Version 1

CRAIG WEBB
Consultant Arborist

PLAN CHANGE 2 SUBMISSIONS REVIEW

WAIPA DISTRICT COUNCIL

REPORT PREPARED BY: CRAIG WEBB

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CWCA Limited
craig@cwca.co.nz
ph: 021 0818 9680

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1 INTRODUCTION

1.1 I, Craig Webb Consultant Arborist (CWCA Limited), have been commissioned by Waipa District Council (WDC) to provide a response to submissions received on the notified Plan Change 2 – Protected Trees.

1.2 The purpose of this report is to provide analysis and commentary, relating to submissions of three topics, as set out in the original brief I received by email from Chris Dawson, Planning Project Manager, Bloxam Burnett & Oliver Limited. The three submission topics are:

- Topic 1: Assessment Methodology
- Topic 2: Individual Tree Assessments / STEM scores
- Topic 3: Value of Trees

1.3 This report has been compiled with reference to the 15 submissions that were received by Waipa District Council following notification of the plan change. A number of the submissions contained comments relevant to the three topics that I have been asked to comment on.

2 ANALYSIS OF SUBMISSIONS

TOPIC 1: ASSESSMENT METHODOLOGY

2.1 Submissions from Christopher Floyd (1) and Roger Jordan (2) oppose the plan change for concern about the loss of protection for many trees as a result of the change in the evaluation methodology. Submissions from David Phillips (5), Royce Wiles (9) and Jane Moodie (10), support the Plan Change in part, and raise concerns about the number of trees that lose protection status following reevaluation using STEM.

2.2 Submissions from Richard Carver (3) and Chris Beex (4) oppose the plan change due to questions around the STEM system and the reasons for changing from the RNZIH system. This topic was discussed in my original report, and I provide additional commentary in the Discussion (3.0) of this report.

2.3 Submissions from Roger Axcell & Nola Searancke (8) and Pamela Carter (15) support the change to the STEM evaluation method as part of the plan change.

2.4 With respect to submissions (1), (2), (5), (9) & (10), it is acknowledged that while some attrition to the protected tree list is inevitable within each tree evaluation cycle, it could well be argued that a 34% loss to the list of protected trees is greater-than-expected attrition from natural (or unnatural) causes. The setting of a protection threshold is the key driver in determining the number of trees that are protected under any evaluation system. When a new system of tree evaluation is introduced, a percentage of loss from a subset of trees is expected, and this is also determined by the protection threshold that is set.

2.5 The 120 points threshold results in 34% of the current trees being removed from the list of protected trees. While natural attrition through aging and down-grading of the quality of trees is expected to occur over time, I agree that losing 1/3 of the protected trees could be considered to be too high. For this reason, consideration of lowering the protection threshold could be warranted.

TOPIC 2: INDIVIDUAL TREE ASSESSMENTS / STEM SCORES

2.6 Several submissions relate to particular individual trees.

- Steven Dyke (7), on behalf of Fairview Motors Limited submits that the English Oak at 95 Victoria Street should be removed from the protected tree list. The English oak scored 90 points, so is below the protection threshold of 120 points. The plan change is supported by Steven Dyke.
- The submission from Kay Rona (11) is concerned with the English oak at 95 Carlyle Street that scored 108 points. Kay Rona opposes the plan change due to issues with management of the English oak tree.
- Elizabeth Bridgeman (12) opposes the plan change because a golden elm at 30A Hamilton Road will not be protected, having scored 117 points.
- Jill and John Elliot (13) support the plan change in part and have raised concern about the black walnut tree at 18 Le Quesnoy Place, which scored 144 points.

2.7 The examples above highlight the differences in perspective of different tree owners / landowners. This also relates to the matter of voluntary protection and whether perceived hardship, nuisance values and other negative values (perceived or actual) should influence the list of protected trees. In response to those four submissions, I provide the following guidance:

- Removal of the English oak tree at 95 Victoria Street from the protected tree list will satisfy the submitter. The tree has been found to be not worthy of mandatory protection.
- The golden elm at 30A Hamilton Road could be reevaluated in light of the submitter's claims of tree-related benefits and historic value. A score that protects this tree (under the current protection threshold) could be achieved by a one-step shift in any one category in STEM to a higher value.
- The black walnut tree at 18 Le Quensoy Place was found to be in good condition and no threat to human, animal or plant life. It is true that black walnut trees have toxic compounds that can kill other plants or prevent many from growing, however in this tree's current setting the harm done is not a significant factor, in my opinion. The toxic compounds' hazard to humans and animals is overstated in the submission and not supported by fact. Black walnut provides an edible tree-nut crop and the nuts have been found to be toxic to dogs only when moldy (the fungal mold is toxic). The black walnut tree scored well due to its size, visual amenity and function factors. The tree

achieved low scores in areas of STEM where nuisance can be considered. In consideration of the potential nuisance values of this tree, it is noted that no dwelling currently occupies the site, so the tree does not impact on any inhabitants. It is acknowledged that the presence of a protected tree could have significant implications for future land development on this property, and that this may require creative planning and architecture. In light of the submission by Jill and John Elliot, the black walnut could be reevaluated. However, in this case the tree is unlikely to be down-graded to an unprotected status, given the score is 24 points (4 one-step shifts to a lower category) above the protection threshold of 120 points.

- The English oak tree at 95 Carlyle Street is in a condition that makes it not worthy of mandatory protection. This tree scored just 84 points, largely due to its poor condition. The hand-over of responsibility and Council's past maintenance of the tree are cited as concerns, yet the benefit of trees in relation to a high water-table are described as reasons why the submitter does not want the tree removed. While the history of management of this tree are unknown to me, it seems clear that the problem with this tree is not the maintenance of it by Council, but the damage that the tree endured during development of land.

