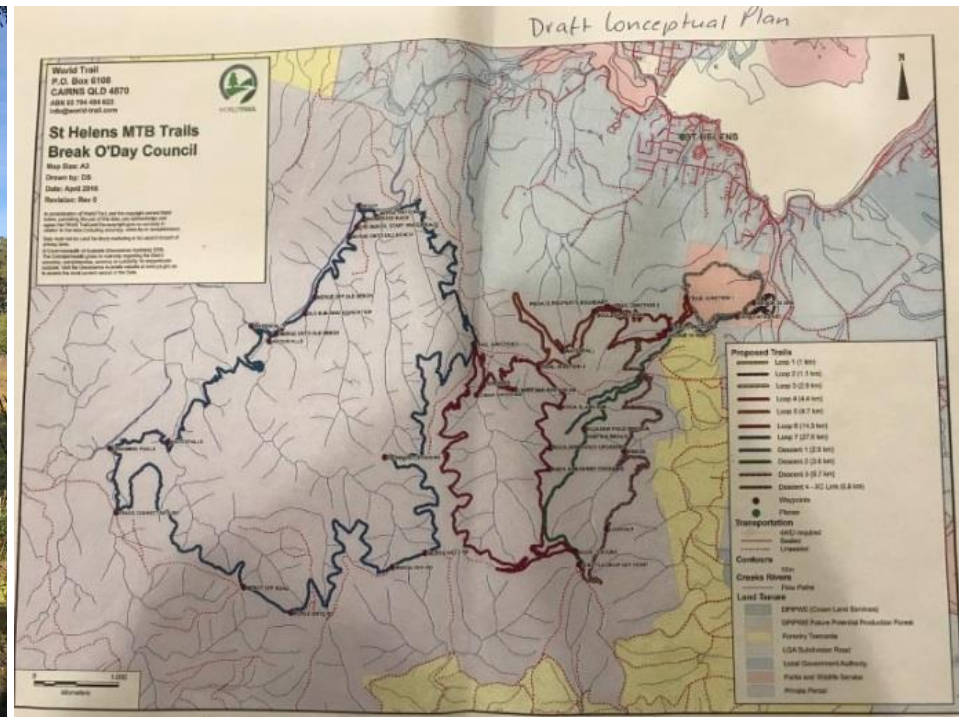


PUBLIC FORUM PROPOSED MOUNTAIN BIKE TRAILS IN THE BREAK O'DAY REGION

Dr Christine Hosking



Mountain Bike Trail development in Break O'Day's natural areas: **An ecological-social-economic perspective**

ECOLOGICAL

- ❖ Habitat loss and fragmentation can lead to 'niche reduction' for species
- ❖ Natural areas are being constantly impacted by human pressures and biodiversity is in decline



ECOLOGICAL

❖ Animals big and small can be affected by disturbances to their forest habitats

Examples of *threatened species* in our region:



Striped marsh frog:
Threatened, lives
on the ground hiding in
dense vegetation



Velvet worm: *Threatened*, occupies old,
decaying logs, *found only near*
Scamander.



Swift parrot:
Critically endangered

Masked Owl:
Endangered



ECOLOGICAL

Roads, trails, houses, farms etc. create **fragmentation** and **perforations** in the landscape that lead to **edge effects** = bad for native plant and animal species



ECOLOGICAL



❖ Steep gullies play a vital role as 'refugia' for plants and animals

- ❖ Apart from direct injury to wildlife by bikers, mountain biking trails (or any other pathway through natural areas) may indirectly impact on native species
- ❖ Many small species are influenced by changes in the vegetation structure that occurs with disturbance at the edge of bushland

(Burgin and Hardiman, 2012 Australian Zoologist)

ECOLOGICAL

Common environmental impacts associated with recreational use of trails include:

- ❖ Vegetation loss and compositional changes
- ❖ Soil compaction
- ❖ Erosion
- ❖ Muddiness
- ❖ Degraded water quality
- ❖ Disturbance to wildlife



(IMBA, 2007) <https://www.imba.com/resources/research/trail-science/environmental-impacts-mountain-biking-science-review-and-best-practices>

