

RUMNEY ROCKS CLIMBING MANAGEMENT PLAN

White Mountain National Forest

Pemigewasset Ranger District

November 2015

Introduction

The Rumney Rocks Climbing Area encompasses approximately 150 acres on the south-facing slopes of Rattlesnake Mountain on the White Mountain National Forest (WMNF) in Rumney, New Hampshire. Scattered across these slopes are approximately 28 rock faces known by the climbing community as "crag." Rumney Rocks is a nationally renowned sport climbing area with a long and rich climbing history dating back to the 1960s. This unique area provides climbing opportunities for those new to the sport as well as for some of the best sport climbers in the country. The consistent and substantial involvement of the climbing community in protection and management of this area is a testament to the value and importance of Rumney Rocks.

This area has seen a dramatic increase in use in the last twenty years; there were 48 published climbing routes at Rumney Rocks in Ed Webster's 1987 guidebook *Rock Climbs in the White Mountains of New Hampshire* and are over 480 documented routes today. In 2014 an estimated 646 routes, 230 boulder problems and numerous ice routes have been documented at Rumney.

The White Mountain National Forest Management Plan states that when climbing issues are "no longer effectively addressed" by application of Forest Plan standards and guidelines, "site specific climbing management plans should be developed." To address the issues and concerns regarding increased use in this area, the Forest Service developed the Rumney Rocks Climbing Management Plan (CMP) in 2008. Not only was this the first CMP on the White Mountain National Forest, it was the first standalone CMP for the US Forest Service. It was developed with input from the local community and other interested parties. After five years of implementation the WMNF worked with the climbing community to evaluate the success of the CMP, fine tune sections and create this document. A summary of changes can be found in Appendix **B**.

Partnerships

The Forest Service recognizes that the local climbing community has been integral in preserving and advocating for climbing opportunities at Rattlesnake Mountain and Rumney Rocks. The Access Fund, in cooperation with the Rumney Climbers Association (RCA), acquired 36 acres at the base of Rumney Rocks which it then sold to the Forest Service in 1995 for the purposes of protecting access to the cliffs and providing a parking area for climbers. The Forest Service and the RCA maintain a formal agreement for the purpose of "forging and continuing a cooperative working relationship for planning and accomplishing mutually beneficial projects and activities within the Rattlesnake Mountain climbing area."

The Forest Service acknowledges that this climbing plan will be most effective and successful with the voluntary support and compliance of the climbing community. To this end the RCA

has been a critical link in the implementation of many successful initiatives such as trail construction, human waste management, climber education, facility maintenance, and non-native invasive plant removal. Their continued support as well as the support of national organizations such as the Access Fund and American Alpine Club, have allowed Rumney Rocks to emerge as an international climbing destination with a reputation for an involved local community.

Goals and Objectives

This Plan is an effort to effectively meet the following needs for the Rumney Rocks area:

- Recognize and respect the value and importance of Rumney Rocks to climbers and members of the community
Assure sustainable long-term conservation of the resource
- Ensure Rumney Rocks remains accessible to the climbing community and other members of the public
Provide opportunity for a quality climbing experience while protecting natural and cultural resources
Work closely with the climbing community to address emerging issues and adaptively manage the area in a cooperative manner
Clearly identify thresholds for acceptable change to the natural and social environment
- Set forth clearly defined management actions to be supported and implemented by the Forest Service and the climbing community

This plan is intended to be used in conjunction with the White Mountain National Forest Management Plan and other laws and policy governing Forest Service land management. Appendix A outlines WMNF Forest Plan standards and guidelines pertaining to rock and ice climbing Forest-wide.

