
Subject: ECORISK Methods Rev 5
Attachments: SLERA Rev 5 Comment Response.pdf

From: Rich, Kent
Sent: Monday, March 05, 2018 2:50 PM
To: Murphy, Robert, NMENV <Robert.Murphy@state.nm.us>
Cc: Rodriguez, Cheryl L <cheryl.rodriguez@em.doe.gov>; Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Arturo Duran <arturo.duran@em.doe.gov>; English, Joe <cenglish@lanl.gov>; Ellers, Kate <kellers@lanl.gov>
Subject: RE: ECORISK Methods Rev 5

Hi Robert,

Please find attached the response to NMEDs draft comments on the Screening-Level Ecological Risk Assessment Methods, Revision 5, dated January 19, 2018. If the proposed changes are acceptable, DOE-EM/LANL will proceed with the preparation and submittal of Revision 5.1.

Thank you,
Kent

Kent C. Rich
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From: Murphy, Robert, NMENV [<mailto:Robert.Murphy@state.nm.us>]
Sent: Friday, January 19, 2018 12:22 PM
To: Rich, Kent <krich@lanl.gov>
Cc: Rodriguez, Cheryl L <cheryl.rodriguez@em.doe.gov>; Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>
Subject: ECORISK Methods Rev 5

Kent,

Attached are NMED's draft comments on *Screening-Level Ecological Risk Assessment Methods, Revision 5*.

Robert Murphy
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Response to Draft New Mexico Environment Department Technical Review Comments on the Screening-Level Ecological Risk Assessment Methods, Revision 5, Dated January 19, 2018

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment.

GENERAL COMMENTS

NMED Comment

1. **Figure 2.1-1, Laboratory TAs in Relation to Surrounding Landholdings, p.3:** *A redrawn Figure 2.1-1 has been included in the Screening-Level Ecological Risk Assessment Methods, Revision 5, Los Alamos National Laboratory, LA-UR-17-28553 dated September 2017 (Eco Risk Methods Rev. 5). The information depicted on the new version of Figure 2.1-1 generally reflects that provided in previous versions of the figure. However, Technical Area (TA) 74 is depicted differently (it appears smaller and fragmented from TA-72 and TA-73). The text of Eco Risk Methods Rev. 5 offers no explanation for the change. An explanation for revising the depiction of TA-74 in Figure 2.1-1 should be added to Eco Risk Methods Rev.5.*

LANL Response

1. Figure 2.1-1 in Revision 5 reflects changes to the boundary of TA-74 that have occurred as a result of land transfer. The following sentences will be added to the end of the last paragraph of page 2:

Land no longer needed to support programmatic activities may be transferred to Los Alamos County or other government agencies. The TA boundaries shown in Figure 2.1-1 reflect current land transfer status.

NMED Comment

2. **Table 3.3-1, Measures Required for the Wildlife Exposure Model, p. 30:** *Table 3.3-1 lists a body weight of 0.56 kilograms (kg) for the mountain cottontail. The value is based on the minimum value reported in Reproduction in the Audubon Cottontail in Arizona, a 1957 paper by L.K. Sowls. While the use of the mountain cottontail as an ecological receptor is appropriate for LANL, it is unclear why the information in the Sowls paper was used to estimate a body weight for the receptor. Because the mountain cottontail is not designated a "default" ecological receptors in the NMED RAG, Eco Risk Methods Rev. 5 should be revised to include a brief discussion that justifies the use of the Sowls paper as the preferred source for information regarding body weight. In addition, the discussion should describe how the value listed in Table 3.3-1 was derived from the data presented in the Sowls paper.*

LANL Response

2. As noted in the cover letter for the Screening-Level Ecological Risk Assessment Methods (SLERA), Revision 5, one of the changes to the report was the replacement of the desert cottontail with the mountain cottontail. The reason for this change was an update to our species list by a LANL biologist. LANL reviewed the information available for these species in the Wildlife Exposure Factors Handbook (EPA/600/R-93/187a) and noted that body weights for the mountain cottontail (0.7 to 1.3 kg, EPA

1993, p. 353) were slightly larger than for the desert cottontail (0.6 to 1.2 kg, EPA 1993, p. 353). Because a lower body weight leads to a slightly larger body weight–adjusted food intake rate, it was decided to continue to use the desert cottontail body weight as a slightly protective representative of mammalian herbivores for the LANL food web. Thus the desert cottontail body weight reported by Sowls (1957, 602507) was used for the mountain cottontail. LANL also notes both species are in the genus *Sylvilagus*, so are ecologically similar. The corresponding note in Table 3.1-1 will be revised as follows:

^dDesert cottontail yield a slightly larger, more protective, body weight–adjusted food intake rate and was used as a surrogate for the mountain cottontail.

