

**SUNSHINE COAST REGIONAL DISTRICT
CHAPMAN WATERSHED DRINKING WATER SOURCE PROTECTION
TECHNICAL WORKING GROUP MEETING NO. 3
SEPTEMBER 21, 2011**

DRAFT MINUTES FROM THE CHAPMAN WATERSHED DRINKING WATER SOURCE
PROTECTION TECHNICAL WORKING GROUP MEETING HELD AT THE FIELD ROAD
OFFICE OF THE SUNSHINE COAST REGIONAL DISTRICT

Members Present:

Sechelt Community Projects Inc.	Dave Lasser
BC Parks	Dylan Eyers (part)
BC Parks	Ryan Elphick
	Alternate (part)
Vancouver Coastal Health Authority	Tim Adams
Tetrahedron Outdoors Club	Reynold Schmidt
SCRD NRAC	Marina Stjepovic
AJB Investments	Mark Rogers
Sunshine Coast Conservation Association	Dan Bouman (part)
SCRD Board	Donna Shugar

Regrets:	Fisheries and Oceans Canada	Grant McBain
	Ministry of Forest Lands and Natural Resource Operations – Forestry Division/BC Timber Sales	William Floyd
	Ministry of Forest Lands and Natural Resource Operations – Water Allocation Division	James Davies

Absent:	Ministry of Energy and Mines	Eddy Taje
	Western Forest Products	Stuart Glen
	Sechelt Indian Band	Jordan Louie

SCRD:	GM Infrastructure Services	Bryan Shoji
	Engineering Technician	Monte Staats
	Senior Planner	David Rafael
	Recording Secretary	Joanne Bullock

Consultants:	Urban Systems Ltd.	Brad Minnes
	Urban Systems Ltd.	Don Dobson (via conference call)
	HB Lanarc	Vince Verlaan

Public Observers	3
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CALL TO ORDER 11:04 AM

AGENDA

Vince Verlaan of HB Lanarc facilitated this meeting.

The Technical Working Group (TWG) adopted the minutes of TWG meeting No. 2 dated June 29, 2011 as presented.

1. Administrative Tasks

a) Introductions

TWG members' introductions were made. Vince reviewed the agenda and advised that an amended timeline schedule has been provided to all members of the TWG.

Dates of tasks 5 and 6 from Urban Systems (USL) original work plan (meeting 3 (today's meeting) and developing the draft SARP) have been amended in the schedule. At this time the project is approximately three weeks behind the original schedule.

Bryan Shoji advised that Jordan Louie of the Sechelt Indian Band (SIB) confirmed that he intends to represent the SIB at these meetings, but unfortunately he was unavailable today.

Monte Staats advised that the following changes to the TWG membership have been made:

Remove Jim Dunkley - Ministry of Forest Lands and Natural Resource Operations (MFLNRO) – Forestry Division/BC Timber Sales.

Add Bill Floyd to replace Jim Dunkley.

Grant McBain (DFO) will not be attending meetings.

Jim Davies (MFLNRO – Water Allocation) will not be attending meetings but is available as a resource if needed

b) Press Release

Bryan Shoji spoke to the press release that was released on August 31. The intent of the press release is to advise the public of the process the SCRCD is following to develop the SARP and the role of the TWG. To date there have not been any comments or questions received from the public regarding this press release.

c) Status Update – Terms of Reference amendment request

This item was discussed at the TWG meeting 2. The TWG had concerns surrounding the wording in Section 4.4.g in the Terms of Reference. These concerns were forwarded to the

SCRD Board, and the Board directed staff to forward a proposed change to the wording of this Section to the SIB for comment. To date, no response has been received from the SIB.

Donna Shugar stated that one of the key points in the Joint Watershed Management Agreement is Item C, which speaks to *mutual interest of the SIB and the SCRD in improving and maintaining the safety quality of their potable water supply*. Donna advised that this is what the Board wants.