Management Actions

1. Protection of natural and cultural resources, including Threatened, Endangered, and Sensitive species

The Forest Service will work with the climbing community and cooperators to protect known natural and cultural resources and address findings of any new natural or cultural resources. The following specific actions will be followed:

a. Peregrine falcon (*Falco peregrinus*) management/voluntary cliff closures

Peregrine falcons have consistently nested on the crags at Rumney since 1995. Nesting falcons successfully fledged 42 young in 16 of 20 years (1995-2014) at Rumney, which makes this nesting territory comparable to many other successful breeding sites in New England. The NH Audubon Society monitors breeding peregrine falcons in NH with guidance from, and under contract with, the New Hampshire Fish and Game Department (NHFGD) Nongame Program. NH Audubon posts annual cliff closures at Rumney and other climbing areas to protect nesting falcons from frequent human disturbance, which could ultimately result in nest failure. The Forest Service will continue to work with the US Fish and Wildlife Service (USFWS), NHFGD and NH Audubon Society or any organization involved with future falcon management efforts to

monitor and protect nesting falcons at Rumney. Through this collaboration, specified areas of the crags will typically be posted closed to climbing for a portion of the spring and summer. Voluntary compliance with these efforts to protect nesting sites has been successful and will continue to serve as the model for management. The Audubon Society will coordinate with the Pemigewasset District Biologist before posting closure of any crags.

The climbing community, Audubon Society, and the Forest Service will monitor the effectiveness of these closures. If voluntary compliance with posted closures is ineffective or it is determined that human disturbance is affecting falcon breeding success, additional management actions potentially including an enforceable closure order will be developed.

If USFWS, WMNF, NHFGD or NH Audubon determines that peregrine falcon-related management actions should change at Rumney, adaptive management methods will be coordinated with the White Mountain National Forest.

- b. Fragrant Fern (*Dryopteris fragrans* var. *remotiuscula*) monitoring**
Fragrant fern was first formally identified at Rumney Rocks in 1959 (UNH herbarium specimen). Monitoring of this species began in 1993. Since monitoring began, it appears that populations of this fern have remained stable, despite their sometimes very close proximity to established climbing routes. The Forest Service will continue to monitor colonies of fragrant fern at Rumney Rocks. Currently, known colonies are on the following crags: *Bonsai*, *Orange Crush* and *New Wave*. If continued monitoring results in the determination that climbing activity is resulting in a decline of these populations, the Forest Service will implement management actions necessary to protect this species. This may include closure of climbing routes or restriction on new route development in areas with documented fern populations.

Other uncommon plant species and communities have been identified in the Rumney Rocks area. The New Hampshire Natural Heritage Bureau maintains records of these occurrences and monitoring information. If it is determined that recreational activities around the climbing area are impacting these populations beyond established thresholds, measures such as closures or restrictions will be developed and implemented to protect these species or other natural or cultural resources not currently identified at Rumney Rocks. New discoveries of cultural sites or remains will be noted and immediately reported to the Pemigewasset Ranger District for review and management direction.

- 2. Moratorium on new fixed protection installation on selected crags**
The Forest Service, in cooperation with the local climbing community, has determined that some crags in the Rumney Rocks area have reached their carrying capacity for route development. No new fixed protection is permitted on the following crags: *5.8 Crag*, *New Wave Wall*, *Kennel Wall*, *Pulse Wall*, *Monstersfr0111 the ID*, *Bonsai*, *Jimmy CNIJ*, *Crow's Nest*, *Meadows*, *Parking Lot Wall*, and *Apocalypse Wall*.

Appendix C defines the boundaries of these areas. These crags will be posted closed to development of new routes requiring fixed protection. Existing fixed protection can be replaced as part of regular upkeep and maintenance. New fixed protection should not be added to existing routes. Rare circumstances may necessitate the need for additional fixed protection such as when natural features change (e.g. rockfall) or when additional fixed protection may reduce unacceptable impacts to natural resources.

The Forest Service will allow new fixed climbing protection on the remainder of the crags. The Forest Service will permit responsible new route development on currently undeveloped rock formations. Climbers must make every effort to minimize climbing impacts to natural resources as new routes are developed. Climbers should carefully consider whether the value of a new route justifies its impact to the natural environment.