ECOLOGICAL

- ❖ Ecological impacts of mountain biking are growing with the popularity of the activity
- ❖ Mountain bikes are effective seeds dispersers at landscape scales

(Weiss et al, 2016, Journal of Environmental Management)



SOCIAL

- ❖ Managers of National Forests are faced with many challenges related to the growing use of mountain bikes
- ❖ Reported concerns and impacts related to the natural resources (degradation of trails, wilderness), social institutions (safety, education), and social policy (planning, legal claims)

(Chavez, 1996, USDA Forest Service)

SOCIAL

- ❖ Narrow walking tracks can become highly eroded and degraded once used for mountain biking
- ❖ Leading to user conflict



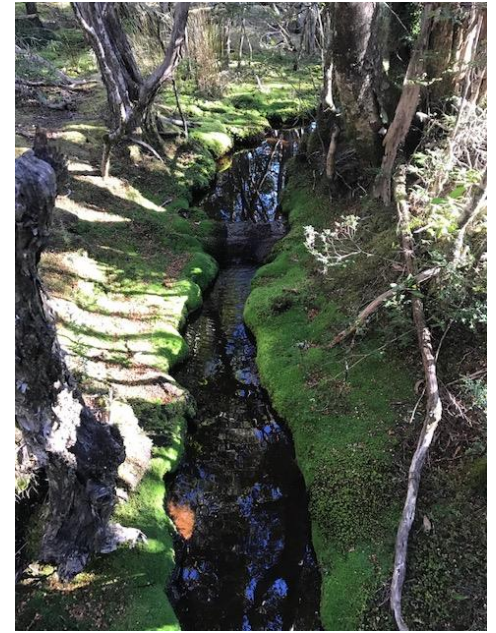
- ❖ Previous walking tracks transformed into mountain bike tracks, excluding other users
- ❖ How is mountain biking managed in a way that is fair and equitable to all?



SOCIO-ECONOMIC

? Cost to BODC Ratepayers for:

- ❖ Trail Care employee (recently advertised)
- ❖ Track construction
- ❖ Track maintenance Repair of degraded tracks (ongoing; e.g. Blue Tier is currently closed due to degradation)
- ❖ Loss of ecosystem services
- ❖ Loss of amenity for other natural area users
- ❖ Emergency rescues



Blue Tier



SOCIO-ECONOMIC

“That moment is me realizing that the possibilities of e-bikes are truly endless”

Source: <https://www.pinkbike.com/news/powerplay-wade-simmons-in-the-south-of-france.html>



“At some point there has to be a consensus from the nsmba and the land managers on the state of the union for e-bike usage. It's a big issue...will increased use of e-bikes mean more traffic, meaning more erosion and a huge backlog of trail maintenance”?

Source: <https://nsmb.com/forum/forum/the-shore-3/topic/the-first-e-bikes-of-the-season-riding-up-mountain-highway-129519/>

SOCIO-ECONOMIC

What you can learn from a death on Deer Valley's Holy Roller mountain biking trail

By John Davis The Salt Lake Tribune

First Published Jul 11 2017 09:33AM • Last Updated Jul 11 2017 06:36 pm



SOCIO-ECONOMIC

❑ *Blue Mountain reaches settlement with quadriplegic*

“Blue Mountain Resort reached an undisclosed financial settlement with Ian McAdam, a 13-year-old boy who was rendered a quadriplegic after a mountain bike accident at the resort in 2007”.

Source: https://www.thestar.com/news/gta/2014/05/28/blue_mountain_reaches_settlement_with_quadriplegic.html

❑ *City cyclist dies in Ladakh mishap*

“Mountain biker Ajay Padval hit his head on a stone at Khardung La and succumbed to his injuries at the civil hospital”

Source: <http://punemirror.indiatimes.com/pune/civic/city-cyclist-dies-in-ladakh-mishap/articleshow/59566188.cms>

❑ *Riders say obstacles placed on trails*

“The club is well aware there are people who do not want us up there and we push very hard to all our members to be courteous, polite and accepting of other trail users”.