Dave Lasser referred to his email dated August 3, 2011, and stated that he still stands behind this email.

2. Review Field Investigation Summary

a) Field Investigation Report

Brad Minnes of Urban Systems (USL) presented the Field Investigation Summary that has been provided in the agenda package.

Brad Minnes advised that the field investigation was carried out by USL technicians. There were no TWG members present during the field investigations. The field investigation took place between July 26 and July 29, 2011. He advised that his field team visited many sites and out of those sites identified 10 with specific hazards. The summary provided is only representative of some of the hazards identified in the original Source Assessment. A map of the watershed showing the general location of the identified hazard sites was presented.

Dan Bouman joined the meeting at 11:30 am

Donna Shugar noted that the investigation took place on the main stem of the creek and the roads and asked if the tributaries were investigated?

Brad Minnes said that some of the tributaries were investigated. There were occasions where the vegetation was so dense that some areas could not be accessed.

Don Dobson (via conference call) advised that the key places to assess are at the lower parts of tributaries near the main stem of the stream to determine if there is any indication of sedimentation that may impact water quality. Any tributaries not identified on the map indicate that there were no hazards found that could be reported on.

The purpose of the field investigation was to:

- a) Get to know the watershed;
- b) Identify areas of interest;
- c) Target hazardous areas;
- d) Investigate the status and update for hazards and risks;
- e) Offer solutions and responses (site specific); and
- f) Offer solutions and responses (broad management level).

Bryan Shoji asked if the field team visited the most recently harvested sites.

Brad Minnes responded that the field team only visited the cut blocks that they could access and that some blocks, like some of the helicopter-logged blocks, were not easily accessible and said that he did not know if the crew visited every cut block.

Donna Shugar replied that these sites should be visited to determine if there are any adverse impacts from the past harvesting activities.

Don Dobson responded by noting that where there was limited access to sites, the drainage downstream from these areas would have been inspected to see if further investigation was required. If the team noticed anything of concern, they would have made every effort to visit and investigate further. Don also noted that the lack of soil disturbance on the trails indicated that the impacts from some areas may be very low.

Brad Minnes advised that the summary table lists the comments from some members of the TWG that were received before the field investigation and noted that it does not include any comments received post field investigation.

Monte Staats advised that only one comment has been received post field investigation. This comment was received after the agenda was distributed.

Brad Minnes presented the updated risk characterization table that was provided in the agenda package and noted that the table includes one additional hazard. The table lists the original level of risk as identified in the Source Assessment, and an updated level of risk as determined by USL.

Mark Rogers asked if those sites identified as high risk that are on privately owned land, and therefore in a trespass area, can still be considered a high risk.

Brad Minnes responded that, these sites can still be considered high risk because privately owned land is still accessible unless there is a physical barrier stopping entry to the site (i.e.; fences). Brad noted that today we will discuss the high and moderate risks identified in the table. The report will still include all the low risk hazards identified.

David Rafael asked how hazard 15, air emissions, is connected to Chapman Lake.

Brad Minnes replied that Chapman has potential to receive air emissions from sources outside of the Chapman Watershed.

Tim Adams asked if the air emissions include emissions from the Pulp mill.

Brad Minnes responded that the mill is not included in hazard 15. The mill is included in hazard 18 as a specific point source hazard. Hazard 15 includes general emissions (i.e., traffic).

Dan Bouman asked if the 1997 Integrated Watershed Management Plan (IWMP) was reviewed, and if so, how did it affect the Field Investigation Plan?

Brad Minnes noted that the IWMP was reviewed and that it was considered in designing the Field Investigation Plan.

Dan Bouman asked if the landslide inventory and the land stability maps from the IWMP were reviewed.

Brad Minnes replied yes to both.

Dan Bouman noted that certain sub-basins are historically prone to road failure. There are over 200 slides and slope failures identified in the IWMP. Of these slides, are any still active?

