



CSAP

Contaminated Sites Approved Professionals of British Columbia

CSAP Technical PD Workshop Oct 15, 2009

Risk Assessment Session



Welcome to the Risk Assessment Session

- **Presenters:** Cindy Ott, CSAP
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Risk Assessment Session

- Screening Level Risk Assessment Application
- Screening Level Risk Assessment Review Checklist
- Hot Topics in RA



SLRA Review Checklist

- May be used by AP when reviewing reports for submission for risk based CoC based on SLRA
- May be used by PA when reviewing reports



Screening Level Risk Assessment Review

- SLRA can be reviewed by either a Standards or a Risk AP which has been prepared by a qualified professional

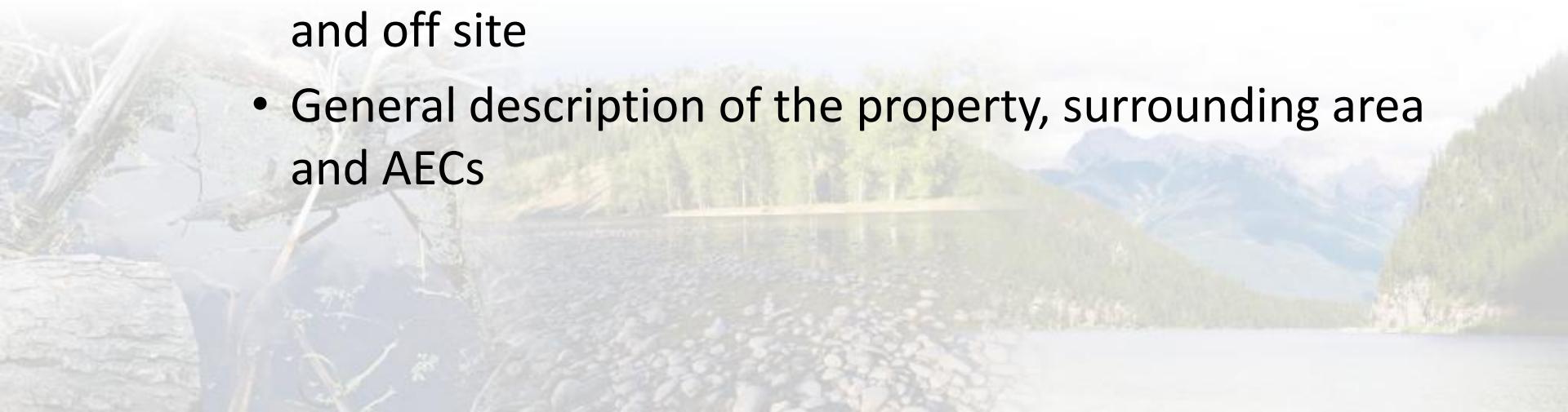


Screening Level Risk Assessment Review

- Are there any precluding conditions that would prevent the use of the SLRA? For example:
 - High risk sites
 - Agricultural sites
 - Presence of LNAPL or DNAPL
 - Deep-rooting trees or plants in area of contamination
 - Others...

Screening Level Risk Assessment Review

- Review the Problem Formulation Section of the SLRA report:
 - Summary of site conditions from PSI, DSI and remediation reports
 - Characterized site conditions
 - Identify and delineate all areas of contamination – on and off site
 - General description of the property, surrounding area and AECs



Screening Level Risk Assessment Review

- Review the Conceptual Model:
 - Illustrated in graphic form
 - Includes source and distribution of contaminants
 - Fate and transport pathways
 - Receptors



Screening Level Risk Assessment Review

- Review the potential exposure pathways via the SLRA questionnaire
- Review SLRA questionnaire with information contained in the reports
 - Tables – use of correct standards
 - Figures
 - Water use
 - Location of contamination
 - Groundwater flow conditions

Screening Level Risk Assessment Review

- If model used review model inputs and check that the appropriate inputs were selected
- Check that the maximum groundwater concentration of the measured versus the calculated was used for the assessment
- Check calculations



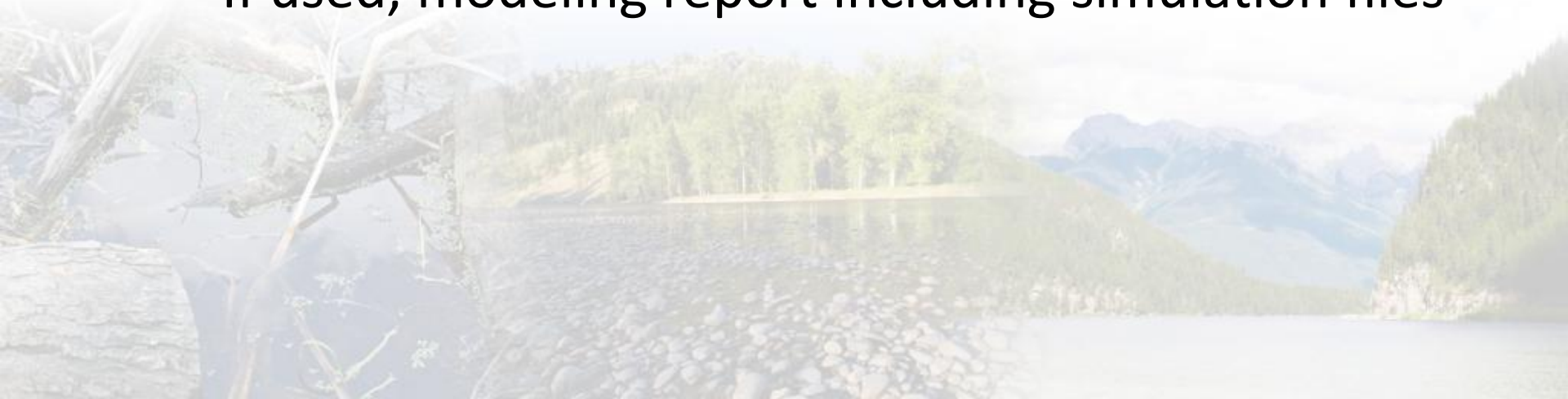
Screening Level Risk Assessment Review

- Appendix B review:
 - Are the recommended receptors selected based on the current site use
 - Were they observed on the site
 - Did a RPBio completed the Habitat Suitability forms for each receptor



Screening Level Risk Assessment Review

- Review the SLRA report for all required information
 - Summary of site conditions
 - Conceptual model for site
 - SLRA questionnaire and supporting documents
 - If used, modeling report including simulation files



Screening Level Risk Assessment Review

- Review the SLRA report for all required information
 - Specification of any eligible beneficial uses and precluding conditions
 - Clearly specifying COC
 - Clearly specifying risk management measures, if necessary
 - Conclusion regarding whether contamination at a site poses acceptable or unacceptable risk

Screening Level Risk Assessment Review

- Review the determination of risk by checking the questionnaire for sites with all “yes” responses within a given exposure scenario



Screening Level Risk Assessment Review

- Review that there is a written signed statement from report author(s) that:
 - SLRA complete in accordance to protocol
 - They have demonstrable experience in remediation and familiar with the remediation carried out at the site



Screening Level Risk Assessment Review

- For a CoC submission, don't forget to review all the other documents:
 - Summary of Site Conditions
 - Application form
 - Draft CoC and Draft letter