Source: <https://thewest.com.au/news/albany-advertiser/riders-say-obstacles-placed-on-trails-ng-b88444640z>

SOCIO-ECONOMIC

❑ *Whistler Mountain Bike Park: a risky, injury-prone experience, study finds. What to do about that?*

“An emergency room specialist at the health centre and co-author on the study, said a general rule of thumb is that one in 1,000 skiers are injured, one in 100 snowboarders, and **one in 10 downhill cyclists**”

Source: <http://vancouversun.com/news/staff-blogs/whistler-mountain-bike-park-a-risky-injury-prone-experience-study-finds-what-to-do-about-that>

❑ “An Ontario municipality is liable, under the province’s Occupiers’ Liability Act, for injuries that rendered a cyclist a quadriplegic after he fell while riding over a teeter-totter-type obstacle at a mountain bike park, the provincial appeal court has ruled”

Source: <http://www.canadianunderwriter.ca/insurance/court-finds-ontario-municipality-breached-duty-care-occupiers-liability-act-operation-mountain-bike-park-1004091747/>

SOCIO-ECONOMIC

Source: Pinkbike Poll: Mountain Biking Injuries

Apr 2, 2015

<https://www.pinkbike.com/news/pinkbike-poll-mountain-biking-injuries-2015.html>



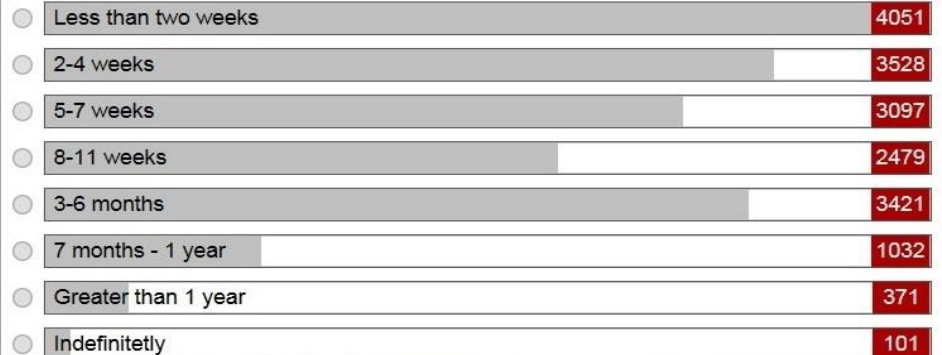
Have you ever had to visit the hospital due to a cycling related injury?

This poll is closed



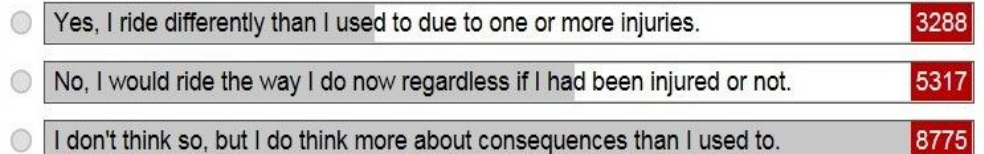
What's the longest period of time you've been unable to ride a bike for due to a cycling injury?

This poll is closed



Have injuries forced you to change your riding style, or have you been able to return to your previous speed and confidence level?

This poll is closed



Alternative thinking!

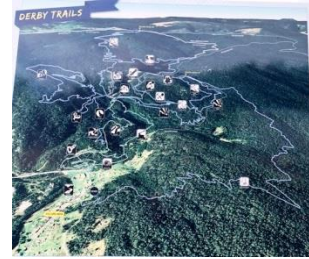


Source: <http://www.world-trail.com/asphalt-pump-tracks/>

- ❖ Pump tracks nearer towns
- ❖ Use already-degraded areas such as farms and old quarries
- ❖ Utilise fire roads (existing infrastructure)

