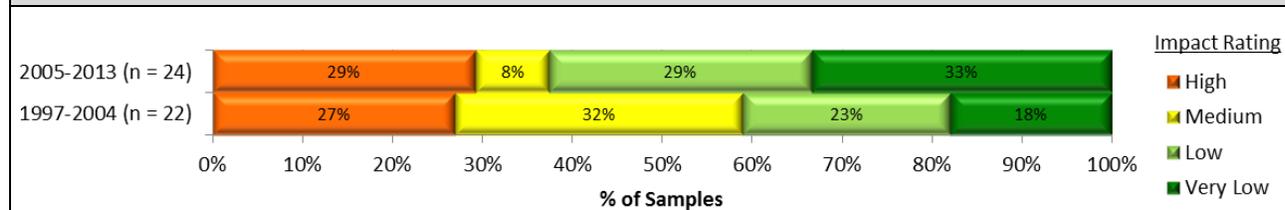


Fish/Riparian Value: DRAFT Riparian assessments on Vancouver Island for North Island Natural Resource District (non-EBM)

Riparian: Resource Development Impacts on Stream Function (non-EBM)



Data Source: The data for riparian stream assessments was collected using the Forest and Range Evaluation Program riparian monitoring protocol. The sampling population for riparian stream assessment is randomly selected stream reaches associated with recently harvested cutblocks.

Summary:
Of the 46 streams monitored (combined *FPC* and *FRPA*-eras), 52% were rated as “very low” or “low” harvest-related impacts: 26% of streams are Properly Functioning (“very low” impact), 26% are Properly Functioning with limited impact (“low” impact), 20% are Properly Functioning with impact (“medium” impact) and 28% are Not Properly Functioning (“high” impact).

Causal Factors:
Factors that contributed to “high” or “medium” impact ratings included: impacted large woody debris processes, in-stream impeded movement of organic debris, sediments and fish (if a fish-stream); insufficient near stream vegetation for adequate root network or LWD supply, impacted riparian vegetation in first 10 m of RMA.

Number of Samples by Stream Class and Impact Rating:

Class	High	Medium	Low	Very low	Total
S1				1	1
S2			3	1	4
S3	2	1	3	3	9
S5	2	1		1	4
S6	9	7	6	6	28
Total	13	9	12	12	46

Overall Stewardship Trend:
Chi-test: $p=0.22$ indicates that there is no statistical difference between sampling eras.
Weighted score: 1.3 (pre-2005 harvest era) to 1.7 (2005 and on harvest era), is indicating potential non-statistical improvement in outcomes.

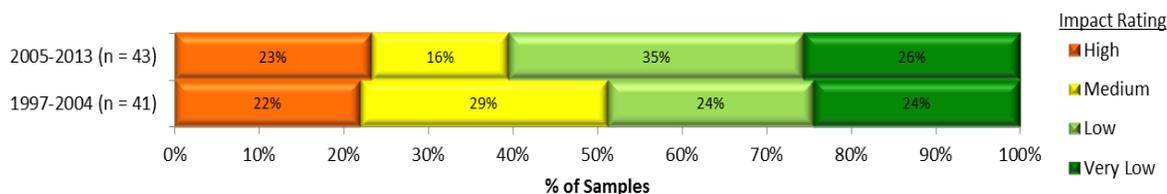
Trending for riparian is based on groupings of harvest years. There have been higher percentage of “very low” impact streams and lower “medium” impact streams in the 2005 and on harvest era streams.

Opportunities For Continued Improvement:
Leave deep rooted vegetation in the first five metres of most streams. Minimize the amount of logging slash entering streams to ensure natural drainage patterns are maintained.

Note: Stream reaches in properly functioning condition are not necessarily pristine streams that lack any human or natural disturbance. Rather, they are streams that can withstand normal peak flood events without experiencing accelerated soil loss, channel movement or bank movement; can filter runoff; can store and safely release water; can maintain aquatic habitat connectivity within the stream network and between the stream and adjacent riparian area; can maintain an adequate root network or large woody debris supply; and can provide shade and reduce bank microclimate change.

Fish/Riparian Value: DRAFT Riparian Assessments on Vancouver Island for North Island Natural Resource District (total DNI)

Riparian: Resource Development Impacts on Stream Function (full district)



Data Source: The data for riparian stream assessments was collected using the Forest and Range Evaluation Program riparian monitoring protocol. The sampling population for riparian stream assessment is randomly selected stream reaches associated with recently harvested cutblocks.

Summary:

Of the 84 streams monitored (combined *FPC* and *FRPA*-eras), 55% were rated as “very low” or “low” harvest-related impacts: 25% of streams are Properly Functioning (“very low” impact), 30% are Properly Functioning with limited impact (“low” impact), 23% are Properly Functioning with impact (“medium” impact) and 23% are Not Properly Functioning (“high” impact).