2.8 My recommendation for peer review of my STEM scores and the input of an historian may be warranted where any further details or claims of individual tree merit are supplied by members of the public. A reevaluation of the scores may shift some trees into the protected status bracket (currently above 120 points).

TOPIC 3: VALUE OF TREES

2.9 Submissions from Christopher Floyd (1), Royce Wiles (9) and Jane Moodie (10) mention the multiple benefits of trees. These topics are largely linked to the Waipa District Tree Policy, which I understand is under review concurrent with, or subsequent to, Plan Change 2. The Waipa District Tree Policy is outside the scope of my review, but I support the development of Council policies that recognize the multiple and significant benefits of trees.

2.10 Jill & John Elliot (13) submit that there should be scope to remove trees that are a danger to people, plants and animal lives. I agree that trees that contain a proven risk of harm should be removed if the risk of harm cannot be tolerated or mitigated. Trees that are obviously faulty should not be nominated or considered for evaluation as protected trees.

2.11 The submission by Christopher Floyd (1) suggests a mechanism for voluntary protection of individual trees on private land should be provided. This is a matter, that is outside of my consideration as part of my brief, however, I would point out that tree protection by private covenant is a mechanism that already exists for land-owners to register protection of trees on private property. By virtue of STEM being a tree evaluation system, it is not a mechanism that is going to give protection to all trees that are voluntarily nominated for protection. Going back to my original report, I suggested that a lower-tier of protection could be included in the District Plan to capture the next generation of historic and notable trees. This is a matter that could be

considered as a means of addressing submitters' calls for voluntary protection, so that trees of merit that don't meet the protection threshold can be protected if they meet a certain score or other notable criteria.

2.12 Similarly, protection of the next generation of trees is also a topic of the submission from Jane Moodie. I agree that the STEM evaluation method limits the ability of Council to add new trees to the list of protected trees, due to the threshold that is set generally only allowing large, prominent or otherwise exceptional trees to become protected. Again, a lower-tier of protection could be considered for inclusion in the District Plan to capture the next generation of protected trees.

2.13 The STEM system recognizes many of the important values of trees, such as amenity, function (usefulness), role in a landscape and climatic influence. The system, developed as a means of evaluating amenity trees, is somewhat skewed towards visual amenity of the tree and the physical condition of tree. While there is some scope to consider wildlife habitat, stormwater amelioration, soil stabilization, carbon sequestration, air quality and temperature moderation functions, these are relatively small components of the evaluation system as it stands.

3 DISCUSSION

3.1 All tree evaluation methods have limitations and problems in their application. By their very nature, tree evaluation systems are subjective, and it is not uncommon for two evaluators with similar qualifications and backgrounds to arrive at different scores when undertaking evaluation of the same tree. This is due to differences in interpretation of many of the criteria that are assessed under tree evaluation systems.

3.2 The Standard Tree Evaluation Method (STEM) is used by the majority of Council's that evaluate trees in New Zealand. This method can be considered a 'standard' method and there is significant potential benefit in Waipa District Council adopting STEM. The RNZIH method has been superseded by the STEM method.

3.3 Many arborists and landscape professionals have familiarity with the STEM method, meaning that the assessment, review and moderation process for trees evaluated using STEM is relatively straightforward. Thresholds for protection of trees using STEM are already well established and 'proven' through environment court hearings, so these may be considered to be beyond challenge. As the 'standard' for tree evaluation in New Zealand, STEM procedures and practices may be re-evaluated, updated, supported by additional guidance and improved over time, making tree evaluation simpler and less subjective. Subsequent reviews of STEM may, for example, recognize or put more emphasis on the less tangible benefits of trees, such as those listed in the submission from Jane Moodie.

3.4 The application of STEM to trees that have significant benefit to society, ignores any factors relating to private property rights, ownership responsibilities and custodianship of trees. A system of tree evaluation for the purpose of mandatory protection should assume that tree

protection is for the longer-term benefit of the community and ignore the short-term vagaries of property ownership and management regimes.

3.5 Setting of thresholds for protection under STEM, or any system of tree evaluation can be a contentious issue. The STEM manual provides no guidance as to how a threshold for formal protection of trees should be set. This is where reference to other District Council's tree policies is useful. A score of 120 points is a defendable position as it aligns with many other Councils that use STEM. In light of Cambridge being known as Town of Trees, there may be justifiable reason to set a lower protection threshold than other Council's.

3.6 I have reviewed the list of trees that fail to meet the protection threshold of 120 points and found that eleven (11) of the 41 trees appear to have suffered a decline in condition, due to health conditions, aging or a change in circumstances. This may be considered 'natural' attrition, as the tree population ages and the use of land changes. Of the 30 trees that were assessed to have no down-grading from natural attrition, nineteen scored 114 or higher points. Just two of the eleven trees suffering from attrition made a score of 114. A score of 114 is just a one-step upward shift in any one category in STEM to a score that gives the trees protection status. Therefore, lowering the STEM threshold to 114 would result in just 20 trees (17%) falling off the list of protected trees.

3.7 When undertaking the STEM reviews of all existing notable trees, I used conservative inputs into the evaluation system. With this in mind, there is potential for a more liberal application of the scoring system to shift the balance of trees that meet the threshold. In particular, further information that supports any historical, cultural or significant amenity values will positively affect the ratings of trees. A peer review of the scores by another arborist, plus further input from historians and landscape specialists may shift the scores that are applied under STEM.

3.8 I am of the opinion that the methodology (STEM) is the best option for tree evaluation and that there is potential for the scores and score thresholds to shift to allow for more trees to remain on the list of notable trees to meet the concerns of the majority of the submitters.