

Element	eFEP 'Worked example'	Prototype MSE	'Full' MSE
Problem Framing	Didn't occur	Stakeholders define set of questions/problems that a FEP could help with, that allow for exploration of technical MP settings/decision points	Facilitated engagement with stakeholders and decision-makers to identify the concerns and the scope of decisions to be made that the MSE analysis will help address
Management Objectives	PDT members decided on a few for illustrative purposes	Stakeholders help define set of objectives, that reflect Council priorities and NS guidelines	Facilitated engagement with stakeholders determines full set of objectives
Performance Measures	Simulation output summarized by PDT but specific performance measures not identified and computed	beta-MSE analysts propose set of metrics that speak to objectives defined, iterated with stakeholders.	Metrics proposed by stakeholders based on discussions with MSE analysts, iterated with stakeholders & modelers given resources available.
Identification of OM needs	Used models that were available / being developed	Use existing OM (e.g. Hydra / Kraken) but stakeholders id core set of scenarios, discussion with analysts on feasible changes	Synthesis based on problem framing, performance measures, and candidate management strategies identified through stakeholder engagement. Review
Develop and demo OMs	PDT members & Center scientists driven.	Small set OM scenarios arise from Scoping conversation with stakeholders, likely 1 model type.	Multiple OMs & scenario characteristics considered based on scoping with stakeholders
Selecting candidate management strategies (this could be unpacked A LOT)	Picked to illustrate aspects of eFEP. Decision points outlined several possibilities but most often a single approach or value was chosen for illustration.	Developed with stakeholders focusing on decision points within the FEP framework. Triage on number of trial values for each decision point in conjunction with analysts and stakeholders. A focus on how the decisions about reference points, floors, and ceilings are made. Err on using simpler models for the assessment methods (e.g. production models). Make simplifying assumptions to	Management strategies developed with stakeholders, given guiding principles of eFEP, but holding doors open for considering other approaches. Consider multiple options/methods for different decision points. Triage number of trial values for various pieces. Consider existing risk policies as part of base-case strategies. Potentially use more complicated estimation model as the
Visualization and communication of results	Presentations by PDT members in reports, shiny apps, etc.	Discussion with stakeholders about preferred visualization tools. Iterative work through with stakeholders via working papers, presentations, and interactive	Use defined set of visualizations from best practice & beta MSE. Iterative work through with stakeholders via working papers, presentations, interactive apps,
Decision support	None	Discussion with stakeholders and analysts on tradeoffs and relative performance with respect to objectives. Some elimination of options based on implications for feasibility. Encourage outcome-based decisions rather than experimntal structure.	Formal comparison of performance of options with respect to pre-defined measures of performance. Encourage evaluation based on outcomes, and try to avoid culling of options to make decisions seem simpler based on structure to experimental design. Eliminate options based on implications for feasibility. Engagement about