

# Enhanced Vegetation Management

CALIFORNIA PUBLIC UTILITIES COMMISSION  
ENHANCED OVERSIGHT AND ENFORCEMENT PROCESS

PUBLIC WORKSHOP

June 23, 2021

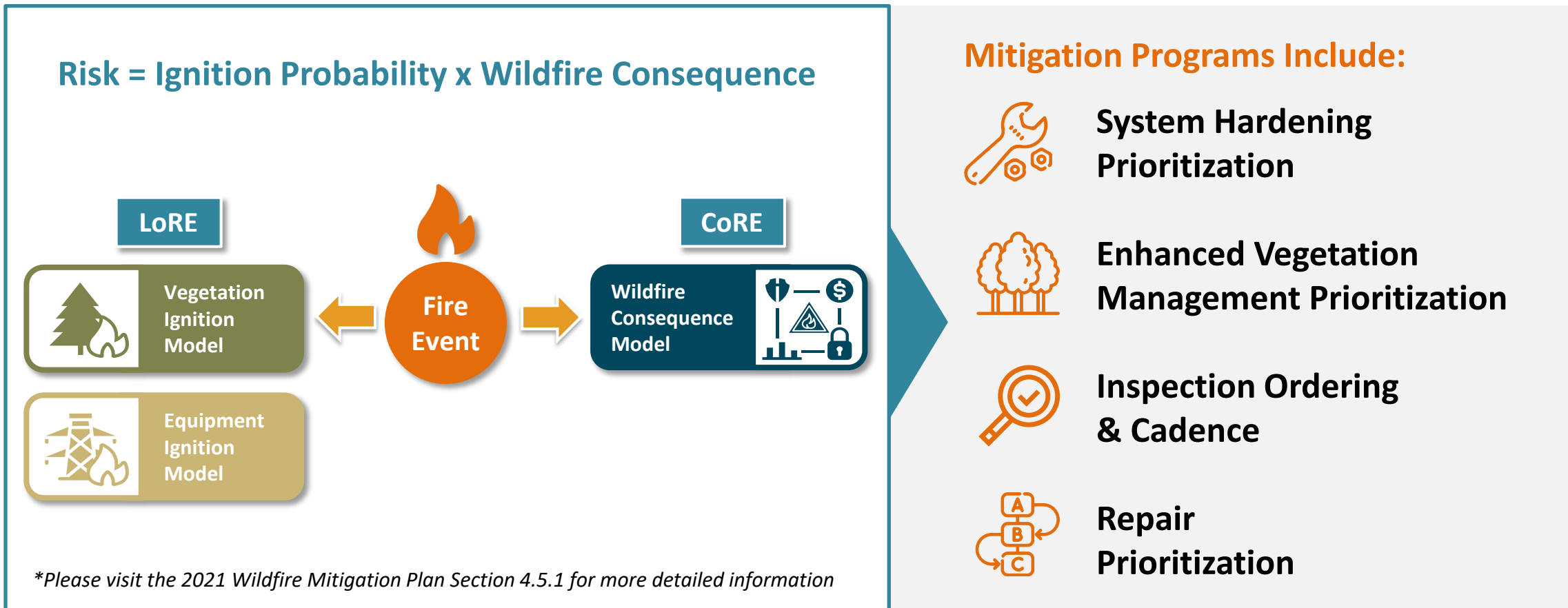


# PG&E'S Approach to Risk Modeling (Elements 2, 5 and 6)

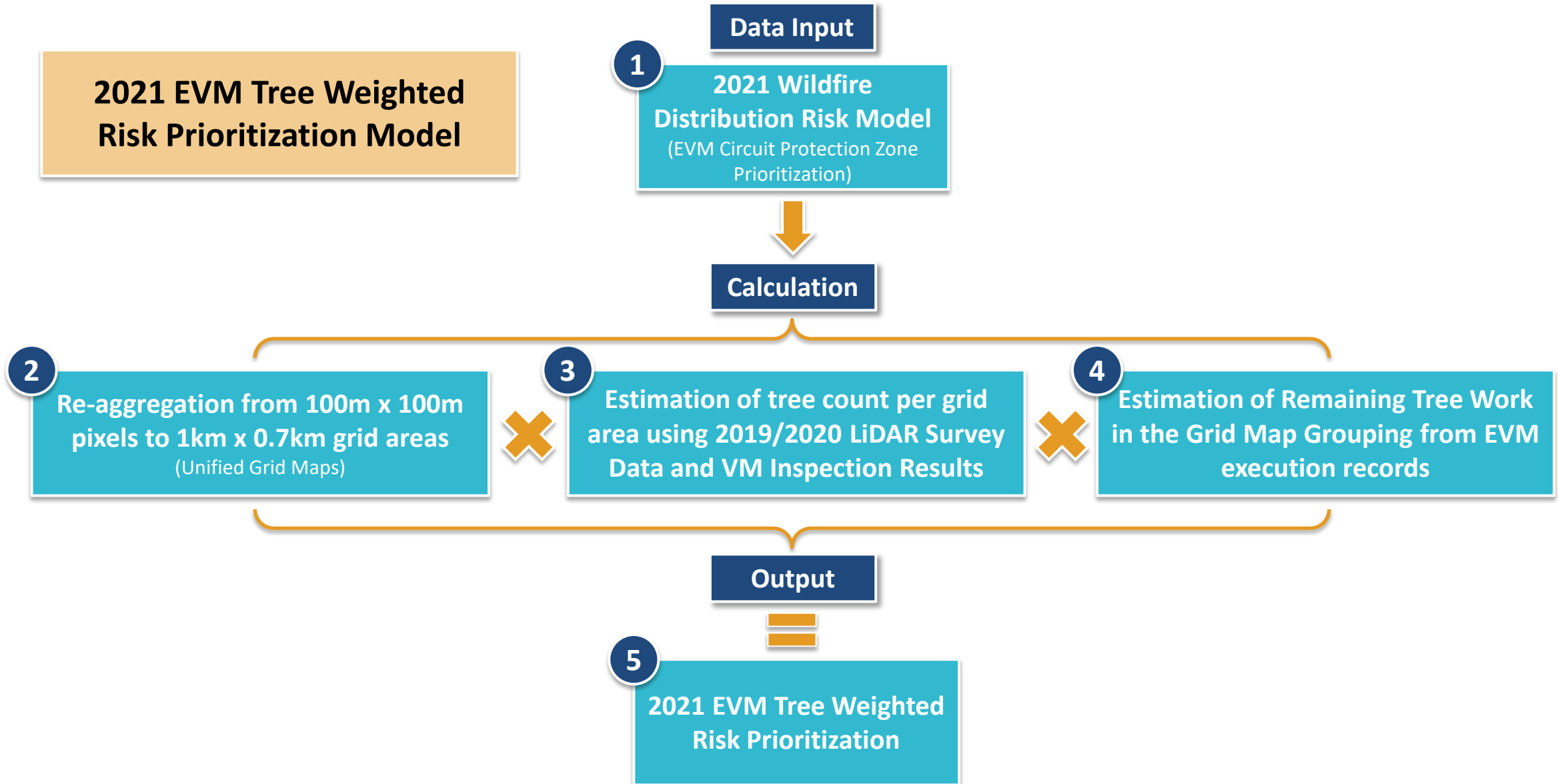


# 2021 Wildfire Risk Model (Element 2)

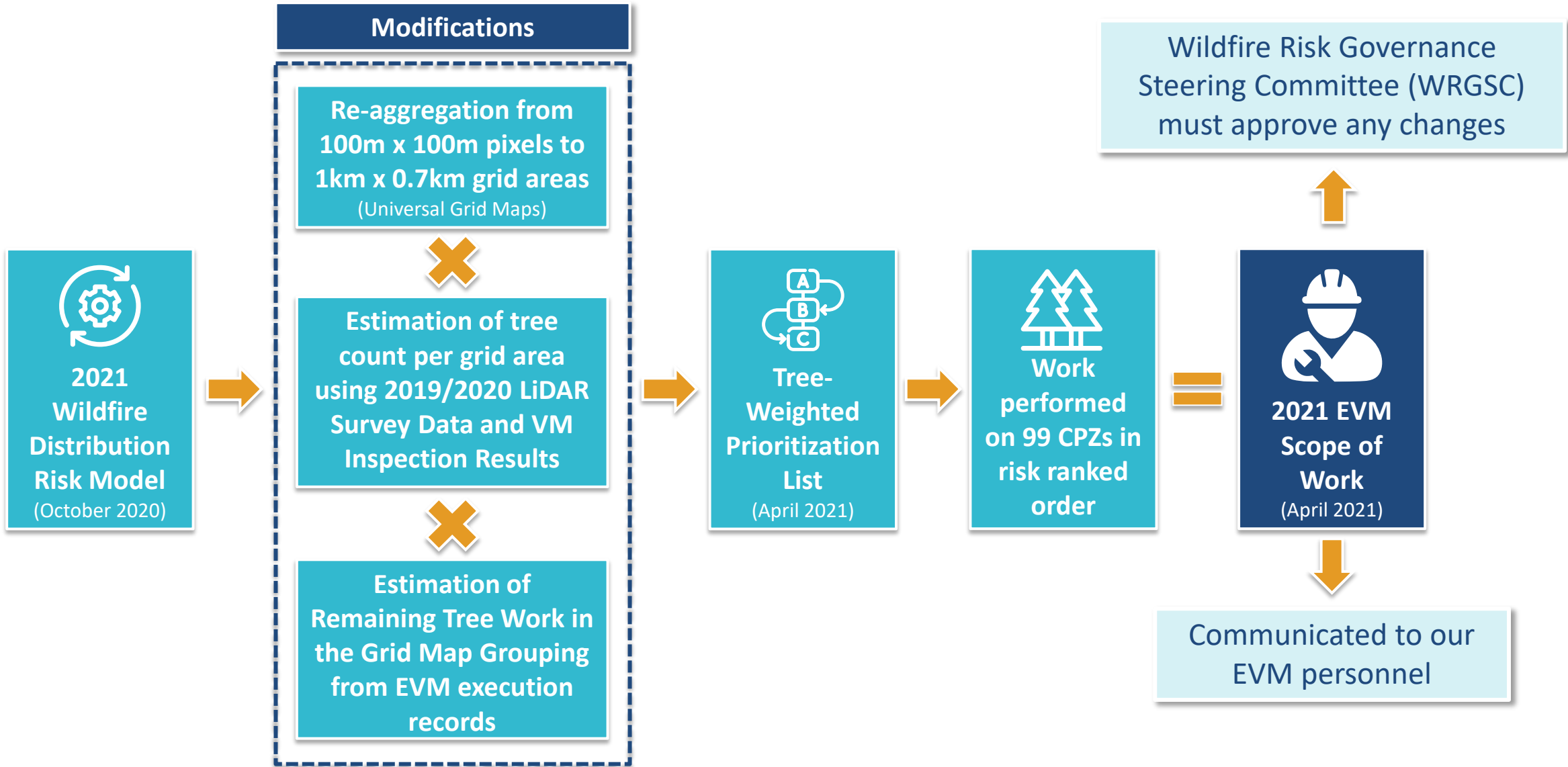
Our 2021 wildfire risk modeling framework is used to assess the Probability of Ignition or Likelihood of Risk Event (LoRE) and the Consequence of Risk Event (CoRE)\* and helps us target our Enhanced Vegetation Management work, among other efforts.



# Development of the 2021 EVM Scope (Element 5)



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## 2019 and 2020 Commitments

