



Coquitlam River Watershed Roundtable

*Kwikwetlem, known as "Red fish up the river."
A living river that reveals its spirit.*

Planning for our Future: Watershed Health and Challenges

Coquitlam River Watershed Roundtable

Summary of June 6th Roundtable Feedback on Component Goals, Attributes and Indicators & Resulting Changes

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Plan Task Group

September 3rd, 2013

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Executive Summary

The Coquitlam River Watershed Roundtable is developing the first phase of a watershed plan for the lower Coquitlam River following the [Open Standards for Practice of Conservation](#), an adaptive management approach that seeks to integrate both ecological and human service (well-being) concepts into conservation planning. A Watershed Plan Task Group of the Roundtable has developed a draft framework and health assessment for the watershed plan. On June 6th, 2013, the Coquitlam River Watershed Roundtable hosted a public meeting at City Hall, Coquitlam. The purpose of this meeting was to present to the public the current status of the Lower Coquitlam River Watershed Plan and to receive feedback on the proposed framework for the plan.

The draft framework for the watershed plan consists of four ecological components and six human well-being components. The draft goal statements, attributes, indicators, and current health assessment (viability analysis) for each component were presented at the meeting through a series of posters set up at five stations in City Hall (Appendix A). Participants were asked to review the information for six components and provide written feedback on the adequacy of components and associated goal statements, attributes, and indicators. In total, 61 participants attended the meeting, and each component was reviewed by between seven and fifteen participants. The posters and feedback forms were also posted on the Coquitlam River Watershed Roundtable website and Roundtable members who were not able to attend the June 6th meeting were invited to provide feedback between June 19 and July 3, 2013. No feedback was received during this period. The Watershed Plan Task Group met on July 17th to review the feedback received from Roundtable participants and discuss potential changes. Table 1 provides a summary of changes to each component, and their associated attributes and indicators, that are being made in response to feedback from Roundtable participants and subsequent analysis by the Task Group.

Table 1. Summary of Changes to Components, Attributes and Indicators based on Feedback from June 6, 2013 Roundtable Meeting and further consideration by Watershed Plan Task Group.

Original Component	Total (n)	Support Goal?			Support Attributes?			Summary of Changes
		Yes	No	NR	Yes	No	NR	
1. Coquitlam River System	14	14 100%	0	0	14 93%	0	1 7%	<ul style="list-style-type: none"> a) Reword goal statement as: Ensure management of water flows, water quality, and habitat in order to support productivity and other ecological and human well-being values; b) Separate turbidity and chemical composition into two indicators; c) Ensure that “base flows” and “peak flows” indicators are ecologically relevant; and d) Potentially combine base and peak flows into an interval indicator.
2. Riparian Zones	12	11 92%	1 8%	0	10 83%	1 8%	1 8%	<ul style="list-style-type: none"> a) Rename component to: Riparian Areas; b) Reword goal statement as: Maintain and where possible, maximize the width and connectivity of intact and healthy riparian areas for proper ecological functioning

								<ul style="list-style-type: none"> c) along the Coquitlam River and tributaries; c) Replace the word ‘forest’ with ‘area’ in the relevant attributes and indicators; d) Determine how to measure continuity; and e) Select indicator species (in process).
3. Salmon	9	9 100%	0	0	9 100%	0	0	<ul style="list-style-type: none"> a) Reword goal statement as: Ensure resilient, healthy populations of native salmon, for current and future generations; b) Expand the accessible habitat indicator to include a measure of blockages to salmon access; c) Add number of spawners for a measurement of genetic diversity (rather than outmigration only) and include an indicator which the public associates with; d) Rephrase indicator “embeddedness” to “condition of spawning gravel”; and e) Track benthos diversity and abundance.
4. Natural Areas and Open Spaces	11	10 91%	1 9%	0	8 73%	0	3 27%	<ul style="list-style-type: none"> a) Rename component to: Natural Areas; b) Rephrase goal statement as: Maintain an interconnected network of land and water resources to support functioning natural systems, recreational opportunities, and aesthetic values; and c) Complete revamp of attributes and indicators – see natural areas section.
5. Livable Communities	15	14 93%	0	1 7%	13 86%	1 6%	1 6%	<ul style="list-style-type: none"> a) Provide context for what is “livable” and what is “sustainable” – see livable communities section for definitions supported by the Task Group; b) Consider the addition of an attribute for “Transportation and Safety”; c) Include a transportation and safety indicator; d) Clarification is needed for density targets, mixed use types and waste reduction (maybe include photos?); and e) Aesthetics indicator: Consider using ratio of proportion of developed areas to natural spaces as the open spaces indicator.
6. Human Health and Safety	11	9 81%	0	2 19%	8 72%	0	3 27%	<ul style="list-style-type: none"> a) Rename component to: Human Health, Well-being and Safety; b) Add the word ‘floods’ to attribute “safety from natural hazards”; c) “Built up land” indicator to be changed to “Safety from floods and other natural hazards”; d) Move “Trail safety” to the “Recreation” component; e) Add fine particulates to list of air quality parameters monitored; and f) Leave drinking water, because it is of high

								public interest.
7. Resource Industry	7 100%	7 100%	0	0	7 100%	0	0	No changes
8. Stewardship	11	10 91%	0	1 9%	10 91%	0	1 9%	<ul style="list-style-type: none"> a) Reword goal statement as: Foster a stewardship ethic in all who interact with the watershed; b) Change attribute "Government and agency responsibility" to "Regulatory support" and revamp bins for bylaws/regulations; c) Remove the indicator "Number of hits to the Roundtable website"; d) Add an indicator "Coquitlam River in the media" to measure the level of awareness and attention directed towards the river in all forms of media; e) Add an indicator "Number of people participating in stewardship activities", the Roundtable should pick two or three activities in order to give some indication of engagement in stewardship activities – see stewardship section for suggested activities; and f) Include one measure of private land stewardship that goes above and beyond regulations – see stewardship section for suggestions.
9. Cultural and Spiritual	13	12 92%	0	1 8%	12 92%	0	1 8%	<ul style="list-style-type: none"> a) Explore ways to better measure these indicators; b) Further discussion with First Nations regarding historical connection with watershed; and c) Define 'places'.
10. Recreation	12	10 84%	1 8%	1 8%	9 75%	1 8%	2 17%	<ul style="list-style-type: none"> a) Reword goal statement: Promote passive and active recreation that respects other users and the watershed; and b) Attributes and indicators revamped in order to address concerns about inter-user conflicts as well as conflicts with habitat integrity – see recreation section for suggested remodel.

