



Determination 2019/031

Regarding the compliance of a pool barrier with adjacent palm trees at 96 Tudehope Road, Kamo



Summary

This determination is in relation to a pool barrier that has mature palm trees outside of and adjacent to it. The determination concerns the barrier's compliance with the Building Code to the extent required by section 162C of the Building Act.

1. The matter to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the Act") made under due authorisation by me, Katie Gordon, Manager Determinations, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.

1.2 The parties to this determination are:

- Whangarei District Council carrying out its duties as a territorial authority or building consent authority and who applied for the determination ("the authority")
- L and A Faithfull, owners of the residential pool ("the owners").

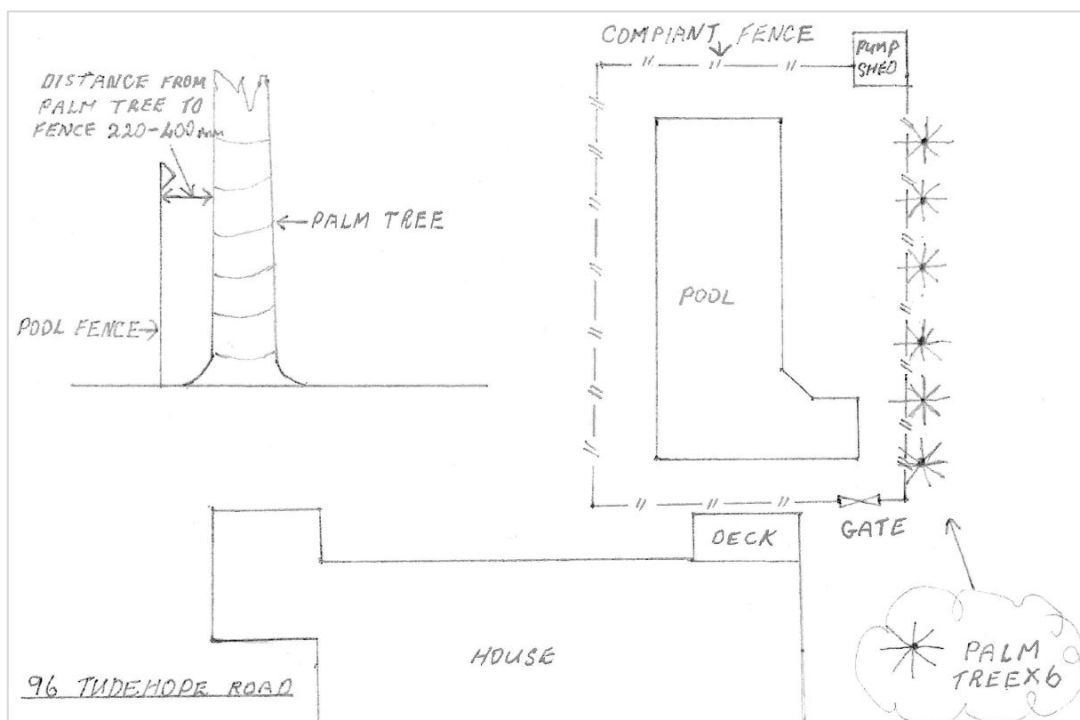
1.3 The determination arises from a failed inspection of a residential swimming pool. The authority considers that young children could use nearby palm trees to climb over the pool barrier and therefore gain unsupervised access to the pool.

¹ The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.building.govt.nz or by contacting the Ministry on 0800 242 243.

- 1.4 The matter to be determined² is whether the owners' pool barrier complies with the Building Code with respect to the palm trees located outside of, and adjacent to, the pool barrier, to the extent required by section 162C³.
- 1.5 In making my decision I have considered the parties' submissions and the other evidence in this matter. This determination does not consider the compliance of other aspects of the owners' pool.
- 1.6 Refer to Appendix A for relevant extracts from the legislation.