Causal Factors:

Factors that contributed to “high” or “medium” impact ratings included: in-stream impeded movement of organic debris, sediments and fish (if a fish-stream); impacted channel LWD processes; and impacted riparian vegetation in the first 10 meters from stream edge.

Number of Samples by Stream Class and Impact Rating:

Class	High	Medium	Low	Very low	Total
S1				1	1
S2			4	2	6
S3	2	1	4	4	11
			1	2	3
S5	4	3	1	5	13
S6	13	15	15	7	50
Total	19	19	25	21	84

Overall Stewardship Trend:

Chi-test: $p=0.50$ indicates that there is no statistical difference between sampling eras.

Weighted score: 1.5 (pre-2005 harvest era) to 1.6 (2005 and on harvest era), is little change in outcomes.

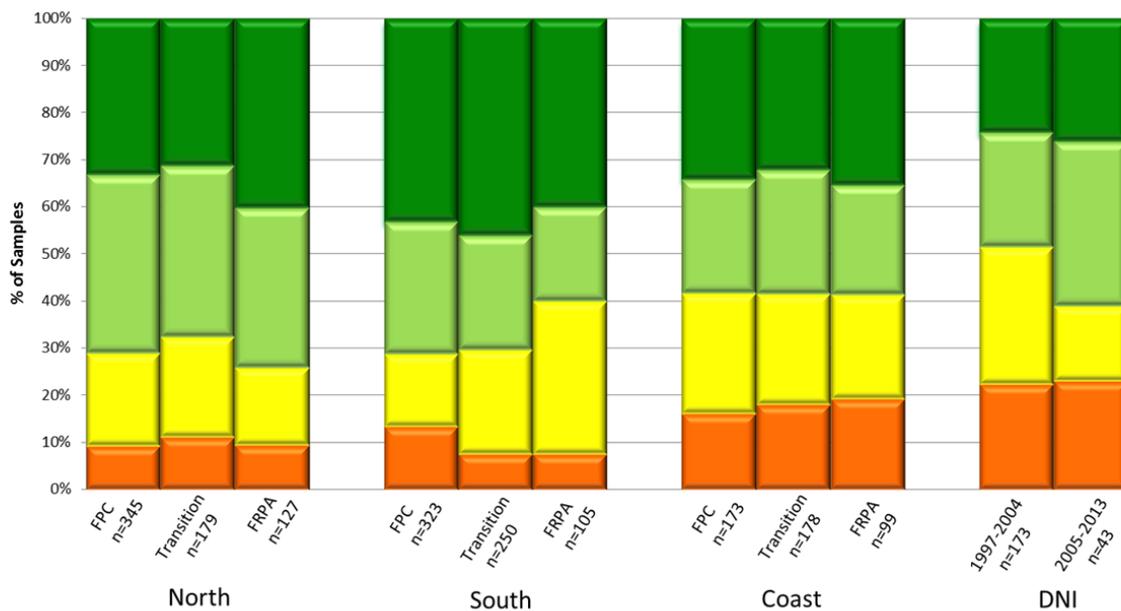
Trending for riparian is based on groupings of harvest years.

Opportunities For Continued Improvement:

Leave deep rooted vegetation in the first five meters of most streams. Minimize the amount of logging slash entering streams to ensure natural drainage patterns are maintained.