NR = No response

Background

The Coquitlam River Watershed Roundtable is developing the first phase of a watershed plan for the lower Coquitlam River following the [Open Standards for Practice of Conservation](#), an adaptive management approach that seeks to integrate both ecological and human service (well-being) concepts into conservation planning. A Watershed Plan Task Group of the Roundtable has developed a draft framework and health assessment for the watershed plan. On June 6th, 2013, the Coquitlam River Watershed Roundtable hosted a public meeting at City Hall, Coquitlam. The purpose of this meeting was to present to the public the current status of the Lower Coquitlam River Watershed Plan and to receive feedback on the proposed framework for the plan. Sixty-one (61) participants attended the public Roundtable meeting. Participants were comprised of representatives from the private sector (28%), non-governmental organizations (20%), local, regional, federal, and First Nation's government (26%), and the public (26%).

Currently, the Lower Coquitlam River Watershed Plan consists of ten (10) components: four are considered ecological components and six are considered to be human well-being components. The draft goal statements, attributes, indicators, and current health assessment (viability analysis) for each component were presented at the meeting through a series of posters set up at five stations in City Hall (Appendix A). Participants were asked to review the information for six components and provide written feedback on the adequacy of components and associated goal statements, attributes, and indicators. Each component was reviewed by between seven and fifteen participants. The posters and feedback forms were also posted on the Coquitlam River Watershed Roundtable website and Roundtable members who were not able to attend the June 6th meeting were invited to provide feedback between June 19 and July 3, 2013. No feedback was received during this period. The Watershed Plan Task Group met on July 17, 2013 to review the feedback received from Roundtable participants and discuss potential changes.

This report provides a summary of the feedback received regarding goal statements, attributes and indicators by component. The report also lists the changes that are being made to goal statements, attributes and indicators for each component as a result of the feedback from Roundtable participants and subsequent analysis and discussion by the Watershed Plan Task Group. Appendix B and C provide an additional summary of suggestions provided by Roundtable participants for changes to indicators and actions by component.

1. Coquitlam River System

A. Summary of June 6th Roundtable Feedback

Fourteen participants reviewed this component. Comments are generally supportive overall. Some clarity is needed around the meaning of lateral migration and the evaluation of both flow and turbidity (i.e. baseline levels/what is good).

Component & Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Ensure management of water flows to maximize productivity and support other ecological and human well-being values)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
14 100%	0 0%	0 0%	14	<ul style="list-style-type: none"> Maintain and support water quality for all Flow regimes are crucial to ecological well-being. Money cannot always be a priority, when weighing the scales environmental health and economic benefits. Would like to see water quality and habitat condition captured in goal statement - flows are only one component of productivity/health. There needs to be better wording for the “Coquitlam River System” component. Perhaps “In-stream Conditions and Habitat”

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (flow, water quality, channel morphology/hydrology)? Indicate Yes or No (*please explain*)

Yes	No	NR	Total	Comments provided by participants
13 93%	0 0%	1 7%	14	<ul style="list-style-type: none"> All work together Improvements to flood plain constriction can always be made Consider addition of component related to barriers/% of fish accessible watercourses - indicating access through dykes (tributaries)

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data					Total (n)	Average	Comments provided by participants
	1 (L)	2	3	4	5 (H)			
Annual flow levels	0	1	2	3	7	13	4.2	Good Flows need to be more broadly developed but using this present indicator works for a quick

								overview
Base (min) flows	0	0	2	2	8	12	4.5	Good Fish entrapment when water drops Coq. R has had problems w/low base flows in summer The min and max flows that are acceptable for salmon and other ecological services are important especially given the flow and control impacts, down-stream of the dam
Peak (max) flows	1	0	2	3	6	12	4.1	Good No flushing especially after spawning Too high peak flows can cause salmon to spawn in non-viable habitat. Also important so juveniles are not "washed away" Not very helpful with respect to productivity and ecosystem health. A flood and safety issue.
Benthic invertebrates	0	0	2	2	9	13	4.5	Good Water quality, feed for wildlife and fish Indicate stream health Good to compare to regional context. Integrates many factors/impacts
Turbidity/ water chemistry	0	0	2	4	7	13	4.4	Good We need to keep an eye on the gravel pits and their effects Can we provide quantitative data for turbidity i.e. What numbers indicate good, med, and very good? Should turbidity and chemical composition be separated as indicators?
% Channel diked	1	0	4	2	5	12	3.8	Good; easy to measure I think this indicator might need further placement in other sections
Rates of Lateral Migration	0	0	4	3	3	10	3.9	Good Might be difficult to consistently measure. Also, is it responsive enough?
Suggested Indicator	<ul style="list-style-type: none"> • # barriers/%fish accessible water courses • Consider possibility of using more ecologically relevant flow indicators than just instantaneous min/max flows • Should sediment load also be considered? 							