2. Background

- 2.1 The owners live on a rural property near Kamo, north of Whangarei. On 19 December 2002 they were granted building consent no. 6119 by the authority to construct an in-ground fibreglass swimming pool close to their house.
- 2.2 From the approved plans the pool is about 4.5 m by 12 m plus a small dogleg. It is surrounded by metal fencing comprised of thin vertical bars, with thin horizontal bars along the top and bottom which are within approximately 100 mm from the top and bottom of the fence that is 1.32 m high ("the pool barrier").
- 2.3 Just outside the northeastern side of the pool barrier, and still on the owners' property, is a row of six mature palm trees. Trunks of the palm trees are between 220 mm and 400 mm horizontally from the top of the pool barrier. They have large, smooth trunks with no vegetation, branches or similar for the first 2-3 m of their height⁴.
- 2.4 The authority's sketch in Figure 1 depicts the owners' pool, barrier and palm trees.



² Under section 177(1)(a) of the Act

³ References to clauses in this determination are to clauses of the Building Code and to sections are to sections of the Act, unless otherwise specified.

⁴ The matter is whether the barrier and palm trees comply with the Building Code to the extent required by section 162C, in making this determination I am considering the situation as it is currently.

Figure 1: The owner’s pool, barrier and adjacent palm trees (not to scale)

- 2.5 On 1 January 2017 legislative changes took effect requiring territorial authorities to carry out regular inspections of residential pools (refer paragraph 4.1). An inspector contracted to the authority carried out the first such inspection of the owners’ pool on 2 October 2018.
- 2.6 At this inspection the inspector completed the authority’s standard form “Swimming Pool and Spa Pool Fencing Check List”. The inspector flagged one criteria out of eleven under the “Fencing” section of the check list as the basis for the failure of the inspection “No permanent steps or other fixtures/features within 1200 mm of the outside of the barrier (F9 AS/2⁵ (2.1.6))” indicating that there were fixtures/features that required a remedy.
- 2.7 The same day, 2 October 2018, the authority wrote to the owners to advise their pool was non-compliant as it had objects (the palm trees) that could assist young children climbing the barrier, within 1.2 m of the pool barrier. The authority said this non-compliance had to be rectified within 30 days and it would inspect the pool again after that date.
- 2.8 A few days later the owner rang the authority to discuss ways to achieve compliance. The authority responded by email on 1 November 2018, advising the owners that it believed the palm trees could assist children to climb the pool barrier by giving them something to prop off. The authority also suggested a way the pool barrier could comply, which involved increasing its height.
- 2.9 The owners replied on 19 November 2018 that they did not accept their pool was non-compliant. They said while “the standard” did not allow climbable vegetation within 1200 mm, a straight palm tree was not climbable.
- Therefore, to predict an under 5-year-old could prop off such a tree is imaginative but is not contemplated by the standard nor is it realistic in practice.
- 2.10 The owners also got a group of five to seven year old children to try and scale the pool fence with the help of the palm trees. They told the authority these children had showed neither the strength nor cognitive ability to even get off the ground.
- 2.11 On 18 January 2019 the authority visited the owners’ property to take photographs and confirm measurements of the pool barrier and trees.
- 2.12 I received an application for determination on 23 January 2019.

3. Submissions and the draft determination

3.1 The authority

- 3.1.1 The authority sent a short submission, summary of events and copies of:
- the building consent for the pool, consented plans and an information sheet about the pool fencing
 - the inspection report and associated letter
 - a sketch of the pool area and palm trees
 - relevant photographs and correspondence.

⁵ I note here ‘F9/AS2 Covers for small heated pools’ refers to small heated pools, which the subject pool is not. I also note in regard to paragraph 2.1.6 there is no such paragraph in F9/AS2. The relevant Acceptable Solution is ‘F9/AS1 Residential Pool Barriers’.

- 3.1.2 On 1 February 2019 the authority clarified that it had not issued the owners a notice to fix⁶ pending the outcome of the determination.
- 3.1.3 The authority said it did not accept that the owners' test using young children to try and scale the fence was relevant, and that its visit to the property on 18 January 2019 had confirmed its opinion that the large palm trees could assist climbing.

[The authority] contends that a child could use the palm trunk as a support while the feet and hands are moved further up the barrier until at the top and then used to help rotate over the barrier. Although the trunks are relatively smooth [the authority] believes sufficient grip would be provided to assist climbing.

