Los Angeles County Department of Public Health Post-Fire Assessment Plan Town Hall:

Initial Findings from Representative Soil Samples at Intact Parcels

April 10, 2025

Soil Sampling

What fire-related soil impacts are reasonably expected at intact properties?

- Representative Soil Sampling from Intact Parcels
  - Testing for fire-related chemicals of concern
  - Within and nearby the Fire area

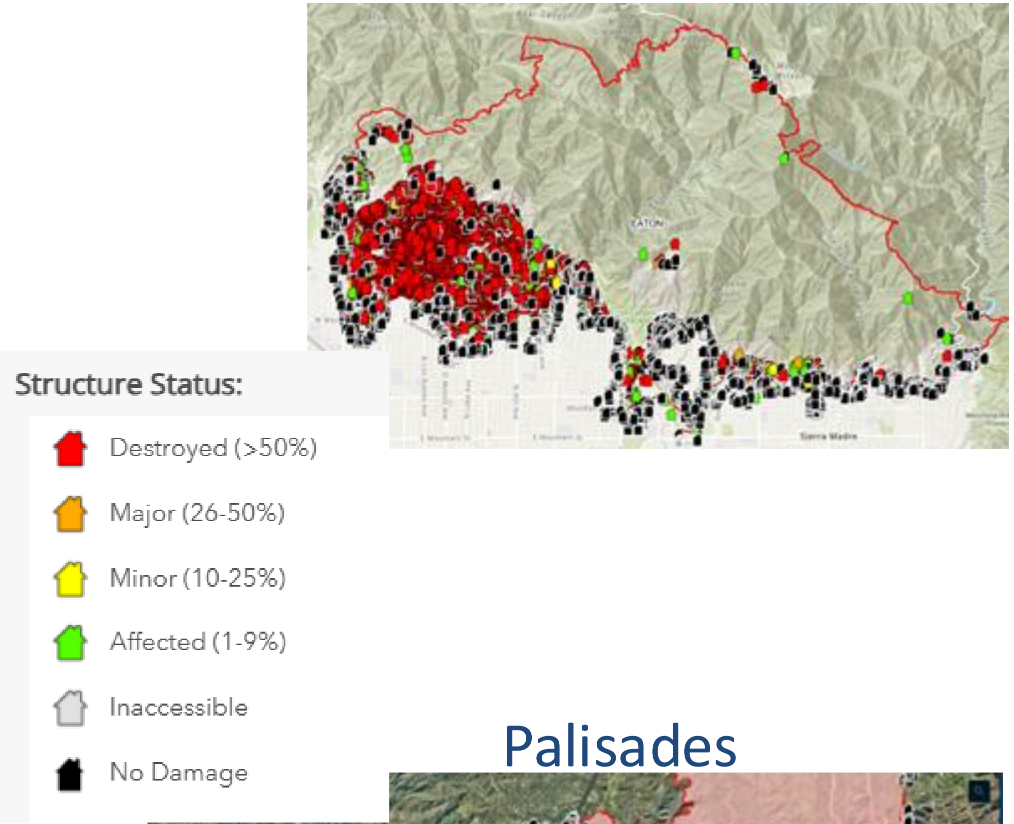
Soil Sampling

What fire-related soil impacts are reasonably expected at intact properties?

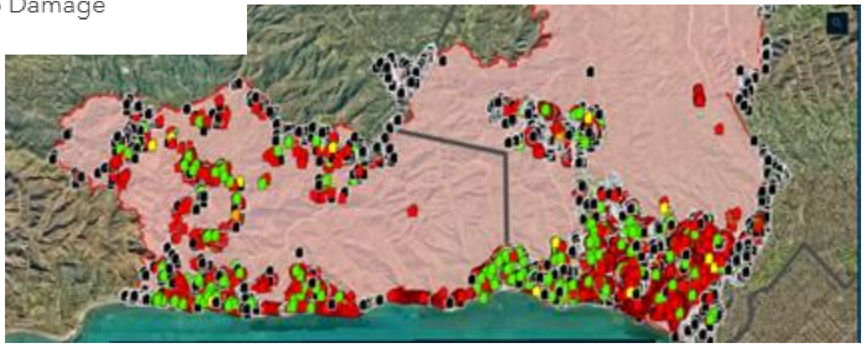
- Representative Soil Sampling from Intact Parcels
  - Testing for fire-related chemicals of concern
  - Within and nearby the Fire area
    - Minor/Affected Damage
    - No Damage
    - Adjacent to Fire Areas