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggestions for additional data or information	<ul style="list-style-type: none"> • More studies on gravel pits and steelhead stocks • Water flows need to be quantitatively represented • Metro Vancouver - B-IBI studies; City of Coquitlam WQ sampling 2012 • BC Hydro for flow rates
b) Names and contact information	<ul style="list-style-type: none"> • Gord Lewis • Academic and/or research institutions • Andjela at Metro Vancouver; Nick Page; Patrick Lilley
c) General comments	<ul style="list-style-type: none"> • Consider increasing forest width policy along mainstream and tributaries • Good start • Should consider some of these indicators and make sure they align with ISMP Monitoring approach being developed by SILG • All [indicators] seem important therefore I support them all • I think it's on the right track, thank you • Posters look nice; good to see people care about Coq River well being • Each is an important indicator in their own right

B. Resulting Changes based on review by Watershed Plan Task Group

- a) There was some discussion about changing the name to Coquitlam River and Tributaries, but strong interest in retaining the term 'system' to ensure that waterways not considered tributaries (e.g. ditches or others) are included;
- b) Reword goal statement as: Ensure management of water-flows, water quality, and habitat in order to support productivity and other ecological and human well-being values;
- c) Separate turbidity and chemical composition into two indicators; and
- d) Ensure that "base flows" and "peak flows" indicators are ecologically relevant;
 - a. Potentially combine base and peak into an interval indicator: Goal would be to maintain flows within certain, ecologically relevant interval long term.

2. Riparian Zones

A. Summary of June 6th Roundtable Feedback

Twelve participants reviewed this component. There was some confusion over the meaning and measurement of connectivity. Percentage of intact forest mostly scored above 4, although respondents felt that the measure should be numeric and dependent on the location. Maturity of forest and age of natural areas was less important than type for two respondents. In addition, several respondents believe that species (invasive/indicator) would be difficult to contain/measure.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Maximize intact and healthy riparian zones along the Coquitlam River and tributaries)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
11 92%	1 8%	0 0%	12	<ul style="list-style-type: none"> • Would like to see more quantitative goal statement • Consider avoiding use of 'maximize' • Having riparian areas intact is important; important for water filtration

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (amount of riparian forest, riparian forest composition, and connectivity)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
10 83%	1 8%	1 8%	12	<ul style="list-style-type: none"> • Consider including more than forests as vegetation type • Wildlife corridors are important

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data					Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)			
% of intact riparian area	1	0	0	5	6	12	4.25	<ul style="list-style-type: none"> • Wider setbacks; consider matching to typical widths used by Metro Vancouver (Integrated Storm Management Plan) e.g. RFI indicator • Increase 30m to 100m; 15m to 30m • Should be all natural vegetation, not just forest
Maturity of	0	0	2	4	4	10	4.2	<ul style="list-style-type: none"> • Good but need more

riparian zone								<ul style="list-style-type: none"> • Less important that type of vegetation • Potentially difficult to measure • Not sure how pertinent • V. Important. Light penetration? • Varies with changes (flood/fire etc.) • OK as ONE quality indicator
Native plant richness	0	0	1	2	7	10	4.6	<ul style="list-style-type: none"> • Very Important; need less invasive species • How can there be an "all native but with small contained invasive patches"? By definition invasive species are not contained • Must be measured. Need to consider 'novel ecosystems' and their contribution to biodiversity e.g. Riverview/col. Farm
Abundance/ presence indicator species	0	0	4	1	5	10	4.1	<ul style="list-style-type: none"> • Good • The main problem in many ways, again glad to see it • It is important to have indicator species or type of land (i.e. Wetland forest) • Could be challenging re: resources to do inventory
Connectivity/ continuity	0	0	1	3	6	10	4.5	<ul style="list-style-type: none"> • Corridors are important • A bit confusing • Wider and more wildlife corridors • Great!

Indicator Species

Summary of responses to the question: Which indicator species do you feel would provide the best measure of the health of the riparian zone?

- City of Surrey Biodiversity Management Strategy; Metro Vancouver Biodiversity Indicators
- Environmentally Sensitive Areas Management Data for the City of Coquitlam
- Natural species
- Mature Species; possibly cottonwood
- Stink currant e.g. An indicator of a healthy, salmon rich river system
- Cedar? Cottonwood, spruce. Correct species for site group. Shrubs - n.o. Dogwood, ninbink. SAR - another quality indicator (TEM)

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggestions for additional data or information	<ul style="list-style-type: none"> • City of Coquitlam. Invasive plant inventory • Metro Vancouver: Sensitive Ecosystem Inventory (SEI) (for Metro Vancouver and Abbotsford, 2010-2012). natural areas/open space + Riparian zones indicators • DFO - Sensitive habitat Inventory management tool database • SEI mapping and methodology from Metro Vancouver • Metro Vancouver has done some work on connectivity - % of natural area surrounding centre of polygon
b) Names and contact information	<ul style="list-style-type: none"> • Stephen Godwin at Surrey; Josephine Clark at Metro Vancouver • Metro Vancouver Natural Resource Management Specialist; Alison Evely
c) General comments	

B. Resulting Changes based on review by Watershed Plan Task Group

- a) Rename component Riparian Areas;
- b) Reword goal statement as: Maintain and where possible, maximize the width and connectivity of intact and healthy riparian areas for proper ecological functioning along the Coquitlam River and tributaries;
- c) Attribute “Amount of riparian forest” should be changed to “Amount of riparian area”. Riparian area to be defined as:
 - Riparian area is the streamside protection and enhancement area – the area adjacent to a stream that links aquatic to terrestrial ecosystems and includes both existing and potential riparian vegetation that exerts an influence on the stream; and, the size of which is determined according to the Riparian Area Regulation in the City of Coquitlam and the Streamside Protection Regulation in Port Coquitlam.
- d) Indicator “percent of intact riparian **forest** within 30 m of the mainstem and 15 m of tributaries” should be changed to “percent of intact riparian **area**” in order to include all natural vegetation (not just forest) and remove any reference to specific width as it is beyond the scope of this plan to define;
- e) Determine how to measure connectivity or continuity; and
- f) Indicator “Abundance/presence of indicator species”: We need to define one or two indicator species for riparian areas (see also references below).
 - Recommendations: Pacific water shrew and Red-legged frog.
 - Task Group members suggest that plant indicator species that are more relevant to the watershed are willows, marsh grass, cat-tails, and salmon berries as opposed to stink currants.