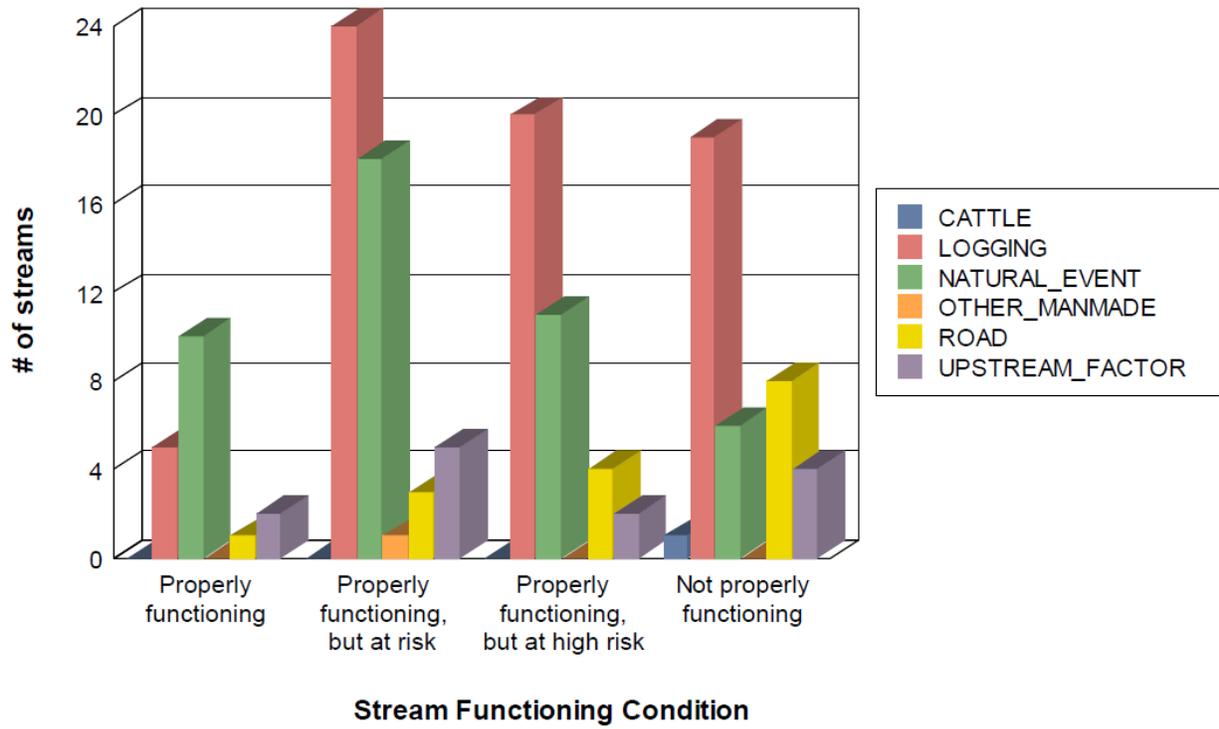
Note: Stream reaches in properly functioning condition are not necessarily pristine streams that lack any human or natural disturbance. Rather, they are streams that can withstand normal peak flood events without experiencing accelerated soil loss, channel movement or bank movement; can filter runoff; can store and safely release water; can maintain aquatic habitat connectivity within the stream network and between the stream and adjacent riparian area; can maintain an adequate root network or large woody debris supply; and can provide shade and reduce bank microclimate change.

North Island Resource District Riparian Results compared to the Coast Region (draft)

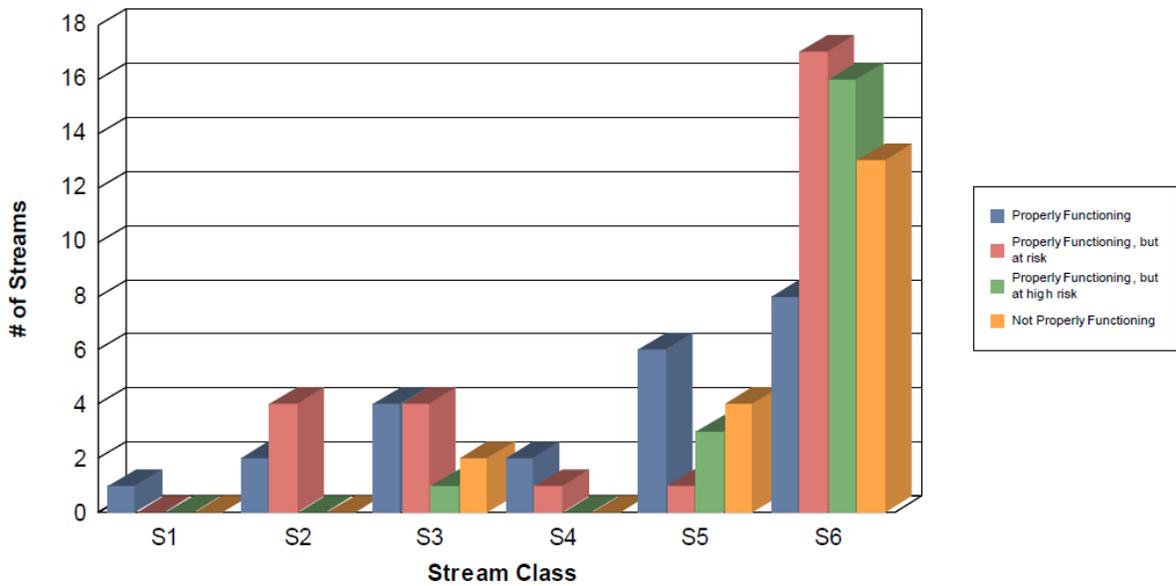


Source: 2013 ADM Report and DNI FREP Data.

Factors Affecting Stream Functioning Condition



Stream Condition by Stream Class



Source: Corporate Reporting System