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2021 WILDFIRE MITIGATION PLAN UPDATE



Risk Assessment and Mapping & Resource Allocation Methodology Panel

2021 WMP Update Technical Workshop

February 22, 2021



Agenda



Topics

Evolution of Wildfire and PSPS Risk Modeling at SCE
Robert LeMoine, *Director, Enterprise Risk Management (ERM)*

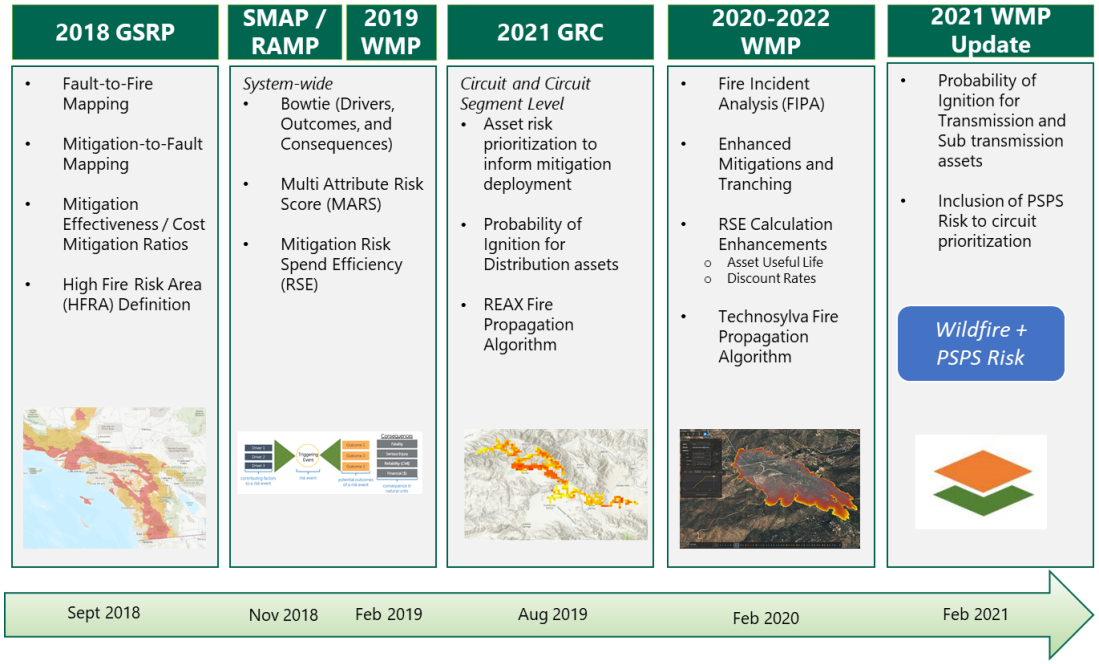
Wildfire Risk Reduction Modeling (WRRM) Framework & Future Improvements
Joe Goizueta, *Director, Advanced Analytics and Process Improvement (AAPI)*

Evolution of Wildfire and PSPS Risk Modeling at SCE

SCE continues to evolve its wildfire and PSPS risk modeling capabilities

In 2020, SCE achieved several key milestones in enhancing our wildfire risk modeling capabilities, including:

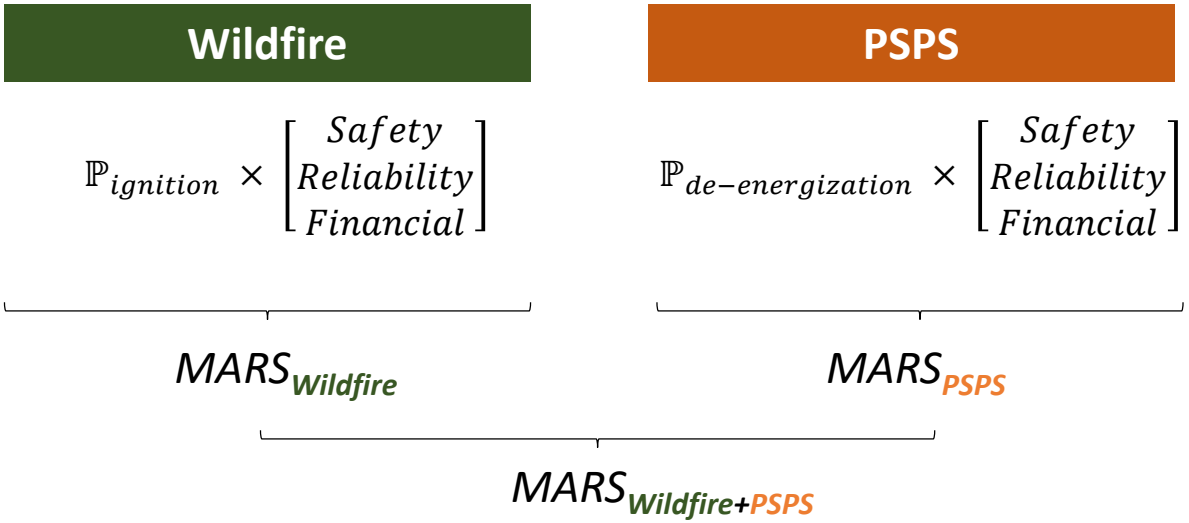
- Asset specific probability of ignition (POI) models
- A new consequence modeling tool developed by Technosylva, with advanced fire propagation modeling algorithms, and improved granularity of inputs and outputs
- An approach to estimating PSPS risk, as well as comparing it to wildfire risk