Table 2: Indicator species for riparian areas. Retrieved from Metro Vancouver. (2003). Conserving Biodiversity in Greater Vancouver: Indicator Species and Associated Habitat Quality – VOLUME II APPENDIX A: Associated species of each major ecosystem class.

Ecosystem	Birds	Mammals	Fish	Amphibians/Reptiles	Insects	Plants
Riparian Areas	American Bittern, Great Blue Heron, Bald Eagle, Cooper’s Hawk, Rufous, Hummingbird, Yellow Warbler, Black-throated Gray Warbler, Townsend’s Warbler, and Spotted Towhee.	River Otter and Black Bear	N/A	Red-legged Frog, Tailed Frog, Pacific Tree-frog, Northwestern Salamander, and Common Garter Snake.	Mayfly and Stonefly	Devil’s Club and Western Trillium

Refer also to the indicator species recommended in the Coquitlam/Buntzen Watershed Plan. 2011. Fish and Wildlife Compensation Program.

3. Salmon

A. Summary of June 6th Roundtable Feedback

Nine participants reviewed this component. Some clarity is needed over the use of terms ‘embeddedness’ and ‘benthos’. Cautions pertain to habitat context for species abundance and baseline issues including natural and hatchery influenced densities. Suggestions include diversity of benthic invertebrates (as opposed to abundance), blockages to fish access, and large woody debris (LWD) as a limiting factor.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Ensure resilient, healthy populations of native salmon)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
9 100%	0 0%	0 0%	9	<ul style="list-style-type: none"> Consider future generations in goals. Which fish are considered native? All fish are good indicators of watershed health. Resilience is essential. Add something to suggest abundance in goal statement (historic levels?) Indicate a higher level timeframe ex "ensure resilient, healthy populations of native salmon for future generations"

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (abundance, productivity, diversity, and habitat)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
9 100%	0 0%	0 0%	9	<ul style="list-style-type: none"> Link salmon with habitat type Healthy fish and wild salmon are a good indicator of health Add wild salmon metric

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Juvenile salmon out-migration				4	5		9	4.6	Chums do seem to be necessary but pink increases seem more limited - can these be grouped?
Smolt density			1	4	4		9	4.3	Seems appropriate Density depends on different habitat

									characteristics (i.e. Mainstream, side channel etc.) Biomass is good but may be a false positive if influenced by artificial hatchery inputs
Benthos abundance			3	3	2	1	8	3.9	Seems appropriate Some clarity needed on 'benthos' Relative abundance must be reflected within habitat they use Species diversity is a stronger indicator (benthos species)
Proportion at healthy				4	5		9	4.6	Only useful if you know what baselines and capacity are? Good but hard to determine I agree that sockeye need to be included for Very Good condition - we're not there yet
Embeddedness			2	5	1	1	8	3.9	Seems appropriate; Like it Some confusion Term "embeddedness of gravel" is negative and problematic - replace with "permeability of gravel"
Accessible habitat				5	4		9	4.4	
Suggested Indicator	<p>Consider adding or substituting # of spawners as an indicator</p> <p>Is there a qualitative assessment of blockages to habitat access? I.e. An identification of impediments to spawning? This could also be measured and linked to abundance grounds maybe?</p> <p>What about core*/LWD - often also a limiting factor in urban streams</p>								

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> Regular monitoring by multi-disciplinary academics (every quarter), data collection as student project Natural predator for Salmon populations and invasive species to understand abundance and diversity measures Likely have data available already b/c of existing knowledge of core committee What can be used as a reference for comparison to the Coq.R. with regards to salmon population/density health
b) Names and contact information	<ul style="list-style-type: none"> Invasive Species council Academic institutions may have data of predator populations

<p>c) General comments</p>	<ul style="list-style-type: none"> • More relevant/identifiable indicators • Consider something public identifies more with more than some of the indicators • Suggestion: 'increased wild population vs. hatchery'. As health and carrying capacity improve need for hatchery input can be reduced (recognize you cannot control ocean survival)
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B. Resulting Changes based on review by Watershed Plan Task Group

- a) Reword goal statement as: Ensure resilient, healthy populations of native salmon, for current and future generations;
- b) Expand the accessible habitat indicator to include a measure of blockages to salmon access;
- c) Add number of spawners for a measurement of genetic diversity (rather than outmigration only) and to include an indicator with which the public associates;
- d) Rephrase indicator “embeddedness” to “condition of spawning gravel”; and
- e) Track benthos diversity and abundance.

Notes: Task Group and Core Committee members noted that tracking LWD would be difficult and this river has not historically had large amounts of large woody debris and does not currently have either. It was also noted that most salmon stocks (except sockeye) have been rebuilt in this river with hatchery stock, which is why the term ‘native’ has been used instead of ‘wild.’

4. Natural Areas and Open Spaces

A. Summary of June 6th Roundtable Feedback

Eleven participants reviewed this component. Most comments pertain to the differentiation of natural and urban spaces. Most respondents believe that natural areas should be the focus over urban parks and trees. Suggested indicators include connectivity of all forest and riparian areas, using percent area protected, and road density as a measure for connectivity. Further clarity is needed on the connectivity attribute.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Maximize an interconnected network of land and water resources to support functioning natural systems, recreational opportunities, and aesthetic values)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
10 91%	1 9%	0 0%	11	<ul style="list-style-type: none"> • Include wildlife corridors as a buffer • Define what is meant by maximize, when will goal be reached?