Stage 2 – No Planned Cleanup

Eaton



Palisades



Initial Data Evaluation

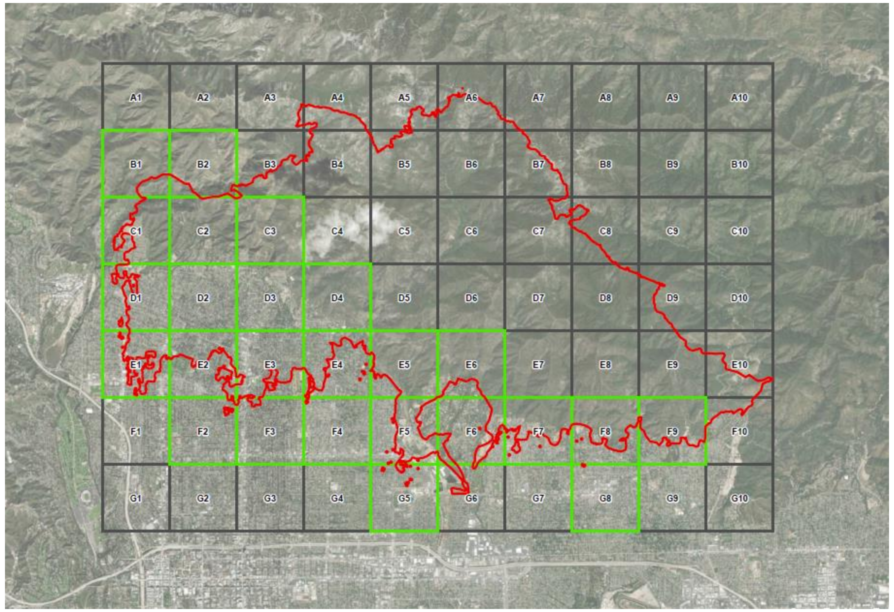
Note: 90% of results have been received to date

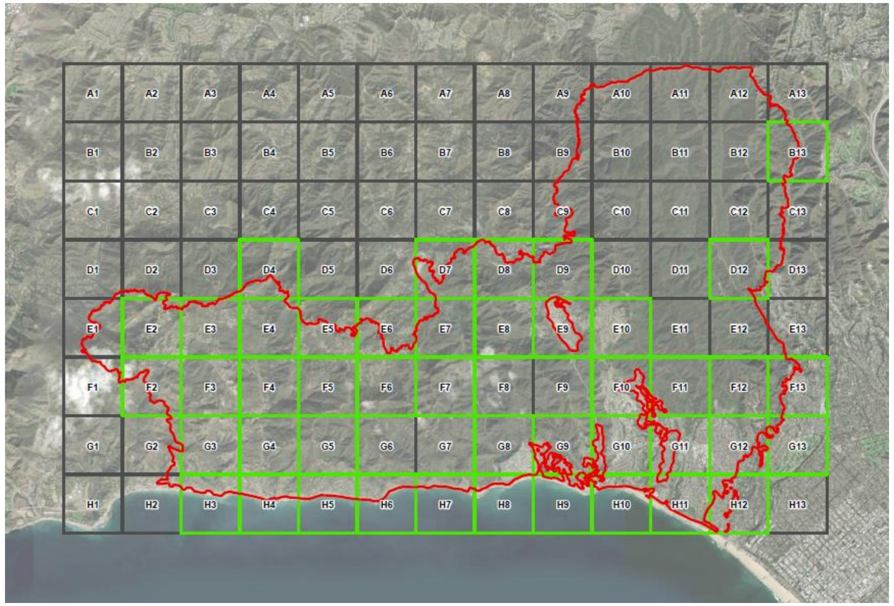
<u>Stage 2</u>: Intact Properties

- 780 parcels
- 5 samples per parcel
- Sampling completed March 4th to March 11th

- Compare results to DTSC residential screening levels for soil
- USEPA residential screening levels used where DTSC values do not exist

Stage 2 - Sampled Parcels			
Type	**Palisades**	**Eaton**	**TOTALS**
Outside Fire Boundary	131	114	**245**
No-Damaged Structure	153	147	**300**
Minor/Affected	129	106	**235**
TOTALS	**413**	**367**	**780**





Use of Screening Levels

Initial Data Evaluation

- Overall Exceedances of Screening Levels
- Spatial Representation of Exceedances