- 3.1.4 The authority also said there were a number of small palms planted between the larger palm trees but considered these "deemed to comply" as they had very aggressive spines that would inhibit their use for climbing⁷.

3.2 The owners

- 3.2.1 The owners sent a submission and photographs on 5 February 2019.
- 3.2.2 The owners said they had cooperated and maintained the integrity of their fencing system for 16 years since the pool was constructed and they supported the authority's drive to ensure the compliance of the district's swimming pools. However, they disagreed with the authority's assessment of their pool for the following reasons:
- Acceptable Solution⁸ F9/AS1 section 2 Figure 2 referred to a climbable object within 1200 mm, but straight palm trees like theirs were not climbable.
 - The authority had extended the intent of F9/AS1 to envisage a situation where a child could use the pool fence and tree combined to get over the fence, but this was not contemplated by the Acceptable Solution.
 - Their testing with young children (refer paragraph 2.10) was relevant and more informative than the authority's theory. These children did not think of using the trees; when directed to the trees they gave up immediately and hunted for other ways to get over; and they had neither the cognitive ability nor the physical strength to do what the authority suggested.
 - A determined and physically capable child would choose easier methods than propping themselves against the trees, such as dragging something over to the pool barrier to assist them climbing over the barrier.

3.3 Draft determination

- 3.3.1 The draft determination was issued to the parties for comment on 16 May 2019.
- 3.3.2 The authority accepted the draft determination with no further comments on 16 May 2019.
- 3.3.3 The owners accepted the draft determination with no further comments on 23 May 2019.

⁶ Under section 164 of the Act.

⁷ I note I have not considered this vegetation as part of the determination as the authority consider these "deemed to comply".

⁸ Acceptable Solutions and Verification Methods are produced by the Ministry and, if complied with, must be accepted by a building consent authority as establishing compliance with the Building Code (refer section 19 of the Act).

4. Discussion

4.1 The legislation and ways to comply

- 4.1.1 On 1 January 2017 the Fencing of Swimming Pools Act 1987 (“the FOSP Act”) was repealed and new provisions relating to residential pools were added to the Building Act (sections 162A-162E, 450A and 450B). At the same time the relevant Building Code requirements were moved from Clause F4 ‘Safety from falling’ to a new Clause F9 ‘Means of restricting access to residential pools’.
- 4.1.2 Section 162C of the Act requires residential pools to have physical barriers that restrict access by unsupervised children under five years of age. In particular, section 162C(2) states that the means of restricting access to a residential pool must comply with the requirements of the Building Code –
- (a) that are in force; or
 - (b) that were in force when the pool was constructed, erected, or installed (after 1 September 1987) and in respect of which a building consent, code compliance certificate, or certificate of acceptance was issued (in relation to the means of restricting access to the pool).
- 4.1.3 Section 162D requires territorial authorities to inspect residential pools at least once every three years to determine whether the pool barriers comply with the requirements of section 162C.
- 4.1.4 Ways to comply with the requirements of section 162C include following the relevant Acceptable Solutions; i.e. Acceptable Solutions for the Building Code requirements that are in force currently, or Acceptable Solutions for the Building Code that were in force when the pool was constructed, erected or installed if constructed, erected or installed after 1 September 1987 but before 1 January 2017.
- 4.1.5 Another compliance option is provided by section 450A Transitional and savings provision for residential pools:
- (1) Fencing of a residential pool in accordance with clauses 1 to 10 of the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force immediately before 1 January 2017) is an acceptable solution for establishing compliance with the building code for the purpose of section 162C.
- 4.1.6 Further, for existing residential pools constructed before 1 January 2017 – as is the case for the owners’ pool – section 450B(2) provides that barriers are deemed to comply with section 162C if they:
- (a) complied with the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force) immediately before 1 January 2017; and
 - (b) continue to comply with those requirements subject to—
 - i) any exemption that was granted under section 6 or clause 11 of the Schedule of that Act and that was subsisting immediately before 1 January 2017; and
 - ii) the conditions of any such exemption.
- 4.1.7 The Schedule to the FOSP Act provided a means of compliance for fences (i.e. pool barriers) under that Act. Clause 1(1)(b) of the Schedule states:

1(1) The fence shall extend:

...

