ROADMAP TO RECOVERY

The value of the Ecological Recovery Option (ERO) in higher tier aquatic studies

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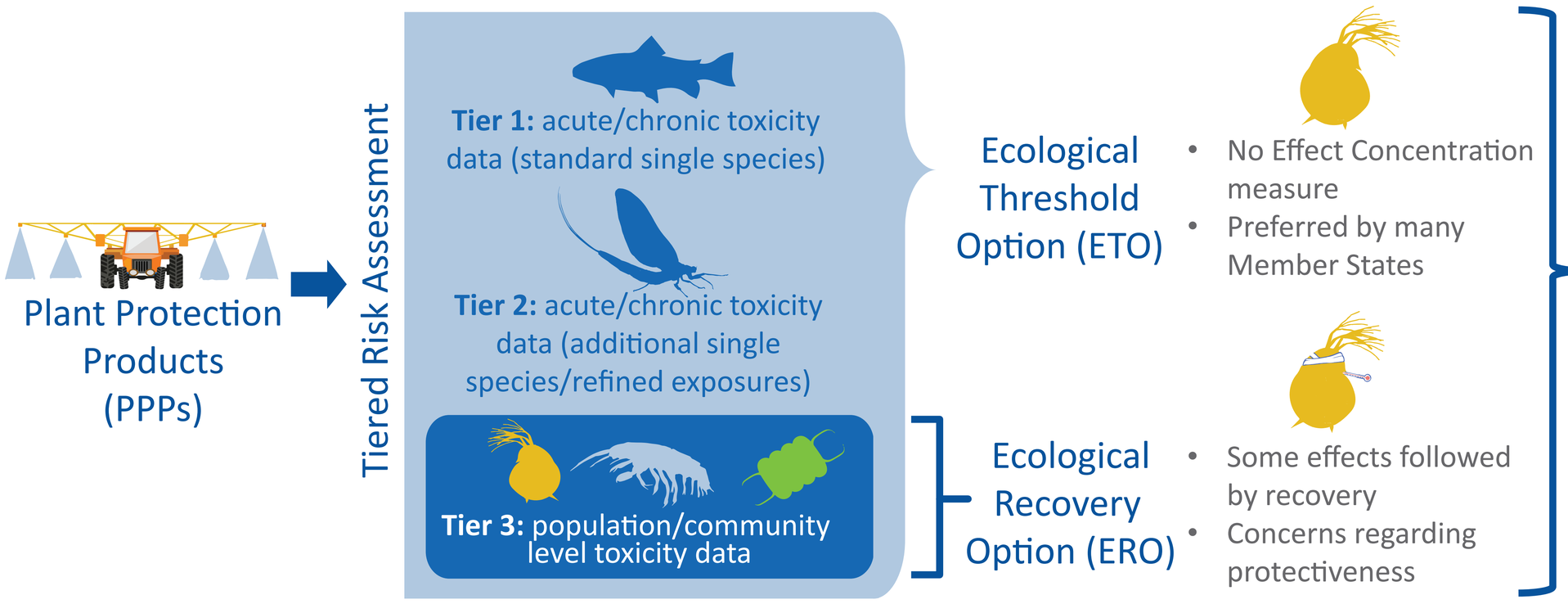
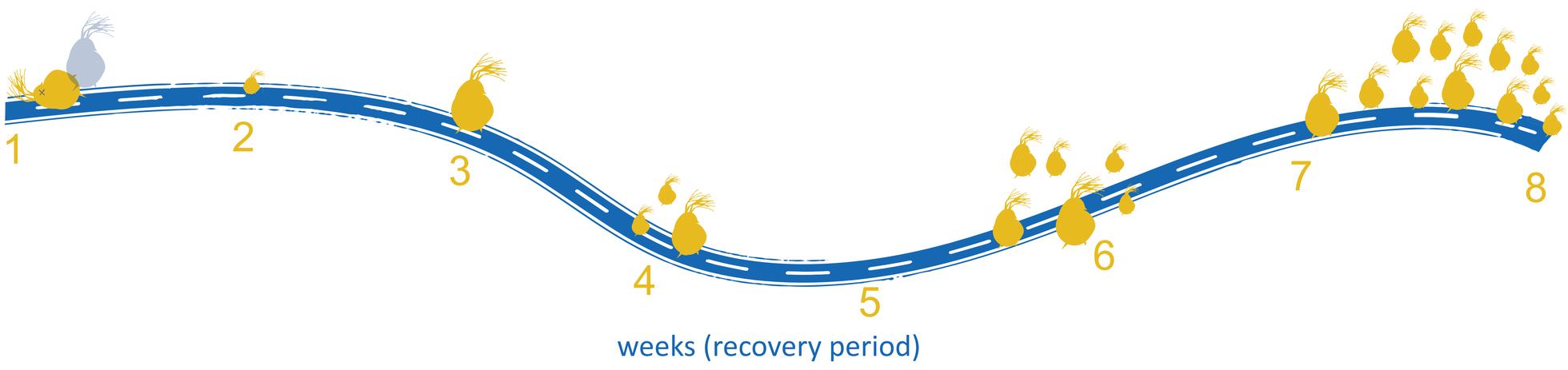
Derivation of Regulatory Acceptable Concentrations



What is the purpose of the ERO-RAC?

Allows for **some population level effects** to occur as long as **reasonable recovery is demonstrated** within an **accepted time period:** EFSA guidelines [1] propose the recovery period to be **8 weeks** and that it is feasible to determine an ERO-RAC where 'all relevant processes that determine population viability and the propagation of effects to the community, ecosystem and landscape level' have been considered.

The **ERO-RAC endpoint** is often higher than the ETO-RAC: reduces the need for risk mitigation/further refinement and increases the likelihood of product authorisation



What are the concerns surrounding the use of the ERO-RAC?

The **arbitrary** nature of the 8 week **recovery period**, lack of consideration given to the **species affected.**

The **potential for multiple exposures** (e.g. drain flow events, other products within the same catchment) **and/or other stressors** (e.g. climate, physical disturbance) during the 8 week period that could affect the ability of aquatic organisms to recover.

Improving confidence in the ERO-RAC

Relevance of the recovery period

- Can rapid/short-term recovery be demonstrated, thus reducing the likelihood of multiple stressors?
- What life-stages are affected: timing of PPP application?
- What type of recovery is required: intrinsic or extrinsic?

Tailored experimental design

- Well defined pretreatment phase to establish baseline
- Increased replication
  Frequent sampling to capture and assess rapid recovery
- Multiple samplings within the first week of test item application(s)

Landscape scale analysis

- Type and proximity of agricultural practices: crops grown, what PPPs are used and when?
- The potential for recolonization of affected water bodies

WOULD YOU LIKE TO JOIN A DISCUSSION GROUP ON THIS TOPIC?

JOIN US AT BOOTH 39 AT 6PM TUESDAY 28TH MAY

References:
1 EFSA PPR Panel (EFSA Panel on Plant Protection Products and their Residues) (2013). Scientific Opinion - Guidance on tiered risk assessment for plant protection products for aquatic organisms in edge-of-field surface waters. EFSA Journal 2013; 11(7): 3290.