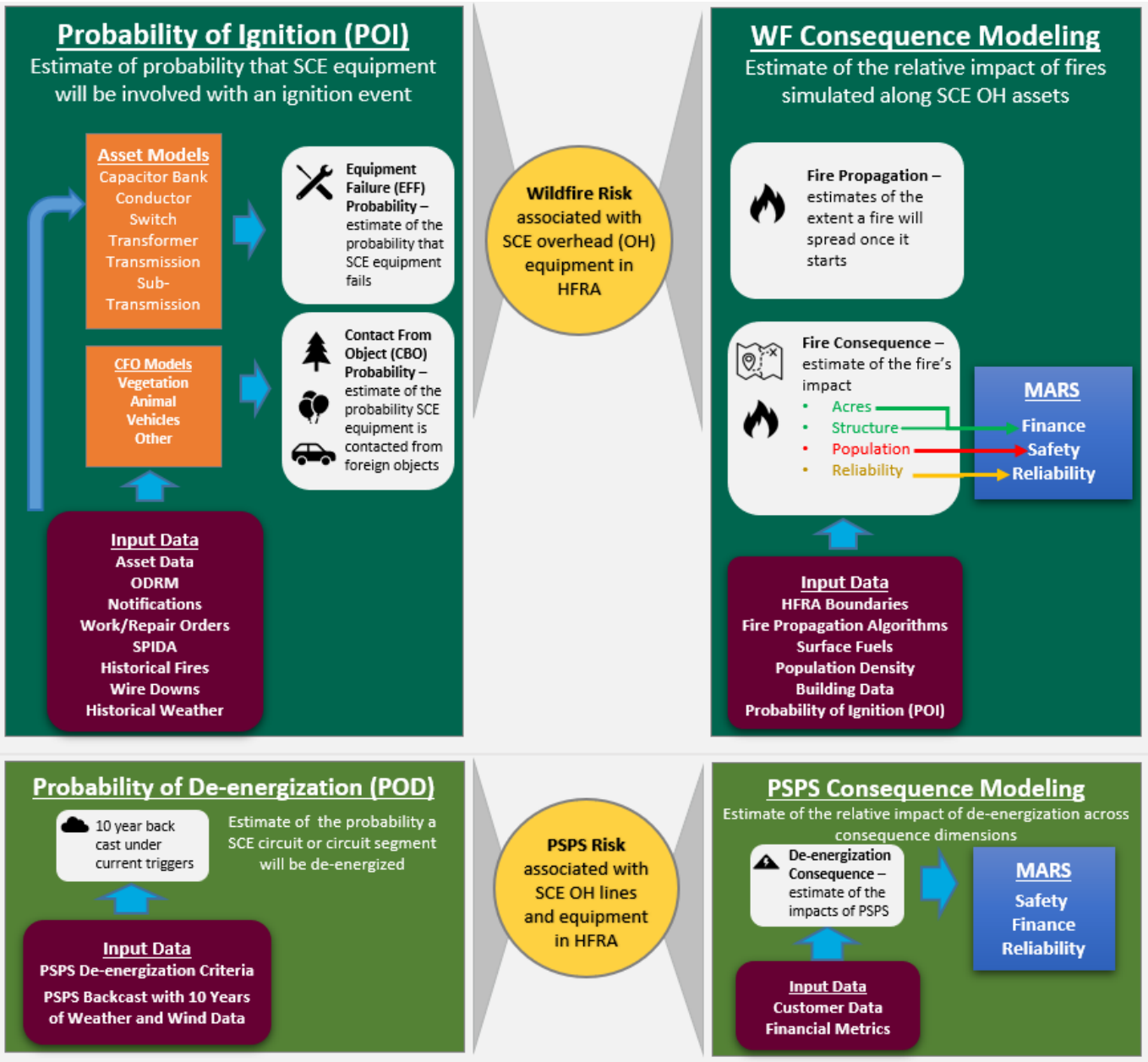
MAVF and MARS 2.0

SCE can quantify Wildfire and PSPS risk together or independently

- The CPUC Safety Model Assessment Proceeding (S-MAP) provided guidelines for developing SCE's Multi-Attribute Value Function (MAVF)
- MARS 2.0 is the output of this risk framework – converting WRRM consequences in natural units to a unitless risk score
- Mitigation benefits can be quantified either by using each risk independently or the combination of both, as in the case of covered conductor

