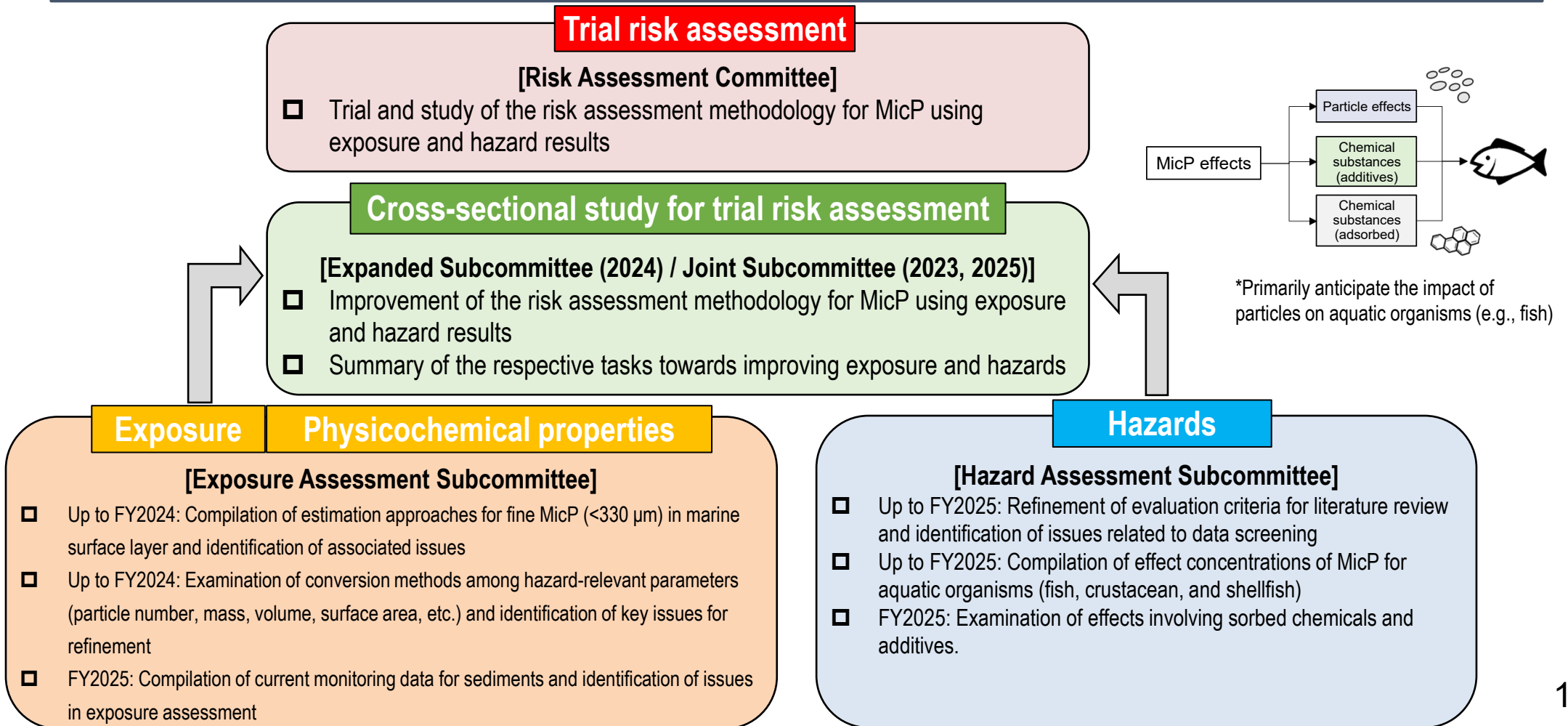


Project Overview

- Background: There is concern about the impact of microplastics (MicP) on organisms and ecosystems. There is a need for quantitative data that sheds light on hazards and risk as much as possible.
- Objective: After collecting scientific knowledge on the MicP exposure and environmental fate, hazards to aquatic organisms, among others, the project aims to establish a preliminary risk assessment method to quantitatively assess the impact on organisms and ecosystems and thereby estimate the risk so as to inform government decision-making in the future. (Although there are concerns regarding the impact of MicP particles and chemicals on organisms and ecosystems, this study focused on the effects of particles on aquatic organisms.*



■ Exposure Assessment

In the exposure assessment for FY2025, information on the occurrence, behavior, and estimation of microplastics (MicP) in sediments was compiled.

In addition, current challenges in the exposure assessment for sediments and knowledge gap was considered (see “6. Exposure Assessment (Sediment)”). The slides in 3. Exposure Assessment (Marine Surface Layer) are the same as those published for FY 2024

■ Hazard Assessment

Regarding particle effects on aquatic organisms, the evaluation of data through literature review of toxicity test data was continued from FY 2024, and the provisional compilation of toxicity test data was updated (see “4. Hazard Assessment (Particle Effects of Microplastics)”).

At the same time, with respect to effects involving plastics associated chemicals (sorbed chemicals and additives) on aquatic organisms, three relevant review articles were examined to find out the latest assessment and knowledge gap to be explored in the future (see “7. Hazard Assessment (Including Effects of Sorbed Chemicals and Additives)”).