Brad Minnes responded that they would have to consider that as part of the investigations to occur in the office. Just because it wasn't found in the field, appropriate recommendations will still be made. The IWMP will still be referred to and addressed in the SARP.

Dan Bouman commented that funding is obviously a concern, but to hear that accessibility was the main reasons for not looking at hazards is a concern.

Brad Minnes stated that the field crew made every effort to access sites. The crew would go in as far as possible on ATV, when they could go no further with the ATV they continued as far as possible by foot. The only time they really couldn't proceed was when the dense vegetation physically stopped them.

Dave Rafael asked if this information could be included in the Final report to clearly show what land was actually accessed, and what could not be accessed?

Marina Stjepovic asked if USL could include a section on methodology, detailing what existing information and documents reviewed and rationale for how the sites were chosen, limitations to the field investigation, etc.

Dan Bouman asked about the roads that were deactivated? Dan claimed that there is no evaluation to show how successful this was in helping the watershed. It would be most helpful to see a map of deactivated roads within the watershed. Also to show which slides are still active, and where the vegetation has grown to the point that you cannot access. All this should be clear in the final report.

Brad Minnes noted that the field crew did not visit all of the deactivated roads. The deactivated roads that were visited were noted as effective in preventing sedimentation and the crew was impressed with the work done. These comments will be included in the final SARP report.

Dan Bouman requested that Brad find a map of the deactivated roads within the watershed, so that the TWG can review and comment on any additional field work that they feel may be required.

Tim Adams requested that the photos from the Summary be better organized and to provide more photos and include more detail of the sites.

Donna Shugar noted that Site 1 on the chart references a maintenance agreement with the SCRD and the Ministry of Forests (MoF) covering a road portion of area. What road is this? And who else uses the road? Site 2 says that the right-of-way along the forest service road has been recently logged in 2010. Who was responsible for this activity?

Brad Minnes advised that the wording should be amended here. The word “logging” should be modified to “clearing” and he could not confirm if this area was harvested or cleared.

Donna Shugar asked if this activity was authorized. We have to find out who was responsible.

Mark Rogers noted that CNI put in a road on that particular property, but this work was done prior to 2010. AJB took out logs for fire safety reasons as CNI had just left the cleared trees to rot. Mark did not know who caused this activity in 2010.

Donna Shugar asked that a tenure map be included in the final SARP and that activities conducted in 2010 be investigated and clarified.

Dave Lasser and **Mark Rogers** mentioned that this work was probably done 3-4 years earlier, not during 2010.

Brad Minnes advised that he will check the dates.

Marina Stjepovic noted that the issue of overlapping land ownership or unclear responsibility for road maintenance is identified more than once in the report, and suggested it be flagged as high priority.

Donna Shugar noted that for Site 3 there is no reference to who is responsible for dealing with the risks addressed, nor is it mentioned who is responsible to pay. Donna asked who is in charge, the SCRD or the MoF.

Monte Staats noted that it is not the TWG’s mandate to enforce remedial work. The role of the TWG is to develop management recommendations to address identified risks.

Dan Bouman asked how can you not deal with the issue of who is responsible for work already done. This is so fundamental. The SCRD has equipment that could be used, who has the money to do this? Someone has to be made responsible.

Monte Staats advised that it is not within the TWG mandate to give direction to responsible parties.

Vince Verlaan noted that we will address and identify this responsibility issue through discussion, but we must draw the line there as we cannot enforce responsibility.

Donna Shugar referenced Site 3, 3rd paragraph, last sentence in the Field Investigation Summary and requested to remove the wording “industrial use”.

The TWG recessed for lunch at 12:33pm and reconvened at 1:05pm

Ryan Elphnik left at 12:45 and **Dylan Eyers** arrived at 1 pm.

3. Discuss management recommendations to be considered in the SARP

Brad Minnes spoke in detail to the high and very high risk hazards identified in the Risk table included in the presentation. The Risk table shows the original hazards identified and the management recommendation for these hazards from the Source Assessment.

