

Copplestone et. al. Considerations for the integration of human and wildlife radiological assessments JRP

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A number of tools and approaches have been developed recently to allow assessments of the environmental impact of radiation on wildlife to be undertaken. The International Commission on Radiological Protection (ICRP) has stated an intention to provide a more inclusive protection framework for humans and the environment. Using scenarios, which are loosely based on real or predicted discharge data, we investigate how radiological assessments of humans and wildlife can be integrated with special consideration given to the recent outputs of the ICRP. We highlight how assumptions about the location of the exposed population of humans and wildlife, and the selection of appropriate benchmarks for determining potential risks can influence the outcome of the assessments. A number of issues associated with the transfer component and numeric benchmarks were identified, which need to be addressed in order to fully integrate the assessment approaches. A particular issue was the lack of comparable benchmark values for humans and wildlife. In part this may be addressed via the ICRP's recommended derived consideration reference levels for their 12 Reference Animals and Plants.

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