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (amount of tree cover and natural areas, ecological integrity of natural areas and urban forests, connectivity)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
8 73%	0 0%	3 27%	11	<ul style="list-style-type: none"> • Need to include larger natural areas, backyard trees are not equivalent. • Consider separating upper and lower reaches; difficult to rate area as a whole • Define what is meant by ecological integrity

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Urban tree cover		1	3	3	4		11	3.9	Expand to include other riparian and non-urban cover Consider size and age Ideally only native species
Parks and protected natural areas				4	7		11	4.6	More protection the better Distinguish between recreation and natural parks

									Use % of existing natural area that is protected
Age structure		1	2	3	3	2	9	3.9	Will not change much Age less important that type What about invasive species?
Amount of environmentally sensitive areas		1	1	1	6	2	9	4.3	Higher the better Tool, not an indicator, skewed Use % protected as an indicator ESA is wrong term - typically refers to DPA areas. Should sensitive/other important ecosystem based data be used to measure protection?
Connectivity		1	1	1	6	2	9	4.3	Wildlife corridors are important Important; uncertain Potentially use road density as a measure Connectivity of all types

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> • Recommend "wildlife corridors" to be represented • Quality indicators - could include: age; edge (good - more natural area, bad development); invasive species; trail network (trails reduce env. quality); roads. • Any covenants or private land protected? - via land tenants (any ecological gifts i.e. Federal program) • There is more recent forest cover mapping through some of ISMPs
b) Names and contact information	<ul style="list-style-type: none"> • Crystal Campbell (KWL) forest cover from ISMPs • City of Coq. - Invasive plant management strategy
c) General comments	

B. Resulting Changes based on review by Watershed Plan Task Group

- Rename component to: Natural Areas;
- Rephrase goal statement as: Maintain an interconnected network of land and water resources to support functioning natural systems, recreational opportunities, and aesthetic values;
- Attribute: "Amount of natural area" (all to be measured by the sensitive ecosystems inventory – but need to determine how to address the riparian class as it is separated into a different component);
 - Indicator: Area of forest cover;
 - Indicator: Area of freshwater and wetland; and
 - Indicator: Area of shrub, grassland and old field habitat
- Attribute: "Ecological integrity of natural areas";

- Indicator: Native plant richness (in parks, same as riparian, but across all natural areas);
 - Indicator: Wildlife trees; and
 - Indicator: Indicator species (choose one for each type of habitat?); and
- e) Attribute: “Connectivity”
- Indicator: wildlife corridors (need a way to measure connectivity/corridors across the whole landscape).

Notes: Indicators measuring road and trail density will be a measure of pressures to this component with respect to transportation and recreation. Indicators measuring the amount of sensitive areas protected in parks, etc. will be a measure of a strategy to maintain these natural areas.

5. Livable Communities

A. Summary of June 6th Roundtable Feedback

Fourteen participants reviewed this component. It was found that clarity is needed to explain density targets and mixed uses. Three respondents felt that solid waste reduction should be more clearly defined. One respondent suggested the use of photos to explain attributes. Two respondents suggested applying the proportion of natural to developed areas in place of garden space or urban tree cover. One suggested an aesthetics attribute, and one suggested rain barrels and/or impermeable surfaces as a measure for storm water practices.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Promote sustainable, livable communities)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
14 93%	0 0%	1 7%		<ul style="list-style-type: none"> Provide context for what is 'livable' or 'sustainable' Agree as long as there is balance between health and pollution – response pressure

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (sustainable growth, green infrastructure, aesthetics)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
13 86%	1 6%	1 6%	15	<ul style="list-style-type: none"> Consider addition of transportation and safety Consider addition of food or agriculture Don't agree with Metro Vancouver density targets

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Average	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Density targets	1	1	2	4	5	2	13	3.8	Difficult to understand Association between density and sustainable growth unclear
Mixed use types	1		2	10	1	1	14	3.7	Not clear Needs further development. I think higher density places include this. Not sure I see the need to call it

									mixed vs. Res & shops??
Storm-water practices				6	6	3	12	4.5	Rain barrels used; impervious surface area
Total pervious surfaces		2		5	5	3	12	4.1	Very important
Waste reduction		3		3	7	2	13	4.1	Not sure about this/clear about this Define what is meant by waste (solid, effluent?) Could use things such as bans on plastic bags, encouraging reusable rather than recycle; how many composters are sold/used; diversion rates may be misleading as recycling might not meet the sustainable goal as it still requires energy/production uses
Garden spaces	1		1	5	6	2	13	4.2	
Urban tree cover			3	1	8	3	12	4.4	Aesthetics are huge
Public open spaces		1	2	5	5	2	13	4.1	Parks?
Suggested Indicator	<ul style="list-style-type: none"> Proportion of developed areas to natural spaces (I guess as a measure of aesthetics and sustainability?) 								

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> Listed on CRWR website More trenches needed at gravel mining near the Coq dam. Do not give more permit to gravel mining
b) Names and contact information	
c) General comments	<ul style="list-style-type: none"> A lot of information to digest Great to see diversity at the open house

B. Resulting Changes based on review by Watershed Plan Task Group

- a) Need to provide context for what is “livable” and what is “sustainable”.
 - Livable refers to: *Vibrant, safe neighbourhoods where people have choices about where to live, work and play; they are accessible and connected to a variety of amenities and services including options for transportation, schools, parks and leisure, food security, housing types, and employment opportunities.*
 - Sustainable refers to: *Time and basic needs - meeting daily needs while not jeopardizing the ability of future generations to do so as well.*
 - Suggested context statement: Vibrant community-oriented neighborhoods that provide accessibility and connectivity to transportation choices and schools, complemented by parks and leisure amenities, a mix of housing types, diversity of residents, and a commercial and resource business sector base that provides for services, economic development and employment opportunities locally.
- b) Consider the addition of an attribute for “Transportation and Safety”;
- c) Include a transportation and safety indicator;
- d) Clarification is needed for density targets, mixed use types and waste reduction (maybe include photos); and
- e) Consider using ratio of proportion of developed areas to natural spaces as the open spaces indicator (measure of aesthetics)?