The group began discussions on the risks (high and moderate)

Risk 1 – High Precipitation and Run-Off

Donna Shugar asked what the implications are regarding high turbidity in Chapman Creek.

Bryan Shoji noted that when turbidity levels reach a certain point, the intake to the water treatment plant shuts down automatically. Bryan was not sure how long the treated water storage would last but he will find out. The creek appears to respond quickly to turbidity events but the duration would depend how severe the turbidity event is.

Dan Bouman asked about controlled land uses and suggested that the water purveyor should control land uses within the watersheds.

Brad Minnes noted that in the process of developing the SARP we are tasked as a group to identify and assess hazards. Best management practices are not related to land use.

Donna Shugar noted that we need a map of zones of prohibition etc. The SCRDP wants no industrial activity in deep slope areas, but flat areas would be considered. We should establish zones in a mapping exercise. This may not be the SARP mandate but we should at least recommend this.

Brad Minnes noted that it is reasonable to make recommendations for this.

Mark Rogers objected to the TWG discussing land use restrictions. While noting that he takes objection to the matter being discussed as this is not supposed to be the intention of the TWG.

Bryan Shoji advised that the scope of the SARP is to work within the current legislative scope, not to change legislation or provincial policies. If the TWG does not find any legislation or policies satisfactory, then a recommendation can be made, but the main focus is looking at management options. The TWG, as stakeholders, must address these risks satisfactorily.

Dave Lasser noted that a lot of activity can be done within the watershed with virtually zero risk. Forestry is not high risk in my opinion. Risk mapping would support some management responses and justify avoiding some areas altogether.

Donna Shugar noted that that type of planning can take place regardless of who has control of the watershed. Local government regulates land use through zoning on private land all the time. Zoning bylaws should be used where appropriate.

Dave Lasser noted that he would like to see the report based on good science and sound technical advice. This way the TWG can make sound decisions and focus on the technical side for the report to keep it credible.

Dan Bouman noted that the Joint Watershed Management Agreement does not prohibit activity. It provides the process of what is acceptable, i.e., the water purveyor having control shouldn't be a conflict.

Mark Rogers advised that he thinks we are going outside of our mandate by addressing this item.

Dan Bouman stated that he feels it is okay to address as it is within the SCRD mandate.

Mark Rogers asked if the Province is asking for this information.

Brad Minnes advised that it is not within the scope to say we are going to use the SARP to make changes to existing legislative policies, but we could make recommendations to ask that those things are investigated.

Bryan Shoji noted that we can address the risks if everyone here agrees. It would only be a recommendation.

Tim Adams reminded that he issued the Order for a SARP implementation because the SCRD has no control over the watershed. The purpose being that we come up with ways to protect the quality of our drinking water.

Donna Shugar remarked that this is clearly an issue for several members and asked how can we deal with the conflict? We should think of the SARP as a blueprint for use of whoever controls the watershed, to appropriately manage it. This would be set of instructions for whatever body will have control over the watershed. It would be a guideline, no matter who is in control. Perhaps this issue could be addressed as a preamble?

Dave Lasser asked **Tim Adams**, if he could clarify what legal standing the SARP has and if responsible parties would be legally bound by the SARP?

Tim Adams responded that he doesn't know how legally binding this is. If someone doesn't follow the instructions of the SARP and this affected the quality of drinking water, there could be some legal ramifications.

Dan Bouman asked if SARP is a due diligence measure. We can look at the watershed and anticipate future hazards. How we respond to emergencies is another subject we haven't touched on. The water purveyor must have control of land uses within the watersheds. No one has ever been held accountable for the damage done to date. Someone needs to have control and be made responsible.

Donna Shugar stated that the accountability issue needs to be addressed and asked if the SARP had legal standing could Tim can make Orders that follow. Would Tim have control over the watershed?