- (b) at least 1.2 metres above any permanent projection from or object permanently placed on the ground outside and within 1.2 metres of the fence.

4.2 Whether the owners' pool barrier complies

- 4.2.1 The owners must comply with the requirement set out in section 162C(1) that their pool has a physical barrier to restrict access by unsupervised children under five years of age. Section 162C(2)(a) and (b) then provides that the means of restricting access must comply with the Building Code requirements either in force now, or when the pool was constructed and in relation to which a building consent or code compliance certificate was issued (in relation to the means of restricting access to the pool).
- 4.2.2 I note here the authority is satisfied the pool barrier itself, other than the presence of the palm trees, complies with the Building Code. I have therefore not considered other aspects of the barrier's compliance.
- 4.2.3 The authority carried out an inspection (refer paragraph 2.6) and assessed the owners' pool against Acceptable Solution F9/AS2 (although I take this to be an error and assume F9/AS1 was meant). As the owners' pool was constructed in 2003, in the first instance, the authority should have considered whether the pool barrier met the Building Code requirements in force at that time the pool was constructed, which were contained in Clause F4⁹. I note here that the authority's standard form for residential pool inspections (refer to paragraph 2.6) only appears to allow consideration against the current Building Code (Clause F9) and the relevant Acceptable Solution F9/AS1, which is not what section 162C provides for. I consider the authority erred in making their assessment of the existing pool barrier against Clause F9 only, as section 162C provides for pool barriers to comply with the Building Code requirements either in force now, or when the pool was constructed, so the authority should have considered whether the pool barrier complies with Clause F4 which was in force at the time the pool barrier was constructed.
- 4.2.4 Clause F4 required swimming pools with a water depth of at least 400 mm to have barriers restricting access by children under 6 years of age, to the pool or immediate pool area¹⁰. In particular, Clause F4.3.5(b) required pool barriers to have:
- (b) No permanent objects on the outside of the barrier that could provide a climbing step.
- 4.2.5 Under section 162D the authority must determine whether the owners' pool barrier complies with the Building Code to the extent required by section 162C. In the case of the owners' pool barrier which was constructed in 2003, the barrier is deemed-to-comply with the requirements of section 162C (specifically section 162C(2)(b)) if it is in accordance with:
- the relevant Acceptable Solution at the time, F4/AS1¹¹, which in regards to swimming pool barriers required:

3.1.1 Fencing for swimming pools shall be constructed to no lesser standard than is required by the Schedule to the Fencing of Swimming Pools Act 1987, to restrict the access of children.

Or,

⁹ Building Regulations dated 6th January 2002.

¹⁰ This applied unless the pool had an exemption under the Fencing of Swimming Pools Act section 5