6. Human Health and Safety

A. Summary of June 6th Roundtable Feedback

Eleven participants reviewed this component. Two respondents were unsure what 'built up land safety' meant or how it would be measured. One respondent thought that the measure of quality depended on the unit being used.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Promote a watershed environment that contributes to human health and safety)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
9 81%	0 0%	2 19%		<ul style="list-style-type: none"> Agree, but include protection from flood hazard

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (clean air, clean water, safety from natural hazards, and physical use of watershed)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
8 72%	0 0%	3 27%	11	<ul style="list-style-type: none"> None

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Air quality index			1	2	8		11	4.6	Tree cover as measure? Depends on unit Knowing what is in our air shed is important
E.coli/coliforms in river			2	3	6		11	4.4	How about chemical composition? Health depends on unit
Drinking water quality	1			1	9		11	4.5	Human drinking water below dam is rare Health depends on unit
Built up land safety	1	1	1	2	4	2	9	3.8	Unsure what this is and how it will be measured Forest cover as measure (recognizing role

									of riparian zone)?
Duration/freq of walking in watershed	1	1	3	5	1	10	4.0		
Trail safety	1	3	4	2	1	10	3.6	Needs to be more defined – crime, hazards, wildlife? Seems like it belongs elsewhere	

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> Universities
b) Names and contact information	
c) General comments	<ul style="list-style-type: none"> Fine particulates, especially submicron particles and ozone

B. Resulting Changes based on review by Watershed Plan Task Group

- Rename component as “Human Health, Well-being and Safety”;
- Add the word ‘floods’ to attribute “safety from natural hazards”;
- “Built up land” indicator to be changed to “Safety from floods and other natural hazards”;
- Move “Trail safety” to the “Recreation” component;
- Add fine particulates to list of air quality parameters included; and
- Leave drinking water, because it is of high public interest, even though quality is largely determined above the dam (though it is partly affected by the maintenance of the distribution system too).

7. Resource Industry

A. Summary of June 6th Roundtable Feedback

Seven participants reviewed this component. Two respondents noted it was ‘excellent’ and another commented that it seems comparable to other plans.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Promote sustainable use of renewable resources and monitored, prudent use of non-renewable resources)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
7 100%	0 0%	0 0%	7	<ul style="list-style-type: none"> None

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (water supply, energy, gravel)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
7 100%	0 0%	0 0%	7	<ul style="list-style-type: none"> No relevant comments

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Annual drinking water					7		7	5.0	
Per capita flow				4	3		7	4.4	
energy production				2	5		7	4.7	
Energy consumption				4	3		7	4.4	
aggregate production			3	2	2		7	3.9	
aggregate consumption			2	2	3		7	4.1	

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	Water quality checks are available on the Coq Roundtable website
b) Names and contact information	None
c) General comments	None

B. Resulting Changes based on review by Watershed Plan Task Group

None required.

Notes: A Task Group member noted that production (of energy, aggregates and water) goes to the entire lower mainland region, which is one difficulty with the indicators selected. To be considered as these indicators get developed further.

8. Stewardship

A. Summary of June 6th Roundtable Feedback

Eleven participants reviewed this component. Three respondents felt participation in stewardship was too inconsistent, simple or difficult to measure (private land in particular). By-laws, similarly were seen as too subjective without opportunity for benchmarking. One suggested inclusion of mental engagement. Seven respondents felt hits to website was a poor indicator and should be expanded to include collective media and time spent on the site.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Foster a stewardship ethic in all who benefit from the watershed)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
10 91%	0 0%	1 9%		<ul style="list-style-type: none"> Word 'benefit' somewhat problematic to me.

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (awareness and education, government and agency responsibility, community engagement in responsible behaviors)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
10 91%	0 0%	1 9%	11	Very Good Important indicators. Perhaps more discussion about measurements. Need for Regulatory Support as an attribute.

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Hits to website			4	1	4	2	9	4.0	Include all collective media (twitter, who, media, public media, FB, 10 different measures, tap susan as free resource) May be misleading/not always accurate. Include time spent on site
Number of Roundtable events/program			1	2	8		11	4.6	Very Good; we need more!
Bylaws/			2		8	1	10	4.6	Very Good

regulations									Too subjective (need to measure whether implementation is successful/track progress).
Number of participants in stewardship activities		1	1	1	7	1	10	4.4	Too simplistic and difficult to measure consistently Too simplistic. Doesn't capture the stewardship work. Other indicators: size of restoration, acres restored, #of groups involved What about mental/private owner stewardship? Include complaints
Suggested Indicator									Complaints

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> Information should be provided on website Public media should be included and social media (face-book, twitter, blogs, you-tube) Consider a watershed pledge program. Salmon safe program - Contact Pacific Salmon Foundation for info
b) Names and contact information	Usual stewardship groups
c) General comments	None

B. Resulting Changes based on review by Watershed Plan Task Group

- Reword goal statement as: Foster a stewardship ethic in all who interact with the watershed;
- Change attribute "Government and agency responsibility" to "Regulatory support" and revamp bins for bylaws/regulations;
- Remove the indicator "Number of hits to the Roundtable website";
- Add an indicator "Coquitlam River in the media" to measure the level of awareness and attention directed towards the river in all forms of media (choose those that are easily measured from a long possible list including twitter, Facebook, blogs, YouTube, local papers, etc.);
- Indicator "Number of people participating in stewardship activities", the Roundtable should pick two or three activities in order to give some indication of engagement in stewardship activities:
 - Number of people involved in river cleanup events (e.g. Great Canadian Shoreline cleanup) and the adopt a trail program;

- Number of people volunteering for site rehabilitation activities (e.g. invasive species removal and tree plantings); and
- f) Include one measure of private land stewardship that goes above and beyond regulations? Number of households purchasing rain-barrels? Number of households signing pledge/agreement/covenant (perhaps not yet relevant!).