**Regulatory screening levels are protective of a life-time of exposure for the most sensitive residential populations*

***Screening levels are not cleanup levels, but thresholds to consider additional evaluation*

Eaton - % of Samples with Exceedances*

% Exceedances of Screening Levels	Eaton Ash Samples	Eaton Destroyed Soil Samples	Eaton Minorly Affected Soil Samples	Eaton Not Damaged Soil Samples	Eaton Outside Fire Boundary Soil Samples	Eaton Ambient Soil Samples
Metals						
Antimony	4.5			0.1		
Arsenic	4.5	6.4	5.5	7.7	11.0	3.6
Cadmium			0.3	0.4	0.5	
Cobalt	9.1				0.3	1.2
Copper			0.2			
Lead	59.1	33.9	36.2	37.2	47.1	8.4
Mercury			3.1	3.6	1.6	2.4
Thallium					0.3	
PAHs						
Benzo(A)Anthracene						
Benzo(A)Pyrene	9.1	4.6	4.9	4.5	4.3	1.2
Benzo(B)Fluoranthene				0.4	0.3	
Dibenzo(A,H)Anthracene		2.8	3.3	4.0	2.4	
Indeno(1,2,3-Cd)Pyrene					0.3	
Naphthalene	9.1					
Dioxins						
Dioxin_TEQ	10.0	3.3		1.8		Results Pending