¹¹ Acceptable Solution F4/AS1, Second Edition amendment 4

- Clauses 1-10 of the Schedule of the FOSP Act (as provided for by sections 450A and 450B).
- 4.2.6 In my view the owners' pool barrier with the palm trees (located outside of, and adjacent to) is not in accordance with Clause 1(1)(b) of the Schedule to the FOSP Act, and therefore also not in accordance with F4/AS1 at the time. This clause requires a fence to extend at least 1.2 m above any permanent objects within 1.2 m horizontally of its exterior. The palm trees constitute such objects but are clearly taller, not shorter, than this barrier (which is 1.32 m high).
- 4.2.7 Paragraph 4.2.5 of this determination outlined two 'deemed-to-comply' solutions to meet the requirements of section 162C(2)(b); however it is important to note that an Acceptable Solution is one way of establishing compliance with the Building Code, but not the only way¹². The design of the pool barrier is not in accordance with an Acceptable Solution or otherwise deemed-to-comply solution, so must be assessed as an alternative solution. This involves consideration directly against the requirements of Clause F4 at the time, and as the dispute relates to the palm trees outside of and adjacent to the pool barrier, the relevant performance requirement is Clause F4.3.5(b).
- 4.2.8 In considering whether the palm trees provide a "climbing step", I note there is no dispute between the parties that the palm trees by themselves are too difficult for a young child to climb: the trunks in circumference are too large to get their arms around, are smooth (i.e. do not have a toe/foot hold or other similar grip) and they have an absence of vegetation, branches or similar until at least 2 m high (which could provide opportunity for young children to utilise to help climb the barrier).
- 4.2.9 The authority believes (refer paragraph 3.1.3) that a child could use these tree trunks to lever themselves up and over the pool barrier. The owners dispute this, arguing that young children are very unlikely to have the inclination or cognitive ability to attempt this as a way to scale the barrier. The owners' are also of the view that the manoeuvre contemplated by the authority would require a high degree of strength and dexterity even if a child thought to attempt it, particularly given the lack of ability to purchase on either the pool barrier (very thin and smooth metal vertical rails) or the palm tree trunks.
- 4.2.10 After taking all the evidence and the particulars of the pool barrier and the particulars of the palm trees in this case into consideration, I agree with the owners' view. The palm trees by themselves are too difficult for a young child to climb (paragraph 4.2.8), and there is no dispute that the pool barrier restricts the access of unsupervised young children (refer paragraph 4.2.2). Further, I do not consider the combination of the palm trees, that are too difficult to climb, and the barrier, which restricts the access of unsupervised young children, to result in a 'climbing step'.
- 4.2.11 The distance between the pool barrier and the trunks of the palm trees, which varies between 220-400mm, I consider a restrictive distance taking account the size of a young child and the space required to manoeuvre over a picket style barrier with limited horizontal members and very thin vertical members. The distance limits a young child to fully outstretch their limbs to carry out a manoeuvre in the way the authority envision. I also consider that a young child would not be able to perform any such manoeuvre between each (or two) of the palm tree trunks as, from the photographs supplied, the palm trees appear too widely spaced.

¹² Refer to sections 16 to 19 of the Act

- 4.2.12 I also consider the pool barrier itself to be a contributing factor to restrict entry or climbability by young children: the barrier comprises mostly thin vertical metal bars, with thin horizontal members limited to the top and bottom of the barrier, making the barrier difficult to grip or gain a toe/foot hold or similar purchase when leaning against the palm tree trunks in the way the authority envision, especially when this distance is limited to 220-400mm. In addition, the barrier height is greater than the minimum height required¹³ by the Schedule of the FOSP Act, increasing the distance to climb which relates to an increase in required physical ability and difficulty in the type of manoeuvre required to use the palm tree trunks as a climbing step.
- 4.2.13 I am of the view the pool barrier and the palm trees as arranged in this case are too difficult to climb for the limited physical strength, dexterity and cognitive ability of young children.
- 4.2.14 Therefore, in my view the large palm trees outside of and adjacent to the owners' pool barrier do not constitute a "climbing step" for young children. Accordingly, I conclude that the pool barrier, with the palm trees located outside of and adjacent to the barrier complies with the Building Code Clause F4.3.5(b), being the relevant performance requirement in force when the pool was constructed.
- 4.2.15 I note here that these palm trees and the smaller ones between them are living and may change over time. I note here for the owner's benefit the requirements of section 162C(4): the owners are responsible for maintaining the pool barrier's compliance at all times¹⁴.
- 4.2.16 I emphasise that each determination is conducted on a case-by-case basis. Accordingly, the fact that a pool barrier in this case has been established as being code compliant in relation to a particular situation and configuration does not necessarily mean that the same arrangement will be code compliant in another situation.

5. The decision

- 5.1 In accordance with section 188 of the Building Act 2004 I hereby determine that the physical barrier to the owners' pool complies with the Building Code, with respect to the palm trees located outside of, and adjacent to, the pool barrier, to the extent required by section 162C.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 11 July 2019.

Katie Gordon
Manager Determinations

¹³ As a 'deemed to comply' solution, but not the only means to establish compliance with the Building Code

¹⁴ Under section 162C(4)

Appendix A: Extracts from the legislation

The relevant sections of the legislation, Building Code, and the Verification Methods include the following:

A1 Building Act 2004

Relevant sections of the Act include the following (which were inserted, on 1 January 2017, by section 17 of the Building (Pools) Amendment Act 2016 (2016 No 71)):