9. Cultural and Spiritual

A. Summary of June 6th Roundtable Feedback

Thirteen participants reviewed this component. We received overwhelmingly supportive comments, although two respondents felt that storytelling and cataloguing would be a difficult measure to quantify/compare. One respondent suggested that cataloguing be placed in stewardship.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Support opportunities for people to connect in the watershed through personal spiritual experiences, heritage conservation and the arts)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
12 92%	0 0%	1 8%	13	<ul style="list-style-type: none"> History helps preservation of area for future Qualitative "numbers" can be "disconnecting"

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (spiritual, heritage, public art)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
12 92%	0 0%	1 8%	13	<ul style="list-style-type: none"> These indicators are difficult to measure; consider further discussion Reason for inclusion of Sockeye? Health of the River also brings happiness and connection

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data								Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR	Total (n)	Avg.	
Catalogue	1		1	1	7	3	10	4.3	Very important Difficult to measure, rate and compare/how will this be done? Personal stories can give a deeper understanding of the watershed
Sockeye returns				3	7	3	10	4.7	Strongly agree; most connecting Excitement regarding returns as a measure Fish in general
Maintenance of places				2	8	3	10	4.8	Quiet places to connect are important Define meaning of 'place' Benches to sit on to meditate

Storytelling/ language			1	3	6	3	10	4.5	Very supportive First Nation's primary connection to the land is their storytelling First Nations history and links to watershed are important (e.g. name of city) May be difficult to measure Imaginary - Viewing the history of a watershed through photos and presentations - what it was, what it is
Artistic displays/events			1	3	7	2	11	4.5	Very Good/Important Art/visual impact promotes connection/deeper/wider understanding to River

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> • Neighbor • History of the First Nations use of the Watershed; archaeological discoveries/villages in the watershed show the rivers importance; First Nation elder stories
b) Names and contact information	<ul style="list-style-type: none"> • Brown and Oakes Archeology • Gord Lewis
c) General comments	<ul style="list-style-type: none"> • Need more resources • Storytelling is lacking • Recognition of culture and spiritual values are currently undervalued and need renewed support. A bit thin of the gamut of the A+C sector • In general, good approach

B. Resulting Changes based on review by Watershed Plan Task Group

- Explore ways to better measure these indicators;
- Further discussion with First Nations regarding historical connection with watershed; and
- Define 'places'

10. Recreation

A. Summary of June 6th Roundtable Feedback

Twelve participants reviewed this component. Most respondents indicated concern over access to the river and trade-offs with ecosystem health, safety of users, and vandalism/erosion; particularity with trail abundance, public accessibility and organized viewing. With respect to fishing, two respondents indicated the need to combine activities with education/appreciation for the River, and one requested a breakdown of age to ensure that new fishers are captured.

Goal Statement

Summary of responses to the question: Do you agree with the goal statement (Promote passive and active recreational opportunities within the watershed)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
10 84%	1 8%	1 8%	12	<ul style="list-style-type: none"> Recreation to mean/focus on nature based activities, respect for natural environment and ensure protection for natural attributes Not at a cost to watershed health; too much access may put pressure on environment

Attributes

Summary of responses to the question: Do you agree with the attributes selected to describe this component (access to and use of the river, trails, wildlife and nature viewing, fishing)? Indicate Yes or No (*please explain*).

Yes	No	NR	Total	Comments provided by participants
9 75%	1 8%	2 17%	12	Does overuse or human impact through recreation come into health?

Indicators

Summary of responses to the question: On a scale from 1 (low) to 5 (high), please indicate your support for the indicator, the assessment of current status, and the descriptions of poor, fair, good and very good (*circle one*)? Please provide an explanation or suggestions. Alternate indicators may be suggested below.

Indicator	Count Data						Total (n)	Avg.	Comments provided by participants
	1 (L)	2	3	4	5 (H)	NR			
Public accessibility		3	2	5	1	1	11	3.4	Not beyond acceptable limits of change. (LAC) as a measure Not necessarily good for health Need way to recognize inter-user conflicts as well as conflicts with habitat integrity More access=more impacts Vandalism/erosion

Number of swim/ boat	1	2	1	4	2	2	10	3.4	Good Concern about safety, trespassing, angler-taker conflicts and vandalism Not sure if this activity should be supported Need to ensure education along the way
Length and diversity trails	1	2		7	1	1	11	3.5	Good Status is difficult to understand More not always better; do not want an increase in trails at cost of ecosystem Needs to be carefully planned, reduce disturbance/erosion
Number of people trails	1		3	4	2	2	10	3.6	Good More is not always better; conflict between users and health of river Concern of balance between recreation and River health; vandalism, litter, erosion
Organized viewing opp.		1	2	3	5	1	11	4.1	Organization important Very Important, good Why organized? What about solitude?
Number participating		1	1	3	6	1	11	4.3	Do these have to be organized? Many people who love nature - bird watching - are not organized Solitude also connects to river Combine with education?
Recreational fishers	1	1	1	6	2	1	11	3.6	Important for connection to river Inclusion of ethics and training/education Need to know breakdown of age as well
Catch success		1	2	4	2	3	9	3.8	Better metric than fish release Easier
Juvenile fish releases		3	2	1	2	4	8	3.3	Undecided Ok, but what about natural spawners