- In 2019 and 2020 we made commitments to cities, counties and agencies to conduct work in areas that had high risk rankings under previous risk models but may not reflect the highest risk Circuit Protection Zones (CPZs) based on the EVM tree-weighted prioritization list
- Given the lead time necessary to obtain permits and the amount of work already undertaken with these cities, counties, and agencies to obtain approval for EVM work, we decided to continue with these commitments
- We may perform work on CPZs outside of our 1-n ranking approach to take advantage of a permit or otherwise fulfill a community commitment (these are a small percentage of the total EVM miles in 2021)

**These commitments will not affect our goal of 80% of the EVM work being performed in the top 20% risk miles**



# 2021 EVM Scope and Progress to Date (Elements 3 and 4)





# 2021 EVM Scope of Work (Elements 3 and 4)

We are prioritizing the highest risk CPZs using the “1 to n” ranking approach.

Circuit Name	Circuit Protection Zone (CPZ)	EVM Miles	Forecasted Tree Work*	Tree Weighted Risk Score	Tree Weighted Rank
RIO DELL 1102	RIO DELL 11024230	22.82	4,237	202.04	1
APPLE HILL 2102	APPLE HILL 2102circuit_breaker	38.41	4,582	175.16	2
FORT SEWARD 1121	FORT SEWARD 11211690	10.43	1,715	153.25	3
OAKHURST 1101	OAKHURST 110110090	31.38	1,755	134.58	4
OREGON TRAIL 1104	OREGON TRAIL 11041574	15.86	629	133.27	5
AUBERRY 1102	AUBERRY 1102R2850	26.34	405	42.15	99

6-98

<b>Total</b>	<b>EVM Miles</b>	<b>Forecasted Tree Work</b>
	<b>2,422.40</b>	<b>169,823.79</b>