162C Residential pools must have means of restricting access

- (1) Every residential pool that is filled or partly filled with water must have physical barriers that restrict access to the pool by unsupervised children under 5 years of age.
- (2) The means of restricting access referred to in subsection (1) must comply with the requirements of the building code—
 - (a) that are in force; or
 - (b) that were in force when the pool was constructed, erected, or installed (after 1 September 1987) and in respect of which a building consent, code compliance certificate, or certificate of acceptance was issued (in relation to the means of restricting access to the pool).
- (3) In the case of a small heated pool, the means of restricting access referred to in subsection (1) need only restrict access to the pool when the pool is not in use.
- (4) The following persons must ensure compliance with this section:
 - (a) the owner of the pool:
 - (b) the pool operator:
 - (c) the owner of the land on which the pool is situated:
 - (d) the occupier of the property in or on which the pool is situated:
 - (e) if the pool is subject to a hire purchase agreement (as that term is defined in the Income Tax Act 2007), the purchaser of the pool:
 - (f) if the pool is on premises that are not subject to a tenancy under the Residential Tenancies Act 1986 but the pool is subject to a lease or is part of premises subject to a lease, the lessee of the pool or the premises.

162D Periodic inspections of residential pools

- (1) Every territorial authority must ensure that the following residential pools within its jurisdiction are inspected at least once every 3 years, within 6 months before or after the pool's anniversary date, to determine whether the pool has barriers that comply with the requirements of section 162C:
 - (a) residential pools other than small heated pools:
 - (b) small heated pools that have barriers that are not exempt, in terms of Schedule 1, from the requirement to have a building consent.

450A Transitional and savings provision for residential pools

- (2) Fencing of a residential pool in accordance with clauses 1 to 10 of the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force immediately before 1 January 2017) is an acceptable solution for establishing compliance with the building code for the purpose of section 162C.
- (3) Sections 22(2) and (3), 23, 24, and 25A apply to the acceptable solution in subsection (1) as if it had been issued by the chief executive under section 22(1) of this Act.
- (4) In this section and the Schedule of the Fencing of Swimming Pools Act 1987,—

fence includes any part of a building, and any gate or door, that forms part of a **fence**

fencing means any barrier or barriers used to enclose a pool (or an immediate pool area) so as to restrict or prevent access to the pool.

450B Savings provision for existing residential pools

- (1) This section applies to a residential pool that was constructed, erected, or installed before 1 January 2017 (an existing pool).
- (2) An existing pool is deemed to have barriers that comply with section 162C if the barriers—
 - (a) complied with the Schedule of the Fencing of Swimming Pools Act 1987 (as that schedule was in force) immediately before 1 January 2017; and
 - (b) continue to comply with those requirements subject to—
 - i) any exemption that was granted under section 6 or clause 11 of the Schedule of that Act and that was subsisting immediately before 1 January 2017; and
 - ii) the conditions of any such exemption.
- (3) Alternatively, an existing pool is deemed to comply with section 162C if all of the following apply:
 - (a) the outside surface of the side walls of the pool is constructed so as to inhibit climbing; and
 - (b) no part of the top of any side wall of the pool is less than 1.2 m above—
 - i) the adjacent ground level; and
 - ii) any permanent projection from the ground outside of the pool and within 1.2 m of the walls of the pool; and
 - iii) any object standing on the ground outside of the pool and within 1.2 m of the walls of the pool; and
 - (c) any ladder or other means of access to the interior of the swimming pool—
 - i) can be readily removed or made inoperable; and
 - ii) is removed or made inoperable whenever the pool is not intended to be in use.

A2 Building Code

The following extract is from Clause F4 Safety from falling at the time the pool was constructed.

Provisions	Limits on application
<p>...</p> <p>F4.3.3 Swimming pools having a depth of water exceeding 400mm shall have barriers provided.</p>	<p>...</p> <p>Performance F4.3.3 shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987</p>
<p>F4.3.4 Barriers shall:</p> <p>..</p> <p>(f) In the case of a swimming pool, restrict the access of children under 6 years of age to the pool or the immediate pool area.</p>	<p>Performance F4.3.4(f) shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987</p>
<p>F4.3.5 Barriers to swimming pools shall have in addition to performance F4.3.4:</p> <p>...</p> <p>(b) No permanent objects on the outside of the barrier that could provide a climbing step.</p>	