Additional Comments and Information

Summary of responses to the question: Please provide suggestions for sources of additional data or information that could help complete the health assessment, the name and contact information for individuals who may be able to provide additional information or assistance, and any additional comments.

a) Suggested additional data or information	<ul style="list-style-type: none"> Info from Riverwatch Newsletter and Data
b) Names and contact information	<ul style="list-style-type: none"> None
c) General comments	<ul style="list-style-type: none"> Good Something to do with trail quality/quality of experience; diversity of trail types; appropriate placement (env BMPs to guide trail development); illegal trails decommissioned; % of trail that meet BMPs i.e. Generally avoid sensitive areas but give limited access where appropriate; compliance, dogs

	<p>on leash, no bikes on pedestrian trails.</p> <ul style="list-style-type: none"> • I would like to see a trail from the mouth to the watershed gate on both sides of the river
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B. Resulting Changes based on review by Watershed Plan Task Group

- a) Reword goal statement as: Promote passive and active recreation that respects other users and the watershed.

Attributes and indicators need to be redone to address concerns about inter-user conflicts as well as conflicts with habitat integrity. Suggested remodel:

- b) Attribute: “Access and Opportunity”
- a. Trails and river access indicator that incorporates need for diversity/access but addresses concerns about impacts (avoids sensitive areas, erosion/stability, maintenance, limits of acceptable change, etc.) – qualitative indicator to be developed; and
 - b. Organized wildlife and nature viewing opportunities, but expanded to include self- guided opportunities (e.g. walks and signage).
- c) Attribute: “Recreational Use”
- a. Percent of residents who use the watershed for active or passive recreation (to be measured through PlaceSpeak or City of Coquitlam survey or City of Coquitlam Recreation Survey (81% of residents used a public trail at least once in 2012)) – goal is to maintain or increase users, particularly the diversity of users (e.g. age)
- d) Attribute: “Satisfaction, Safety and Respect”
- a. Satisfaction with hiking, walking and biking trails (use measure generated from City of Coquitlam Recreation Survey as a proxy for this indicator, until something better can be done);
 - b. Catch success;
 - c. Recreational user safety (e.g. very good is no reported incidents); and
 - d. Compliance with regulations and social norms (e.g. very good would be dogs on leash except in off leash areas, no bikes on pedestrian trails, no littering or trespassing, no incidents of lack of respect for other users/wildlife, etc.)

Appendix A. Component Posters Presented at June 6, 2013 Roundtable

Posters for ecological components are available at:

http://www.coquitlamriverwatershed.ca/sites/default/files/LCRWP_Ecological_Components_June2013draft_0.pdf

Posters for human well-being components are available at:

http://www.coquitlamriverwatershed.ca/sites/default/files/LCRWP_HWB_Components_June2013draft.pdf

Appendix B: Summary of Suggestions for Ecological Components

	Goal	Indicator	Suggestion
Action	2. Riparian Areas	Native plant richness	Prevent invasive species
Measure	2. Riparian Areas	Abundance/presence indicator	Stink Currant. Task Group members suggest that indicator species that are more relevant to the watershed include willows, marsh grass, cat-tails, and salmon berries.
Indicator	1. Coquitlam River System	Base min Flows	Ecologically relevant flows
	1. Coquitlam River System	Base min Flows	Fish entrapment when water drops
	1. Coquitlam River System	Peak max flows	Ecologically relevant flows
	2. Riparian Areas	% intact forest	Biodiversity
	2. Riparian Areas	% intact forest	Any natural area not just forest
	3. Salmon	Benthos abundance	Species diversity better
	3. Salmon	Embeddedness	Blockages to fish access
	3. Salmon	Accessible habitat	Core/LWD as limiting factor
	4. Natural Areas/Open Spaces	Urban tree cover	Connectivity of all forest not urban specific
4. Natural Areas/Open Spaces	Urban tree cover	Go beyond urban tree cover - riparian areas	

Appendix C: Summary of Suggestions for Human well-being Components

	Goal	Indicator	Suggestion
Action	5. Livable Communities	Waste reduction	Bans on plastic, encourage re-use
	9. Cultural and spiritual	storytelling/language	Photos and Presentations of past and present
	9. Cultural and spiritual	maintenance of places	Benches for meditation
	10. Recreation	recreational fishers	Training for recreational fishers
Measure	5. Livable Communities	Storm water practices	Rain barrels installed, permeable/impermeable driveways
	6. Human Health	Built up land safety	Forest Cover
	6. Human Health	Air quality	Tree Cover
	8. Stewardship	participants in stewardship	mental engagement
	9. Cultural and spiritual	Sockeye returns (Maybe?)	Excitement of seeing Salmon returns
Indicator	5. Livable Communities	Urban tree cover	Aesthetics
	5. Livable Communities	Density targets	Development of Natural Areas
	5. Livable Communities	Waste reduction	Composters sold/used
	6. Human Health	E.coli/coliform in river	Chemical composition
	8. Stewardship	Hits to website	Collective Media
	8. Stewardship	Hits to website	Collective Media
	8. Stewardship	Hits to website	Collective Media
	8. Stewardship	Hits to website	Time spent
	8. Stewardship	participants in stewardship	Complaints
	9. Cultural and spiritual	Sockeye returns (Maybe?)	Fish returns in general
	9. Cultural and spiritual	storytelling/language	Watershed awareness. First Nation links important.
	10. Recreation	number participating	Combine with education
	10. Recreation	recreational fishers	Effect of hatchery on natural selection
	10. Recreation	length and diversity trails	Erosion
10. Recreation	recreational fishers	Ethics of Fishers	