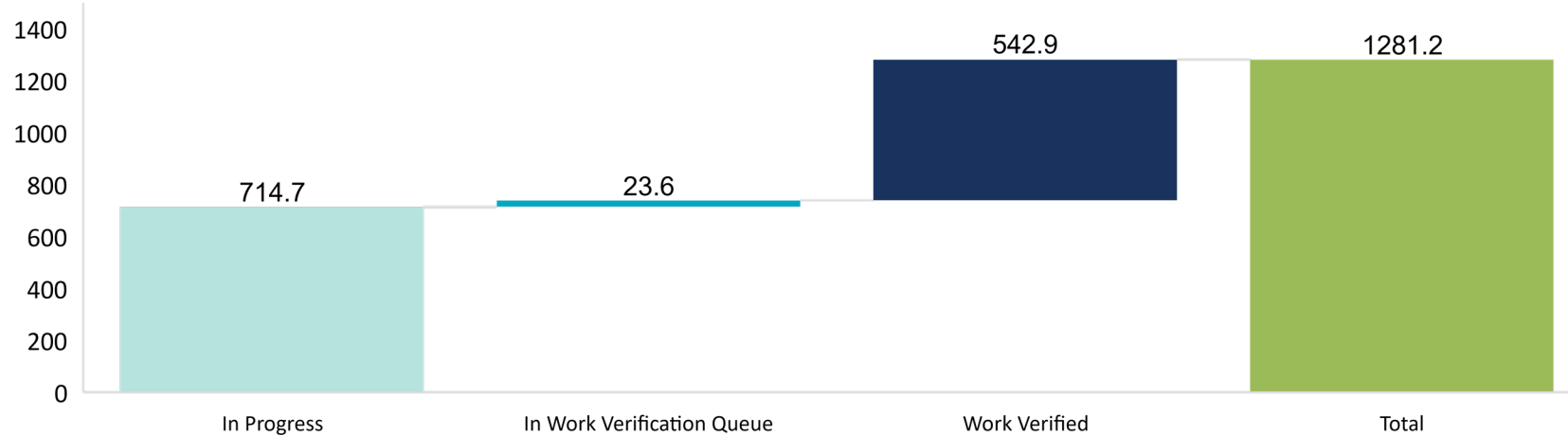
\*Data is rounded





# EVM Progress to Date (Elements 3 and 4)

**EVM Work Progress as of June 21, 2021 (in Miles)**



- **2021 Planned Total EVM Mileage: 2,422.4**
- **EVM Work Verified Miles completed YTD within top 3 percentile of all CPZs: 449.5**


EVM Risk Distribution YTD (as of June 21, 2021)	
Risk Tranche	Work Verified Miles
< = 3% (Top 99 CPZs)	449.5
< = 10%	493.2
> 10 – 20%	17.9
> 20 – 30%	7.6
> 30 – 40%	5.1
> 40 – 50%	6.3
> 50%	12.9
<b>Total</b>	<b>542.9</b>

EVM Constrained Miles (as of June 21, 2021)		
Category	Miles	Segments
Refusals	4.9	113
Constrained Vegetation Points	152.2	3,342
<b>Total</b>	<b>157.1</b>	<b>3,455</b>

# 2021 Officer Verification, Coordination and Communication (Elements 7, 9, 10, 11 and 12)



## Process for PG&E officer verification.

ELEMENT		VERIFICATION
7	Changes to risk, wildfire consequence or vegetation models in the last or next 90 days	 <p><b>Conducted by Sumeet Singh, Senior Vice President and Chief Risk Officer</b> using:</p> <ul style="list-style-type: none"> <li>✓ Wildfire Risk Governance Steering Committee</li> <li>✓ Internal audit and validation</li> <li>✓ Daily operating reviews</li> </ul>
9	Risk model, data sets and vegetation management records used to prioritize EVM alignment with report	
10	Targeting substantial majority of EVM work to the highest risk CPZs in the next 90 days	
11	Targeting substantial majority of EVM work to the highest risk CPZs in the last 90 days	

In addition to Elements 7, 9, 10 and 11, Element 12 also receives officer verification.