Tim Adams noted that if there is a direct link to hazards in the drinking water supply, it would have to be a very severe impact for him to issue an order. This is voluntary. Tim could act if someone is not following the SARP and places the water supply in imminent danger.

All agreed that clarification of this is required for the next TWG meeting.

The TWG agreed to move *intake shut down* to the existing measures as we already use this measure.

The group requested that a column be added to the table showing who the TWG considers to be responsible for each of the recommendations.

Brad Minnes added that maintenance and monitoring of rehabilitation and deactivation projects is a good recommendation by Triton and should remain.

Donna Shugar noted that it is assumed that best management practices are being followed but it needs to be articulated clearly as this is not always the case.

Dave Lasser noted that the Sunshine Coast Community Forests follow rules and regulations while working on crown land. Others (outside of forestry) do not have to follow the same rules.

Donna Shugar noted that in the Forest and Range Practices Act (FRPA) it states that "unless it unduly restricts the resource extraction....".

Dan Bouman added that due diligence can excuse, and makes the public responsible if the licensee follows "due diligence". Best management practices are not a very safe recourse for us.

Tim Adams clarified that the Drinking Water Protection Act trumps forestry.

Hazard 2 – Wildlife and Birds

Brad Minnes spoke to Hazard 2 - wildlife and birds. This is a high priority as fecal matter from wildlife gets into the drinking water.

Mark Rogers asked if this risk can actually be managed.

Donna Shugar noted that this isn't preventative action. We cannot stop birds from entering the watershed. Monitoring will let us know what we need to be doing in the treatment plant.

Dan Bouman noted that there are thousands of small creatures living in the watershed, all of which leave fecal matter. There has never been e-coli in the source, except with human contaminants. This is not a risk, it is a natural condition. Is the risk truly high?

Bryan Shoji clarified that Chapman water is not pristine. It has high coli forms, some e-coli and only after going through the water treatment plant is it considered safe to drink.

Tim Adams added that we have always had fecal matter and coli form in the watershed and that's why we have the water treatment plant.

The TWG recessed at 2:25pm and reconvened at 2:38pm

Hazard 3 – Future Forestry Activities

Brad Minnes spoke to Hazard 3 – Future forestry activities and noted that this was considered high in the Source Assessment and now it has been changed to moderate.

Dan Bouman noted that the FRPA speaks to water leaving the water treatment plant, not water entering the water treatment plant.

Bryan Shoji suggested that that water quality monitoring occur above and below activity in the watershed.

Donna Shugar noted that there is no Emergency Response Plan (ERP) for a major slide as result of forestry activity.

Bryan Shoji noted that this is something staff are currently working on through the water supply ERP process.

Donna Shugar added that sensitive zones in the watershed should be identified through a risk mapping process.

Dave Lasser added that whoever is working in the watershed should know where these sensitive areas are.

The TWG agreed to move *auto shutdown due to turbidity* to existing measures in the chart.

Donna Shugar stated that a proponent of any activity in the watershed should do the monitoring at their own cost.

Tim Adams agreed and noted that this is stipulated in the best management practices for Western Forests.

Dan Bouman asked who they submit their monitoring data to.

Tim Adams responded that they do not submit to anyone at this time. But they have to provide the data to the Drinking Water Officer should it be requested.

Hazard 4 – Human Access to Intakes and Assessment Areas

Monte Staats noted that in the existing measures from the Source Assessment it speaks to the storage release valve at Chapman being locked. It is not actually locked.

It was noted that there is no existing agreement with AJB and the SCRCD for access to the intake.

Mark Rogers stated that he is not against discussing this.

Tim Adams asked about adding an Access Management Plan, trail strategy and public education and/or co-management to the new recommendations for this hazard.

Donna Shugar asked if the access management plan would be for the whole watershed.

Tim Adams responded yes and that this needs to be discussed.

Donna Shugar noted that this is a huge task and very expensive.