NMED Comment

3. **Section 3.4.4, Water ESLs, p. 41:** *Item number 2 at the bottom of page 41 includes a hyperlink that is intended to take the reader of Eco Risk Methods Rev.5 to EPA’s Ambient Water Quality Criteria. The EPA web site has been updated and this link now takes readers to a web page entitled Water Topics. Additional searching is required to reach the EPA ambient water quality criteria document referenced in previous versions of ecological risk methods document. The link should be revised to take the reader directly to the document referenced in item number 2.*

LANL Response

3. The link on page 41 will be replaced with the following:

<https://www.epa.gov/wqc/national-recommended-water-quality-criteria-aquatic-life-criteria-table>

NMED Comment

4. **Section 4.1, Scoping Evaluation, p.48:** *The third paragraph of Section 4.1 includes a hyperlink intended to take the reader of Eco Risk Methods Rev. 5 to EPA’s web page for ProUCL software. The EPA web site has been updated and this link now takes readers to a page that provides information of EPA’s Office of Science Policy. Additional searching is required to reach EPA’s web site for ProUCL. The link should be revised to directly reference EPA’s ProUCL web page (<https://www.epa.gov/land-research/proucl-software>).*

LANL Response

4. The link on page 48 will be replaced with the following:

<https://www.epa.gov/land-research/proucl-software>

NMED Comment

5. **Section 4.2, Screening Evaluation, p.53:** *The fourth paragraph on page 53 references ECORISK Database Release 4.0 dated October 2016 (LANL 2016, 601838, or latest version). Once ECORISK Database Release 4.1 dated September 2017 becomes available, this reference citation and the listing in Section 5.0, References, for the ECORISK database should be updated accordingly.*

LANL Response

5. Release 4.1 is now available. The reference citation in the fourth paragraph on page 53 will be revised to (LANL 2017, 602538, or latest version). The reference in Section 5.0 will be revised to the following:

LANL (Los Alamos National Laboratory), October 2017. "ECORISK Database (Release 4.1)," on CD, LA-UR-17-26376, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2017, 602538)

NMED Comment

6. **Section 4.2, Screening Evaluation, p.53:** *The fourth paragraph on page 53 provides a hyperlink to the most recent version of LANL's ECORISK Database. Throughout the technical review period, this link referred to a Service Unavailable page on LANL's web site. As part of the final revisions to Eco Risk Methods Rev. 5, ensure this hyperlink takes readers to ECORISK Database Release 4.1 dated September 2017.*

LANL Response

6. The link in the fourth paragraph on page 53 will be revised to the following:

<http://www.lanl.gov/environment/protection/eco-risk-assessment.php>

NMED Comment

7. **Section 4.3.4, L-ESL Analysis, p. 59:** *The first paragraph of Section 4.3.4 references ECORISK Database Release 4.0 dated October 2016 (LANL 2016, 601838, or latest version). Once ECORISK Database Release 4.1 dated September 2017 becomes available, this reference citation and the listing in Section 5.0, References, for the ECORISK database should be updated accordingly.*

LANL Response

7. Release 4.1 is now available. The reference citation in the fifth paragraph on page 59 will be revised to (LANL 2017, 602538, or latest version). The reference in Section 5.0 will be revised to the following:

LANL (Los Alamos National Laboratory), October 2017. "ECORISK Database (Release 4.1)," on CD, LA-UR-17-26376, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2017, 602538)

REFERENCES

EPA (U.S. Environmental Protection Agency), December 1993. "Wildlife Exposure Factors Handbook," Vol. I of II, EPA/600/R-93/187a, Office of Research and Development, Washington, D.C. (EPA 1993, 059384)

LANL (Los Alamos National Laboratory), October 2017. "ECORISK Database (Release 4.1)," on CD, LA-UR-17-26376, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2017, 602538)

Sowls, L.K., May 1957. "Reproduction in the Audubon Cottontail in Arizona," *Journal of Mammalogy*, Vol. 38, No. 2, pp. 234-243. (Sowls 1957, 602507)