The Forest Service and the local climbing community will monitor the status of new route development at Rumney Rocks. If at a future date the Forest Service determines that additional crags have reached their carrying capacity, they will be closed to the development of new routes requiring fixed protection. The Forest Service will look to the RCA and other partners to educate the climbing public regarding the policies of new route development and prohibitions at certain crags.

3. Replacement of unsafe bolts and anchor systems

Climbers are responsible for assessing the safety and condition of any fixed protection they choose to use. It is important to recognize that cursory visual inspection tells very little about most safety aspects of climbing bolts and other hardware. This equipment is not property of the Forest Service or the RCA. It is the responsibility of each climber to assess the safety of all aspects of any climb and make informed personal decisions based on one's assessment and ability.

Climbers must replace unsafe bolts, fixed protection and anchor systems according to Forest Plan guidelines:

- a) Best practice bolt replacement techniques and anchor replacement materials will be used at all times. Ring hangers or acceptable industry standards should be used for rappel stations. Webbing should not be used on bolt anchors.
- b) Replacement bolts should use existing holes when possible and bolt holes should be filled and camouflaged.
- c) Guidelines for continued maintenance on bolts and anchor systems can be referenced on the Access Fund and American Safe Climber Association web pages.

https://www.accessfund.org/uploads/pdf/AF-AAC_FixedAnchorPolicy_20150428.pdf
<http://www.safclimbing.org/education.htm>

4. Removal of stored, cached or abandoned equipment

The White Mountain National Forest Plan dictates that storing or caching any personal property on National Forest land (excluding wilderness, where it is prohibited entirely) is permitted for no more than 14 days. Fixed protection such as bolts with hangers and pitons are not considered cached or stored equipment. All other climbing equipment

including but not limited to quickdraws, pennadraws, carabiners and ropes are considered cached equipment for a 14-day period after which they are considered abandoned. Two exceptions to this rule exist:

- a) During the primary season of climbing use (April I-November 30) quickdraws may remain in place attached to fixed protection for more than 14 days. Because prolonged UV exposure degrades nylon and continued abrasion damages aluminum carabiners, quickdraws are inappropriate for long-term usage. The climbing community must be encouraged to limit the practice of leaving quickdraws in place for unnecessarily long periods of time, to remove their quickdraws **after** they make a successful ascent, and to utilize neutral colored nylon on quickdraws to minimize aesthetic impacts. Any equipment left on climbing routes or stored on National Forest land in excess of 14 days outside of the noted period of exception (April I-November 30) is considered abandoned property and may be removed.
- b) The Forest Service and the climbing community accept measured use of permadraws for reasons of safety, protection of natural resources, and management of social impacts related to use patterns. The RCA and the Forest Service agree to permit permadraw installation as set out in the table below. Only 5 of 28 cliffs will have permadraws that remain in place outside of the primary season of climbing use and not all routes at these cliffs will have permadraws. The RCA and the general climbing community will work together to define where permadraws are included at each cliff under the parameters identified below. Permادraws shall be discreetly colored relative to the rock on which they are installed, permanently affixed, and have a minimum 16kN strength testing. The Forest Service may authorize the installation of additional permادraws outside of these crags on a bolt-by-bolt basis for the means of addressing safety or resource protection issue. These situations will be rare as each additional installation will contribute to increased development creep.

Cliff	Total routes	Number of routes which may receive permادraws (See appendix D for percentages of permitted routes in 2015'
Main Cliff	33	3 routes
Waimea	54	15 routes
New Wave	18	2 routes
Orange Crush	30	7 routes
Monsters from the Id	14	4 routes

The RCA will monitor quickdraws and unauthorized permادraws left hanging on routes and conduct periodic cleanup days to remove those that are determined to be abandoned. The RCA will communicate with and update the Forest Service regarding the extent of cleanup effort in order to determine/evaluate the effectiveness of RCA education efforts to build community awareness of the importance of removing quickdraws. Additionally, the RCA President will provide the Forest Service with an end of year report that will serve to highlight successes associated with our mutual collaboration.