## ELEMENT

12

### Verification that PG&E:

- Communicates information and internal decisions regarding the 2021 project list and prioritization of work
- Ensures personnel is aware of where to target EVM work in the next 90 days

## COMMUNICATION/COORDINATION

Daily, weekly and quarterly meetings with our vegetation management team to review:

- The 2021 EVM Scope of Work
- Work progress, including 90-day progress reports
- Forecasting remaining miles
- Any approved changes by the WRGSC to the 2021 EVM Scope of Work
- Any concerns and challenges on how WRGSC-approved changes may impact progress
- Incorporation of lessons learned

## VERIFICATION



Conducted by  
Sumeet Singh,  
Senior Vice  
President and  
Chief Risk  
Officer

# Lessons Learned from 2020 (Elements 1 and 8)





# Lessons Learned from 2020 (Elements 1 and 8)

LESSONS LEARNED	ACTIONS WE ARE TAKING IN 2021
<b>Carry-Over Work from 2019</b>	<ul style="list-style-type: none"><li>Ensuring that any work carrying over from 2021 into 2022 will be based on the risk-informed 2021 EVM Scope of Work</li></ul>
<b>Use of the Wildfire Risk Model combined with Other Factors</b>	<ul style="list-style-type: none"><li>Focusing primarily on risk by using the 2021 Wildfire Distribution Risk Model and the EVM tree weighted prioritization list</li></ul>
<b>2020 EVM Goal of 50% of work on top 50% of highest risk lines</b>	<ul style="list-style-type: none"><li>Performing work on the highest risk ranked CPZs and focusing at least 80% of our EVM work on the top 20% of the highest risk CPZs</li></ul>
<b>Inconsistent Reporting and communication gaps</b>	<ul style="list-style-type: none"><li>More centralized decision making and oversight through the Wildfire Risk Governance Steering Committee</li><li>Adoption of new tracking processes</li><li>Implementation of daily and weekly operating reviews to improve rigor and visibility of execution</li></ul>

# Impact and Duration of Corrective Action Plan (Elements 13 and 14)

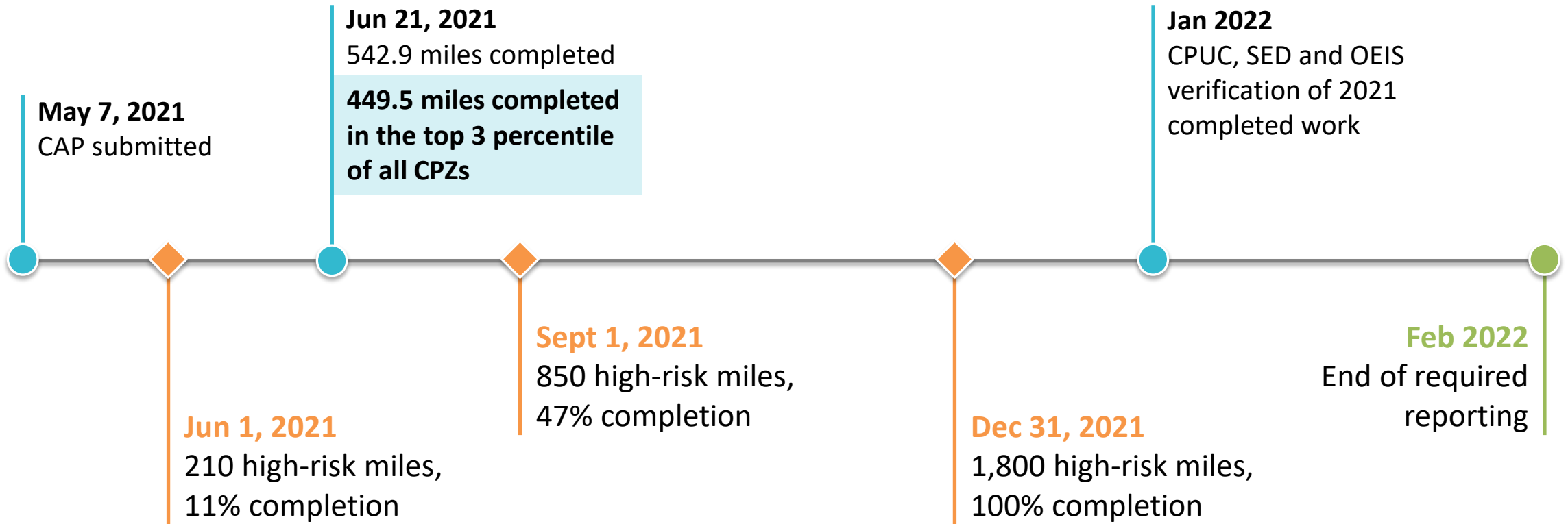


# Impact and Duration of Corrective Action Plan (Elements 13 and 14)



Proposed timeline for ending required reporting, prioritization of high-risk circuits and milestone goals.

Milestone Goal



Overall, we conclude that the Corrective Action Plan is either complementary to or has no effect on System Enhancement Initiatives (SEI).