest areas that are in or contain rare, threatened or endangered ecosystems.</td>
<td>356.4 ha</td>
</tr>
<tr>
<td>- Duneland: Small Leaved Colonisers &amp; Grasses (70.2 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Geothermal Sinter Terraces (1.3 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Geothermal Vegetation (11.5 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Kahikatea / Swampland (16.2 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lake / Surface Water Wetland (3.1 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Leptospermum / Coprosma / Flax Wetland (82.9 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lowland Softwood / Tawa / Titoki (35.6 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Semi-wetland, Sedge &amp; Fernlands (135.6 ha)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCV4</td>
<td>Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).</td>
<td>0 ha</td>
</tr>
<tr>
<td>n/a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 The HCV classification and numbering follows the ProForest HCVF toolkit. The toolkit also provides additional explanation regarding the categories. Toolkit is available at [http://hcvnetwork.org/library/global-hcv-toolkits](http://hcvnetwork.org/library/global-hcv-toolkits).
<table>
<thead>
<tr>
<th>HCV5</th>
<th>Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).</th>
<th>n/a</th>
<th>0 ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV6</td>
<td>Forest areas critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).</td>
<td>Other</td>
<td>0.8 ha</td>
</tr>
</tbody>
</table>

Number of sites significant to indigenous people and local communities: 642

**5. Workers**

Number of workers including employees, part-time and seasonal workers:

<table>
<thead>
<tr>
<th>Total number of workers</th>
<th>131 workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Of total workers listed above</td>
<td>98 Male</td>
</tr>
<tr>
<td>Number of serious accidents</td>
<td>6 (4 in FSC and 2 in non-FSC forests)</td>
</tr>
<tr>
<td>Number of fatalities</td>
<td>0</td>
</tr>
</tbody>
</table>

**6. Pesticide Use**

☐ FME does not use pesticides. (delete rows below)

FME has a valid FSC derogation for use of a highly hazardous pesticide  ☒ YES ☐ NO

<table>
<thead>
<tr>
<th>Name</th>
<th>Quantity</th>
<th># of Hectares Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexazinone</td>
<td>226.82 kg</td>
<td>161.20 ha</td>
</tr>
<tr>
<td>Terbuthylazine</td>
<td>4,345.47 kg</td>
<td>638.30 ha</td>
</tr>
<tr>
<td>Picloram</td>
<td>126.13 kg</td>
<td>460.9 ha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Quantity</th>
<th># of Hectares Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clopyralid</td>
<td>190.17 kg</td>
<td>451.3 ha</td>
</tr>
<tr>
<td>Cuprous oxide</td>
<td>9142.41 kg</td>
<td>7,331.0 ha</td>
</tr>
<tr>
<td>Fatty alcohol ethoxylate</td>
<td>18,868.80 ltr</td>
<td>7,331.0 ha</td>
</tr>
<tr>
<td>Glyphosate</td>
<td>5,700.6 kg</td>
<td>1,561.3 ha</td>
</tr>
<tr>
<td>Haloxyfop</td>
<td>2.29 kg</td>
<td>36.5 ha</td>
</tr>
<tr>
<td>Metsulfuron methyl</td>
<td>97.92 kg</td>
<td>1,088.9 ha</td>
</tr>
<tr>
<td>Organosilicone</td>
<td>0.77 kg</td>
<td>1,512.4 ha</td>
</tr>
<tr>
<td>Parrafinic oil</td>
<td>3.14 kg</td>
<td>367.6 ha</td>
</tr>
<tr>
<td>Pindone</td>
<td>0.02 kg</td>
<td>0.0 ha</td>
</tr>
<tr>
<td>Spray Maximiser</td>
<td>0.01 kg</td>
<td>65.0 ha</td>
</tr>
<tr>
<td>Triclopyr</td>
<td>457.64 kg</td>
<td>371.8 ha</td>
</tr>
</tbody>
</table>
APPENDIX II: Rainforest Alliance Database Update Form

Instructions: For each FSC certificate, Rainforest Alliance is required to upload important summary information about each certificate to the FSC database (FSC-Info). During each annual audit RA auditors should work with the certificate holder to verify that the information posted on FSC-Info is up to date as follows:

1. Print out current Fact Sheet prior to audit from FSC-Info website or direct link to fact sheets (http://www.fsc-info.org)
2. Review information with the FME to verify all fields are accurate.
3. If changes are required (corrections, additions or deletions), note only the changes to the database information in the section below.
4. The changes identified to this form will be used by the RA office to update the FSC database.

Is the FSC database accurate and up-to-date? YES ☐ NO ☒
(if yes, leave section below blank)

Client Information (contact info for FSC website listings)

<table>
<thead>
<tr>
<th>Organization name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Contact</td>
<td></td>
</tr>
<tr>
<td>Primary Address</td>
<td>Telephone</td>
</tr>
<tr>
<td>Address</td>
<td>Fax</td>
</tr>
<tr>
<td>Email</td>
<td>Webpage</td>
</tr>
</tbody>
</table>

Forests

<table>
<thead>
<tr>
<th>Change to Group Certificate</th>
<th>Yes ☒ No ☐</th>
<th>Change in # of parcels in group</th>
<th>21 total members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total certified area</td>
<td>59,798.2 Ha (or)</td>
<td>Acres</td>
<td></td>
</tr>
</tbody>
</table>

Species (note if item to be added or deleted)

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Add/Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Products

FSC Product categories added to the FM/CoC scope (FSC-STD-40-004a)

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II-a: Certified Group Member/FMU List (Please refer to Exhibit 1 - Group Scheme Register)*

(Insert additional rows as necessary for groups with more than 15 members).

1. **Total # members in the certified pool:** 21

2. **Total area in Current Pool (ha. or acres):** 59,798.2

**Cutting Right:**

Cutting right is a term used in the NZ forest industry to describe a range of relationships. This relationships is often contractual in nature. For example, it could be the right to come on to land for the purpose of harvesting existing mature trees. Or it could be directly analogous with a forestry right granted under the Forest Rights Act 2016 in that it contains the usual rights to plant, maintain and harvest the trees. The latter is applicable in the case for PF Olsen as a Group Entity.