5. Management of ice and mixed climbing

There are approximately 50 ice or mixed climbing routes at Rumney Rocks. Some of these routes are also identified rock climbs. In an effort to protect rock climbs from damage due to "dry tooling," or using ice climbing equipment to climb bare rock, mixed climbing is discouraged on routes only established as rock routes. First mixed ascents are also strongly discouraged on rock routes.

There is the possibility that unique conditions may occasionally arise when ice forms in areas that generally remain ice-free. The intent of this plan is to protect the rock from chipping or damage on rock routes due to the use of ice tools. It is not to prohibit the exploration of new ice routes that may occasionally "come in" and be climbable.

There is currently not a large concern regarding ice and mixed climbing at Rumney. If damage to rock climbs or rock faces from ice tools is clearly affecting the quality of rock climbing routes or the natural environment, the Forest Service will limit the use of ice climbing equipment to designated routes. The Forest Service will remain in communication with the climbing community to monitor the effects of this use.

6. Management of commercial use and the Outfitter/Guide (O/G) program

All "commercial users" of White Mountain National Forest lands, including Rumney Rocks, must obtain an outfitter/guide permit through the Forest Service. Outfitter/Guides must carry their permit card when providing services at Rumney Rocks. There are numerous schools, commercial guiding companies, and other organizations that are registered in the Outfitter/Guide system and use Rumney Rocks. There currently are no limits to the number of outfitter/guide permits issued for Rumney Rocks.

To minimize social and environmental impacts from commercial group use, rock and ice climbing outfitter/guide group size is limited to 12 persons, including instructors. Groups from a single commercial operation may not occupy the same zone at the same time. The zones are identified as follows:

- The Meadows (includes Apocalypse and Parking Lot walls with all routes from Supreme Onion Sacrifice to Percolator)
- Orange Crush Area (includes all routes at New Wave, Kennel, and Pulse Walls)
- Main Cliff (includes all routes from Mercury to Get A Grip)
- 5.8 Crag (Granny's Route to Only a Crow)
- Central Crags (includes Waimea, Bonsai, Darth Vader Crags and Jimmy Clift)
- Western Crags (includes Blackjack Boulders, Triple Comers, and all crags to the west)
- All remaining climbing areas within Rumney Rocks

If the Forest Service determines that outfitter/guide use is causing an unacceptable impact to natural resources or the recreation experience, the Forest Service will limit

permits issued or add restrictions to permits issued for Rumney Rocks. Unacceptable impacts may include considerable interference with general public use of or access to the cliff, monopolization of a large portion of a cliff for a long period of time, or natural resource damage.

The Forest Service will work to create a tracking system to monitor outfitter/guide use at Rumney Rocks. During the annual review process, the Forest Service and the local climbing community will discuss the status of outfitter/guide operations at Rumney. The Forest Service will continue to manage commercial groups through the Outfitter and Guide permitting program.

7. Monitoring use levels and changes at Rumney Rocks

If monitoring results or communication with the climbing community concludes that increased use levels at Rumney Rocks are altering the desired condition of the land beyond acceptable levels, the Forest Service will evaluate and implement methods for limiting use. This process of evaluation would involve the climbing community, cooperators, and the general public. Parking lot use and overflow, impacts to trails and staging areas, impacts to biological communities, and social impacts will all be used to assess use levels at Rumney and their effects to the natural and social environment.