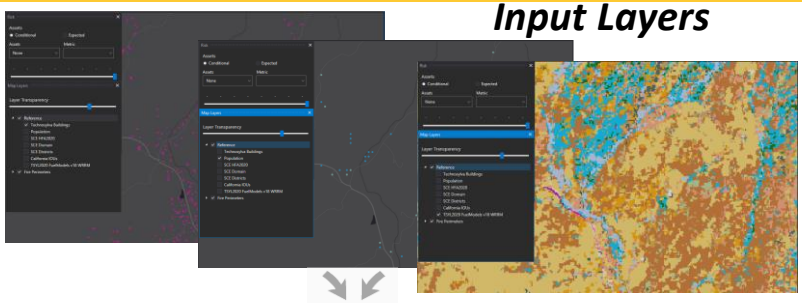


Wildfire Risk Reduction Modeling (WRRM) Framework

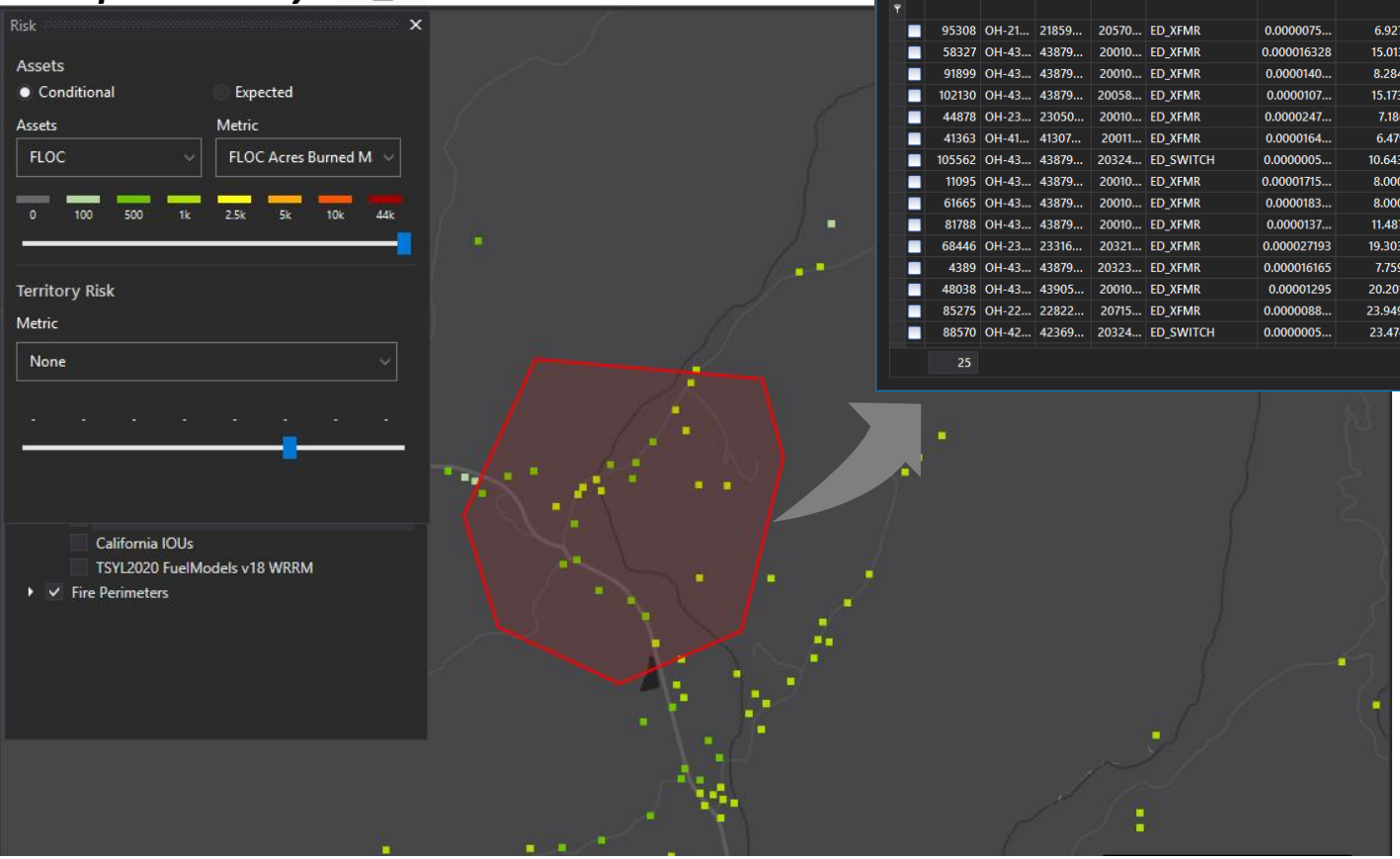


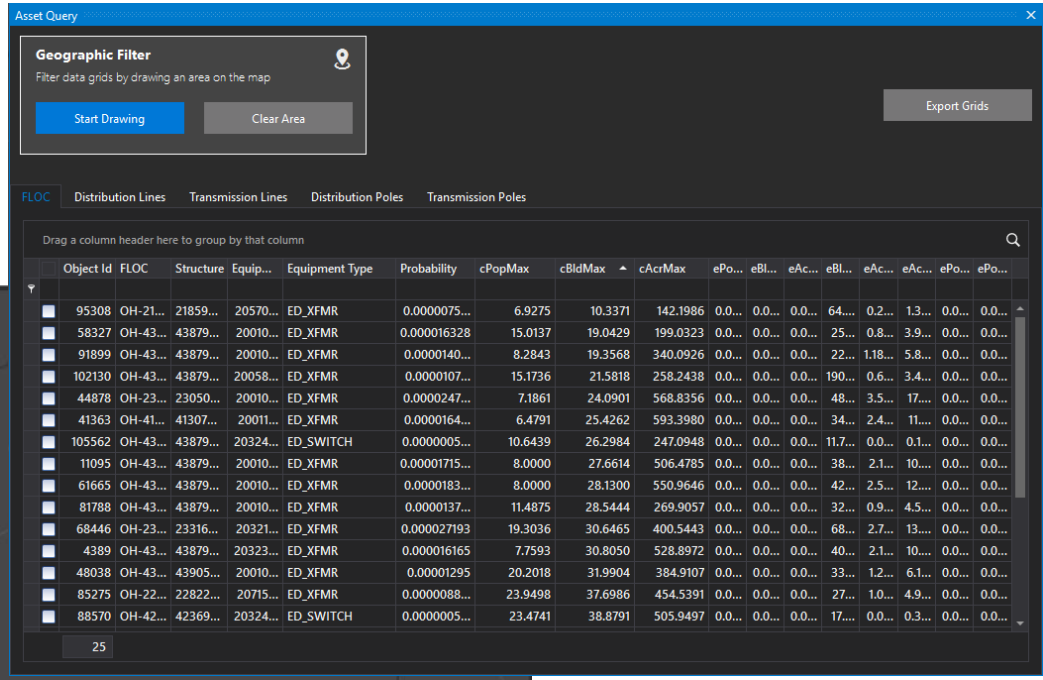
WRRM User Interface

Input Layers



Geospatial Analysis





Asset Level Information

Future Improvements to the WRRM

SCE continues to develop its risk modeling capabilities to further inform deployment of mitigations

Prioritization of Mitigations

- Reevaluating need and prioritization criteria for one mitigation activity once another mitigation has been implemented
  - Need for expanded trims once covered conductor has been installed
  - Changes to PSPS de-energization thresholds as more system hardening is completed
  - Sequential evaluation of mitigation deployment provides optimization across multiple mitigations

Tree Removal Example

- Determining risk of each hazard tree in SCE's territory then prioritizing larger areas (i.e., region/district) with highest hazard tree risk on average
  - Approach beneficial from a pace of risk-reduction and execution efficiency perspective
  - Removing "riskiest" tree from one region and traveling to another region to remove "riskiest" tree sharply decreases pace of risk reduction and increases cost due to time elapsed between tree removals



Thank You