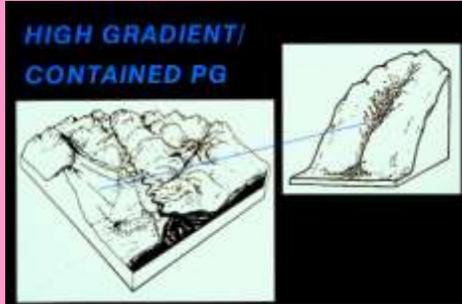


High Gradient Contained Process Group



Associated landforms: Mountain (30s) and hill slopes (40s), footslopes (52)

Stream gradient: greater than 6%

Sediment function: Transport process dominant, sediment source areas

**Stream class: II or III
Channel width > 1.5m except HCO**

HCO– Micro HC Channel

A small steep channel possibly spring fed or associated with upslope swales, rills. Undetectable on resource aerial photography.

Stream Class: IV, possibly Class II in transitional footslope segments to valley bottom

Incision Depth: variable, < 3m

Bankfull Width: approx. 0.3 to 1.5 m

Bankfull Depth: no data

Dominant Substrate: Silt to coarse gravel

Stream Bank Composition: Bedrock, organic material

Sideslope Length/Angle: no data, estimated to be less than 15 ft

Associated Landform: 52, 51, 40s, and 61

Riparian Vegetation: Over story = W.Hemlock, Y. Cedar, Mtn.Hemlock, Mixed Conifer, understory = Blueberry, Devil's club, Alder.

HCLw-Low Incision HC, wetland Phase (former -HC1)

A narrow, high gradient, low incision channel in hills and muskegs.

Incision Depth: 2 m (7ft) or less

Dominant Substrate: Small cobble, boulder, bedrock

Stream Bank Composition: Bedrock, colluvium or alluvium

Sideslope Length/Angle: <10 m (33 ft)/<50%

Assoc Landforms: 40s, 60s

Plant Association: Mix.Conifer/B.Berry, Mix.Conifer, W.Hemlk/B.Berry, Nonforest

Similar Channel Types:

HCV: upper valley landscape position

HCDw: deep incision.

HCL- Low Incision HC Channel (former-HC2)

A high gradient low incision forested mountainslope or hillslope channel.

Incision Depth: 2 m (7 ft) or less

Dominant Substrate: Coarse gravel to small boulder and bedrock

Stream Bank Composition: Bedrock, alluvium or colluvium

Sideslope Length/Angle: <15 m (50 ft)/<30%

Assoc Landforms: 51, 52

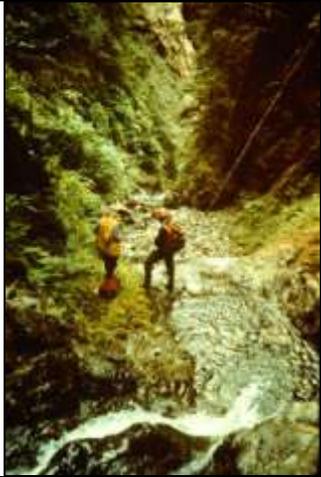
Plant Association: W.Hemlock/Blueberry, S.Spruce/Blueberry or Nonforested,

Similar Channel Types:

AFH: no structural control, alluvial cone landform

HCL: muskegs adjacent, 60s landforms, poorer timber site productivity

MMS or MMM: gradient 2-6% small flood plain development

			
<p><u>HCV</u> Upper Valley HC Channel (former - HC3) A steep, upper valley, forested stream.</p> <p><u>Incision Depth:</u> variable, due to valley sideslopes</p> <p>Dominant Substrate: Small cobble to bedrock Stream Bank Composition: Bedrock and alluvium (cobble) Sideslope Length/Angle: >20m (66ft)/50 to 100% valley sideslopes dominate</p> <p>Assoc Landforms: 30s, 40s Plant Association: Western Hemlock/Blueberry, Nonforest Salmonberry & S.Alder</p> <p>Similar Channel Types: <u>HCL:</u> low incision, mountain slope position <u>HCD:</u> deep incision, mountainslope position</p>	<p><u>HCDw</u> Deep Incision HC Channel, wetland phase (former - HC4) A steep, deeply incised channel in or adjacent to hills and lowland muskegs.</p> <p><u>Incision Depth:</u> greater than 6 m (20 ft)</p> <p>Dominant Substrate: Small cobble to bedrock Stream Bank Composition: Bedrock Sideslope Length/Angle: 6-20 m (20-66 ft)>100%</p> <p>Assoc. Landforms: 36,40s,60s Plant Association: Nonforested, Mixed Conifer/B. berry, Shore Pine/Crowberry</p> <p>Similar Channel Types: <u>HCLw:</u> low incision <2 m (7 ft); sideslope length <6 m (20 ft)</p>	<p><u>HCM</u> Moderate Incision HC Channel (former HC5) Moderate incision, high gradient, mountainslope cascade channel. Bedrock control dominates.</p> <p><u>Incision Depth:</u> 2 m to 6 m (20 ft)</p> <p>Dominant Substrate: Coarse gravel to Large rubble and bedrock Stream Bank Composition: Bedrock, alluvium or colluvium Sideslope Length/Angle: <15 m (50 ft)/<30%</p> <p>Assoc. Landforms: 10s, 30s, 40s Plant Association: W. Hemlock/B. berry, S. Spruce/B. berry/D. Club, Mixed Conifer</p> <p>Similar Channel Types: <u>HCD:</u> deep incision; sideslopes >10 m (33 ft)/100% <u>HCLw:</u> deep incision, wetland assoc <u>HCV:</u> valley bottom position.</p>	<p><u>HCD</u> Deep Incision Mountainslope Channel (former -HC6) A narrow, steep, very deeply incised, high gradient, forested channel.</p> <p><u>Incision Depth:</u> greater than 6m (20 ft)</p> <p>Dominant Substrate: Bedrock, boulders, cobble Stream Bank Composition: Bedrock, alluvium or colluvium Sideslope Length/Angle: >10 m/>100%</p> <p>Assoc. Landforms: 30s,40s,10s Plant Association: Western Hemlock/Blueberry, Nonforested Alder & Salmon</p> <p>Similar Channel Types: <u>HCV:</u> upper valley position <u>HCDw:</u> wetland associated <u>HCL:</u> low incision</p>