Risk Assessment Options for the FIFRA/ESA Interim Approach and Beyond

Bernalyn McGaughey
REASON AND RESPONSIBILITY: WHAT IS ENDANGERED SPECIES “RISK?”

What defines it?

Who defines it?

What constitutes risk reduction?
Value conflict is accompanied by disputes over means and methods. Whose scientific data are more “correct?” Which analytical techniques do we accept as valid? Who decides? Values intrude mightily into every facet of science and technology.

Pesticides and Politics, C. J. Bosso
Weed control for fire suppression, Okanogan County

Table 1. Total Acres Burned by Land Ownership

<table>
<thead>
<tr>
<th>Agency</th>
<th>Sum of Acres</th>
<th>Sum of Acres by Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEDERAL</td>
<td>61,986</td>
<td>13%</td>
</tr>
<tr>
<td>PRIVATE</td>
<td>135,911</td>
<td>29%</td>
</tr>
<tr>
<td>STATE</td>
<td>72,410</td>
<td>16%</td>
</tr>
<tr>
<td>TRIBAL</td>
<td>195,573</td>
<td>42%</td>
</tr>
</tbody>
</table>
Mathematically, it is often not possible to understand what may occur on average without understanding what the possibilities are and how probable they are. NRC, 2009
A Functioning FIFRA/ESA Consultation Process

• Recognizes regulatory drivers and resource limitations
• Defines the issues clearly, applying studied judgment to which risk assessment processes project an outcome that can reasonably be expected to occur
• Considers all of the applied technologies that are necessary to inform pesticide risk assessment

Are We There Yet?
Proposed Resort Development

First ESA Process: Action Agency Determines if their action may affect listed species

Second ESA Process: Action Agency and policy partners determine the likelihood of an effect

Third ESA Process: Services determines if there is jeopardy
The NAS Panel used the three phases of the ESA process as a crucible for policy flow – are we instead looking at the “steps” as methods, or – more likely the panel’s intent – are we defining methods to achieve an efficient and smooth flow through the ESA phases?

The Panel Report is not a policy paper nor is it a regulatory guidance document
How Do **You** Handle Risk?

The weatherman just told me that there will be a 0.0000002% chance of rain today.

I am not going to carry an umbrella!

Yet numbers like this are moving “no effect” to “may effect”
How Do You Handle “Myths?”

My mother always told me that
if the flies are biting it’s going to rain

I carry an umbrella because I’ve considered this in context

Are the impacts of pesticides being evaluated in context of “other things” -
- or is there a stigma carried over that is not related to actual “risk?”
For Example

California Highway modification project affecting 0.51 acres

**Species affected:**  
Alameda whipsnake  
California tiger salamander  
San Joaquin kit fox

**Expected impact:**  
Take in the form of kill  
Habitat disturbance on 0.51 acres  
Permanent loss of 0.29 acres

**Finding:** No significant impact
Some things to think about
Have We Sorted Out the Historical Record, and Addressed What it Means to Us?

The policy of using an RQ has no scientific basis.

EPA-OPP regulation set in 1975 emerged from examination of risk assessment theory that settled on use of the “quotient” method.

In 1980, the use of the quotient method and an endangered species risk quotient was formalized in an interagency agreement between OES (now FWS), NMFS and OPP.
Have We Sorted Out the Historical Record, and Addressed What it Means to Us? (2)

EPA has never completed pesticide consultation

By the end of 1983, EPA and the Services completed 209 use site/active ingredient consultations

These resulted in a suite of approximately 100 mitigation methods selectively applied to pesticide use through county bulletins
So What Happened?

We have had three periods of development that I’d like to look at humorously – but in a way that gives foundation to reflective thought and open discussion in the sessions to come.
What started in the late 70’s as an ESA-directed procedure of pesticide consultation was slow and burdensome, and after time did not produce “new” mitigation strategies. Gradually, the process slipped into EPA’s independent application of existing and previously agreed mitigations to new registration actions.

Regardless of the science behind species protection actions by EPA, absence of consultation process triggered litigation and the period of slumber was over.

OK! We’re all awake now!
Cinderella – or – In Comes the Panel Report

We’ve changed our appearance and come to the dance.

We are all trying to make that glass slipper fit without breaking it – or hurting ourselves.

OK! We’re all really trying!
The Emperor's New Clothes - or - The Docket is Open

The Emperor had everything anyone could ask for, but seemed to have a little trouble putting it all together.

Have we yet to put together the proper wardrobe?
Thank you for this opportunity to share my thoughts and opinions

Bernalyn D. McGaughey
President/CEO, Compliance Services International
Project Manager, FIFRA Endangered Species Task Force

7501 Bridgeport Way West – Lakewood, WA 98499
253-473-9007 – BMcGaughey@ComplianceServices.com