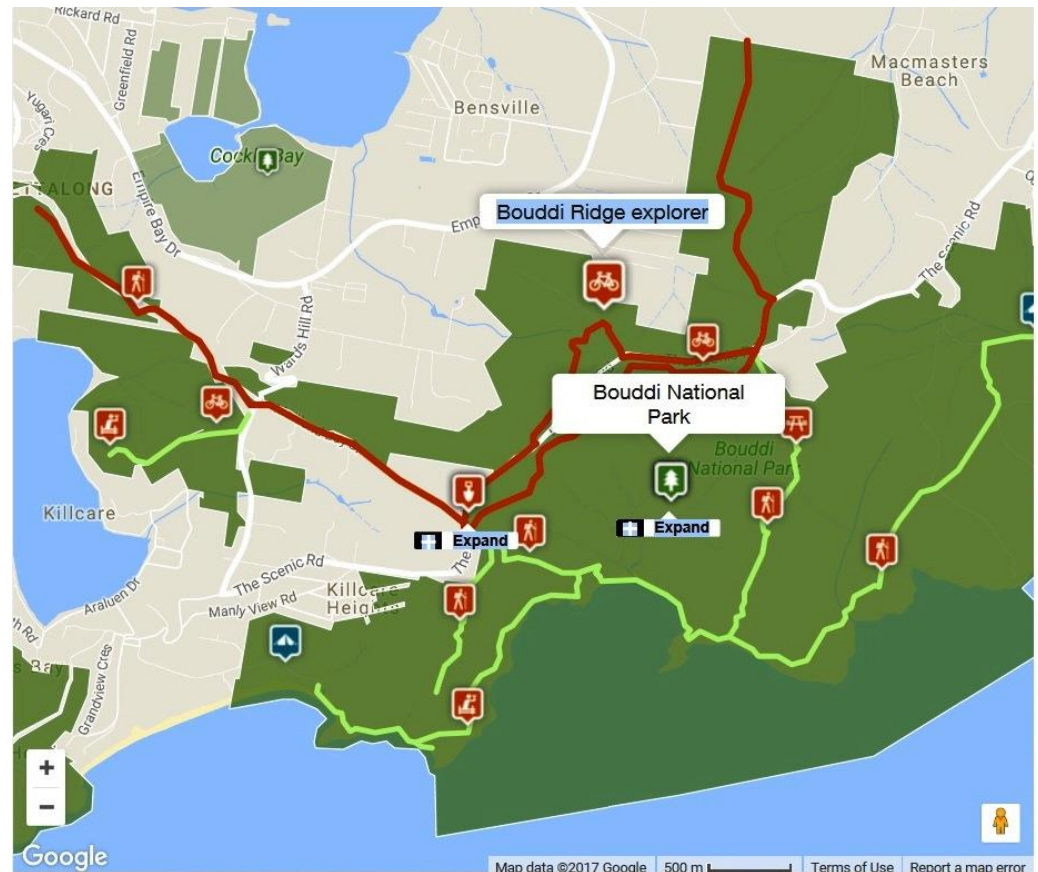
Alternative thinking!

Example: NSW Parks and Wildlife accommodate mountain biking in an educational and equitable manner



Mountain pygmy possum

<http://www.nationalparks.nsw.gov.au/conservation-programs/saving-our-species>



<http://www.nationalparks.nsw.gov.au/things-to-do/cycling-trails/bouddi-ridge-explorer>

Alternative thinking!

- ❖ Invest in walking-cycle-ways along the highway: existing tourism
- ❖ Promote the local history e.g. Derby mine tunnel
- ❖ Promote unique bridge of Scamander, e.g. Spiky Bridge



This is a treasure on our doorstep. Lets not destroy it

An open and communicative approach

Break O' Day Council's Draft Strategic Plan's three key objectives:

'Community', 'Economy' and 'Environment'
This presentation is in line with these goals....

Council's Values:
"Teamwork, Open & Honest Communication, Integrity, Respect"

An open and communicative approach

In planning the construction of a network of mountain biking tracks in BODC, Council needs to be transparent and:

- Calculate and communicate costs to ratepayers
- Investigate and determine social costs
- Investigate and determine environmental costs
- Investigate other ways of attracting tourism
- Look at interstate and overseas MTB experience and learn from them

THEN

- Ask the local community how it feels about this

BEFORE

- Preparing a mountain biking management plan that takes all the above into account

Let's not let Break O'Day become another 'paradox'

Thank you for listening



Photo: Dave Watts