8. Design and construction of facilities to protect natural resources

The Forest Service will continue to make improvements to the facilities of Rumney Rocks with a focus on protecting natural resources while keeping development levels to only the minimum necessary. The following projects were approved in an October 2009 decision notice signed by District Ranger Molly Fuller:

- Redesign, reconstruct, and pave the main parking lot
- Improve staging areas at Meadows/Parking Lot Wall, 5.8 Crag, and Triple Corners
- Improve access trails and eliminate redundant or unsustainable trails
- Another decision in October 2012 authorized the construction of a toilet building at the small parking lot to replace the two portable outhouses that have been used each season. All of these projects will be implemented as resources allow.

9. Annual Meeting

The Forest Service will remain in close communication with the RCA and the local community in managing this very unique resource. The Forest Service will determine and coordinate open public meetings in partnership with the RCA when appropriate. Public meetings shall include discussion of current management, strategy and concerns from involved parties, recommendations for adaptation or change and resource monitoring results. This Management Plan may be amended or revised based on new information, monitoring results, or other conclusions drawn from this meeting or based on conclusions by Forest Service staff.


Jon Morrissey
District Ranger

12/7/15
Date


Rose Kenny
RCA 2013-2015 President, Director

12/7/15
Date

Appendix A WMNF Forest Plan Standards and Guidelines for Rock and Ice Climbing

Definitions (from Forest Plan glossary unless noted):

Standard (S): A course of action that must be followed, or a level of attainment that must be reached, to achieve management goals and objectives. In general standards limit project-related activities. Deviations from standards must be analyzed and documented in a Forest Plan amendment.

Guideline (G): A required course of action or level of attainment. It is intended to move the Forest toward desired conditions in a way that permits operational flexibility to respond to variations in conditions. Guidelines can be modified or not implemented if site-specific conditions warrant a deviation. The rationale for deviating from a guideline must be documented in a project-level analysis and signed decision.

Fixed Protection (Climbing): In climbing, permanent or semi-permanent installations placed to protect a leader or provide an anchor. Common examples of fixed protection include 3/8" stainless steel masonry bolts with hangers, pitons (which are metal pins with eye holes that are hammered into cracks in the cliff face), and nylon webbing tied around trees or looped around blocks. The first ascent party usually places fixed protection. It is considered unethical for subsequent parties to add or remove fixed protection placed on the first ascent.

Quickdraw:* Two non-locking carabiners or links, connected with a sewn webbing "dogbone" or sling, designed to be attached to fixed protection and then removed from the rock.

Permadraw:* A weather-resistant non-locking non-removable carabiner attached to a coated cable which is attached to a piece of fixed protection by a wrench-tightened quicklink; designed to be a permanent part of the fixed protection bolt. Carabiner, quicklink and cable are made of steel or similarly durable material.

*These definitions were not included in the Forest Plan but are commonly used in the climbing community.

Rock and Ice Climbing Standards and Guidelines:

S-1 The White Mountain National Forest is open unless designated closed to rock, ice and mixed climbing.

S-2 Except in Wilderness (see MA 5.1) where it is prohibited, storing (caching) equipment, including fixed ropes is permitted for no more than 14 days.

S-3 Chipping to create foot and hand holds, gluing to stabilize features, and attaching permanent artificial handholds is prohibited.

5-4 Route cleaning is prohibited where federally listed, threatened, endangered, and sensitive species occur.

5-5 To protect natural features, the use of mechanical or motorized devices, explosives or chemicals for cleaning or developing climbing routes is prohibited. Hand drills and power drills are permitted for the installation of bolt protection, except in Wilderness where power drills are prohibited.

G-1 Specific areas should be dosed or limitations placed on use, including group size, if recreational climbing creates unacceptable social or natural resource impacts. This may result in temporary or permanent closures or limits on number of outfitter/guide permits authorized.

G-2 To minimize social and environmental impacts, climbing party size should be limited to 12 persons, except in Wilderness, where group size is limited to 10.

G-3 Removing, altering, or manipulating vegetation, soils, or other natural features at the cliff edge, talus slope or cliff base should be avoided.