Dylan Eyers added that the Parks Management Plan covers some of the access issues, but only for the park, not the watershed as a whole. The big challenge is snowmobile access, more so than ATV.

Marina Stjepovic left the meeting at 3:03pm

Dan Bouman asked if ATVs are a big problem and if they do not comply with regulations, are there are ATV clubs that could help make them comply.

Dylan Eyers commented that the challenge with dealing with more recreational users is that there is a risk that people will venture further into the watershed so relationships need to be built between all users.

Hazard 10 –Recreation Activities

Dylan Eyers commented that uses have been confined in the tetrahedron for a number of years and that use of the park has declined as a result. Since the barriers have been put in place, park use is expected to keep declining. In other areas of the watershed, recreational activity is much less.

It was suggested to add establishing partnerships with recreational organizations (i.e. ATV and snowmobile clubs) to the list of new Management Recommendations for this hazard.

Tim Adams asked what regulations are in place for watershed protection in parks.

Dylan Eyers responded that the Parks Act contains regulations for protecting watersheds in parks. There is also a Tetrahedron Park Management Plan that addresses water quality protection

Brad Minnes asked what the status of the Access Management Plan is and if it is in place?

Dylan Eyers responded that the plan is in place, but only in the park areas.

Hazard 17 Sechelt Landfill and Hazard 19 Transport of Contaminants

It was commented that there is a monitoring program in place at landfills for monitoring water quality every 3 months and the results must be reported to the Ministry. It was suggested that this be moved to “existing”. Also, despite the fact that the landfill face is covered every day birds are still an issue as is wind blow.

It was suggested that illegal dumping be added as a new hazard to be addressed in the SARP with a risk factor of moderate to high.

It was noted that the SCR D has an illegal dumping program where all of the known illegal dumping sites have been GPS'd and mapped and are available on the SCR D website.

Tim Adams commented that the Source Assessment rated the Sechelt Landfill as low risk and asked why this risk has been upgraded to moderate.

Brad Minnes responded that he wasn't sure and will look into it and report back.

Brad Minnes noted that another hazard that has not been considered is the transport of outhouse contents in parks and asked if this should be identified?

Tim Adams responded that it depends on the process used for removing the contents.

Dylan Eyers noted that the contents are flown out to a road and transferred to a truck.

The TWG agreed that this is a very low risk and there is no need to add this.

Some members left the meeting at 3:35pm. The following members stayed to discuss Climate Change:

Vince Verlaan, Brad Minnes, Monte Staats, Joanne Bullock, Donna Shugar, Tim Adams, Dan Bouman, Dave Lasser, and Don Dobson (via conference call).

No. 11 Climate Change

It was noted that no existing measures were identified in the Source Assessment and that this hazard has been upgraded from low to moderate.

Don Dobson explained that climate change occurs gradually over time and that it needs to be put into context of the time horizon for this plan. The demand from the community and how supply meets demand is important information. When doing flow and water quality monitoring, if we see rain events are changing, (i.e.; becoming more severe) it may result in a higher run off in streams and degradation of water quality.

Donna Shugar asked about snow melt.

Don Dobson replied that overall the amount of precipitation is the same, but it seems to be less snow and more rain. Much of our water supply comes from snow melt. The amount of area in snow will decrease and therefore the amount of available water will decrease as well.

Monte Staats commented that the SCR D used to have a snow monitoring program but it was discontinued a few years ago and suggested that recommendation be made to re-implement this program.

Don Dobson stated that he would like to see this re-implemented and noted that it doesn't have to be a big expense but could record maximum snow pack in the watershed and may require only one or two measurements per year.

Dave Lasser asked if the Tetrahedron Outdoors Club could assist to save SCR D staff time.

Tim Adams asked if we are looking at increasing water storage.

Don Dobson replied that it depends on how sensitive the supply is to the demand.

ADJOURNMENT 3:54pm