G-4 Climbing or new route development may be restricted to protect federally listed, threatened, endangered and sensitive species.

G-5 Climbing should be restricted where there is potential to impact heritage resources.

G-6 When issues are no longer effectively addressed by application of standards and guidelines, climbing plans for specific areas should be developed to minimize environmental and social impacts.

G-7 Removable traditional protection should be used. Fixed protection may be considered when the use of removable protection is impossible, impractical or causes increased or ongoing unacceptable resource impact. If installation of fixed protection for a new route or the replacement of fixed protection on an existing route is required, the following guidelines should be used:

a. 3/8" expansion bolts with hangers (or other acceptable industry standard that has the same or less impact) should be used. Ring hangers should be used for rappel stations. Webbing should not be used on new bolt anchors.

b. Replacement bolts should use the existing holes when possible.

c. Natural-colored webbing should be used on tree anchors.

d. All bolt hangers should be painted to blend with the color of the cliff face.

e. Hand drills, battery powered rock drills (except in Wilderness), hammers, crowbars and wrenches are recognized as standard tools for fixed anchor installation and maintenance.

G-8 Reasonable cleaning of a route is allowed (except per S-4). Hand tools such as wire brushes, hand brooms and toothbrushes are recognized as standard tools.

Standards and Guidelines pertaining to Rock and Ice Climbing Special Use Permits:

S-1 To minimize social and environmental impacts from commercial group use, rock and ice climbing outfitter/guide group size must be limited to 12 persons. In Wilderness, the group size limit is 10 persons.

G-1 Rock and ice climbing recreation events permits should limit group size to 12 persons.

G-2 Numbers of permits per cliff for outfitter/guide and recreation events may be limited to protect natural resources or the recreation experience.

Additional standards and guidelines in Wilderness (not applicable to Rumney Rocks):

S-1 Wilderness is open unless closed to rock, ice and mixed climbing.

S-2 The use of power drills is prohibited.

S-3 Storing equipment, including fixed ropes, is prohibited.

S-4 Installation of fixed protection, including webbing, bolts or pitons is prohibited on new climbing routes.

G-1 Existing fixed protection on established climbing routes may be replaced consistent with Forest-wide standards and guidelines as necessary to preserve known routes and to protect visitor safety.

Appendix B

WMNF Summary of RCA and WMNF Amendments from the 2008 CMP

The section on the moratorium on new fixed protection installation (Section 2) was edited to provide more detailed guidance. Under the 2008 CMP it was unclear whether new fixed anchors could be added to existing climbs. The language was ambiguous and in some ways conflicting which led to bolts being added to existing routes. The original intent of the moratorium was to preserve the character of the crags that had been deemed by the climbing community to have reached their capacity for route development. The current language provides more solid guidance and allows the flexibility to consider adding fixed anchors to existing routes in rare and unusual circumstances.

The section concerning the replacement of unsafe bolts and anchor systems (Section 3) was changed slightly to account for advances in fixed anchor technology. Due to the extremely high use levels at Rumney Rocks, the RCA has been able to work at the cutting edge of fixed anchor management. They have experimented with several different commercially available anchor designs to determine what works best in the unique conditions found at Rumney. They will continue to try new designs with an emphasis on safety, longevity and minimal impact.

The major change from the first climbing management plan (CMP) is the management of quickdraws (Section 4). The 2008 CMP used the standard 14-day limit for cached equipment as the basis for the management of all quickdraws left in place at the cliffs. This approach was highly controversial and the one aspect of the CMP that did not have overwhelming support by the climbing community. Several places in the CMP note that the issue was a point of contention and that the strategy taken was far from perfect. The rationale for this strategy was based largely on the desire to keep development levels low and to try to remain consistent with the traditional climbing ethic promoted in the White Mountain National Forest Plan.

After five years of implementation the proliferation of quickdraws left on the cliffs became an issue of increasing importance. Some of the quickdraws had been in place for upwards of 10 years and the Forest Service did not have the resources to remove them. The Rumney Climbers Association helped spread the word about the dangers of relying on the quickdraws and a number of injuries and near misses locally and nationally raised the profile of the problem. In 2013 the RCA organized a quickdraw removal project and eliminated more than one hundred quickdraws many of which were in dangerously poor condition. They publicized the event to increase awareness in the community while also conducting surveys on where and why climbers felt the need to maintain quickdraws on a route for an extended period. While convenience was sometimes used as rationale a number of routes require that quickdraws remain in place for reasons of safety. In other areas climbers would likely try to access the cliff top to rappel down and preplace quickdraws for their ascent. This provides not only a safety issue but also a concern for the cliff-top ecosystems that sometimes harbor rare and sensitive species.

The current management strategy for the management of quickdraws and permadraws is an acceptable compromise between the many factors involved. The exception to the WMNF 14-day cached equipment regulation has been made to recognize the fact that climbers regularly

return to difficult routes many times over the course of a season as they attempt a successful ascent and requiring them to remove quickdraws only to reinstall them soon thereafter does little to protect the character of the area. Utilizing a limited number of permadraws will have benefits to safety, natural resources, and visitor experience. Because their use will be limited to less than 5% of the established routes (31 of 646 documented routes), and at only five of the cliffs, the Forest Service believes that there will be significant impact on the area's minimally developed character.

It is the intent of both the WMNF and the RCA that this new approach be reevaluated after a period of approximately five years. Evaluation criteria will include the number of unauthorized permadraws that have been installed as well as the number of quickdraws that are removed annually as part of the RCA-led clean-up initiatives.

Section 6 which addresses commercial use at Rumney was edited to provide stronger direction to address crowding and other social impacts. Under the 2008 CMP groups were capped at the same size (12 persons including instructors) but it was unclear how close two groups from the same commercial operation could climb before they were considered one large group exceeding the size limit.

The section regarding the design and construction of facilities (Section 8) was updated to account for the large amount of work that took place between 2008 and 2015. For a similar reason the Action Plan that was included in the original CMP was dropped. Additionally, section 9 was modified to hold meetings with the RCA and local community on an as needed basis rather than on an annual basis.

Appendix C

Areas Covered Under the Fixed Protection Moratorium

These areas are covered by the moratorium on new fixed protection as described earlier in this document. In order to protect the character of these cliffs the moratorium extends out an additional 20 feet from the routes in each area's description.

1. **5.8 Crag:** Includes the area between the routes *Granny's Route* and *Only a Crow*
2. **New Wave Wall:** Includes the area between *Air and Present Danger* and *Schist Another Sport Climb*
3. **Kennel Wall:** Includes the area between the routes *Gigantopithicus* and *Ya Moe*
4. **Pulse Wall:** Includes the area between the routes *Shock Therapy* and *Quickie Crack*
5. **Monsters from the ID:** Includes the area between the routes *Little Demon* and *Doctor No*
6. **Bonsai:** Includes the area between the routes *The Flake* and *Social Obligation*
7. **Jimmy Cliff:** Includes the area between the routes *Pine Tree Crack* and *Lonesome Dove*
8. **Crow's Nest:** Includes the area between the routes *The Dingy* and *Sea Breeze*
9. **Apocalypse, Meadows, and Parking Lot Walls:** Includes the entire area between the routes *Supreme Onion Sacrifice* and *Percolator*.

Appendix D

Summary of 2015 percentage figures permitted to receive permadraws

Main Cliff: 3 routes (9% of the cliff s routes as of 2015)
Waimea : 15 routes (28% of the cliff s routes as of 2015)
New Wave: 2 routes (11% of the cliff s routes as of 2015)
Orange Crush: 7 routes (23% of the cliff s routes as of 2015)
Monsters from the Id:4 routes (29% of the cliff s routes as of 2015)