*Only compounds with exceedances in either fire area illustrated in table

Eaton - % of Samples with Exceedances

ARSENIC

LEGEND

Eaton Fire Boundary

Reference Grid

Percent Exceedance

0% - 10%

10% - 20%

20% - 30%

30% - 40%

40% - 50%

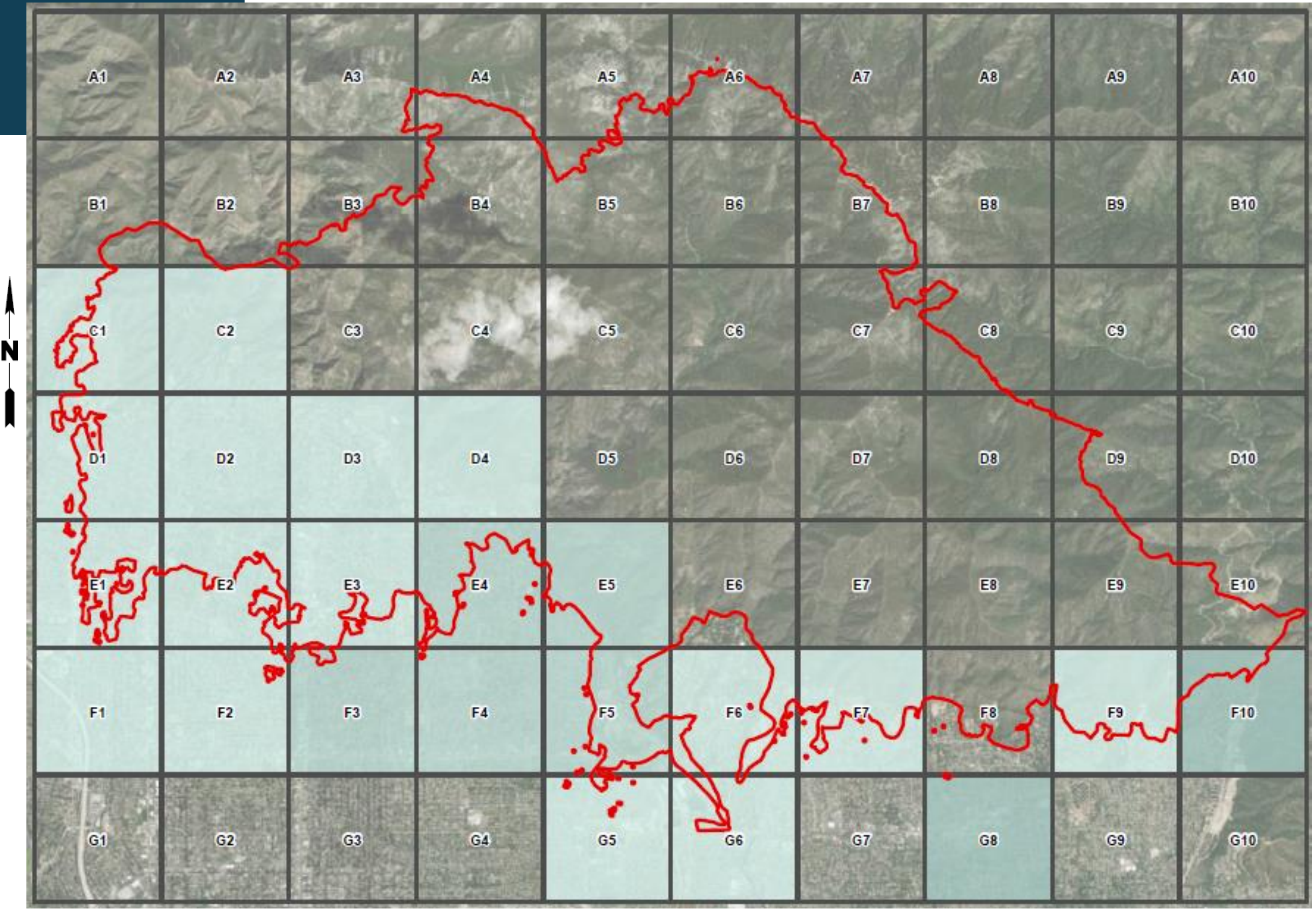
50% - 60%

60% - 70%

70% - 80%

80% - 90%

90% - 100%



Eaton - % of Samples with Exceedances

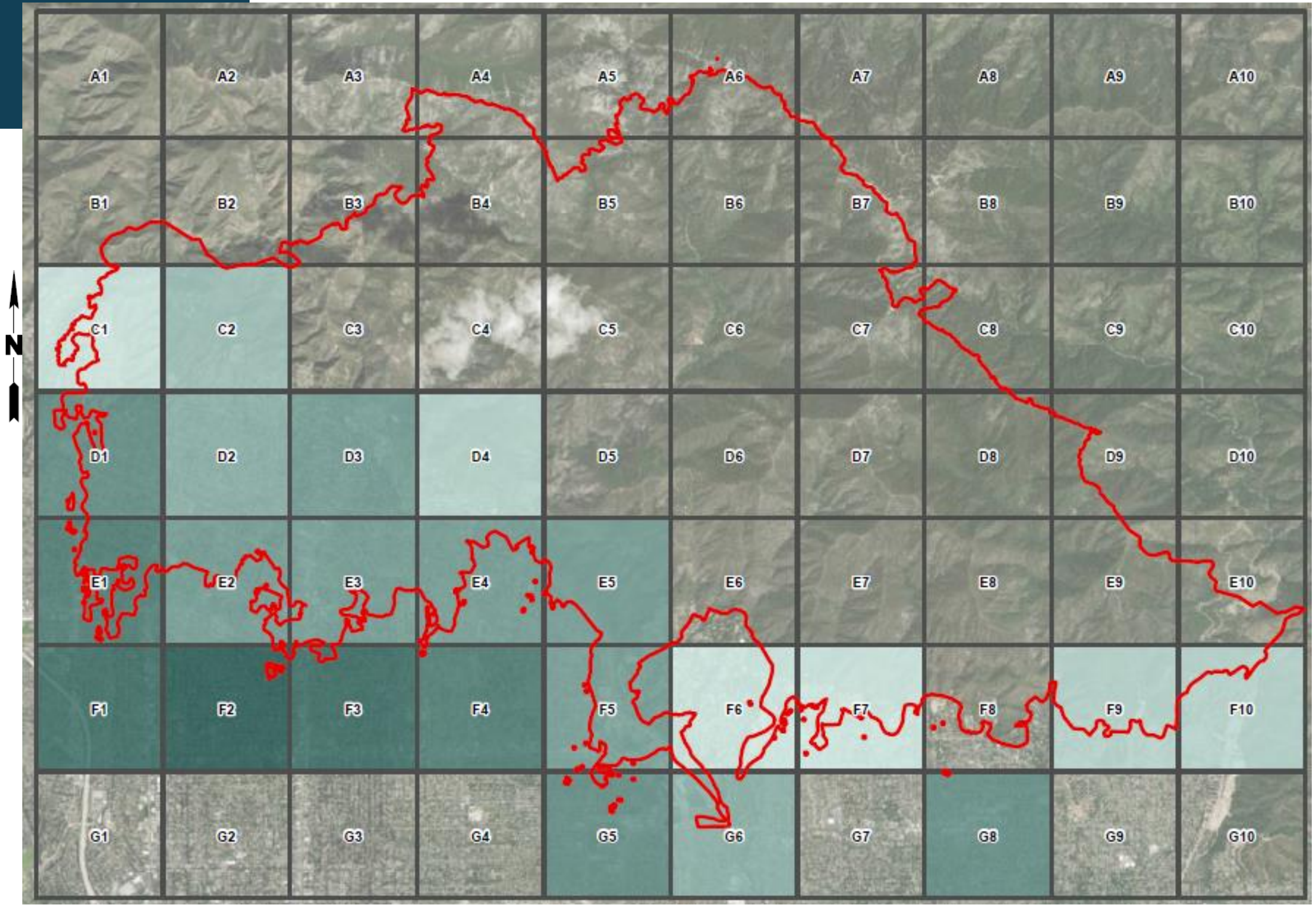
LEAD

LEGEND

- Eaton Fire Boundary
- Reference Grid

Percent Exceedance

- 0% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- 80% - 90%
- 90% - 100%



Eaton - % of Samples with Exceedances

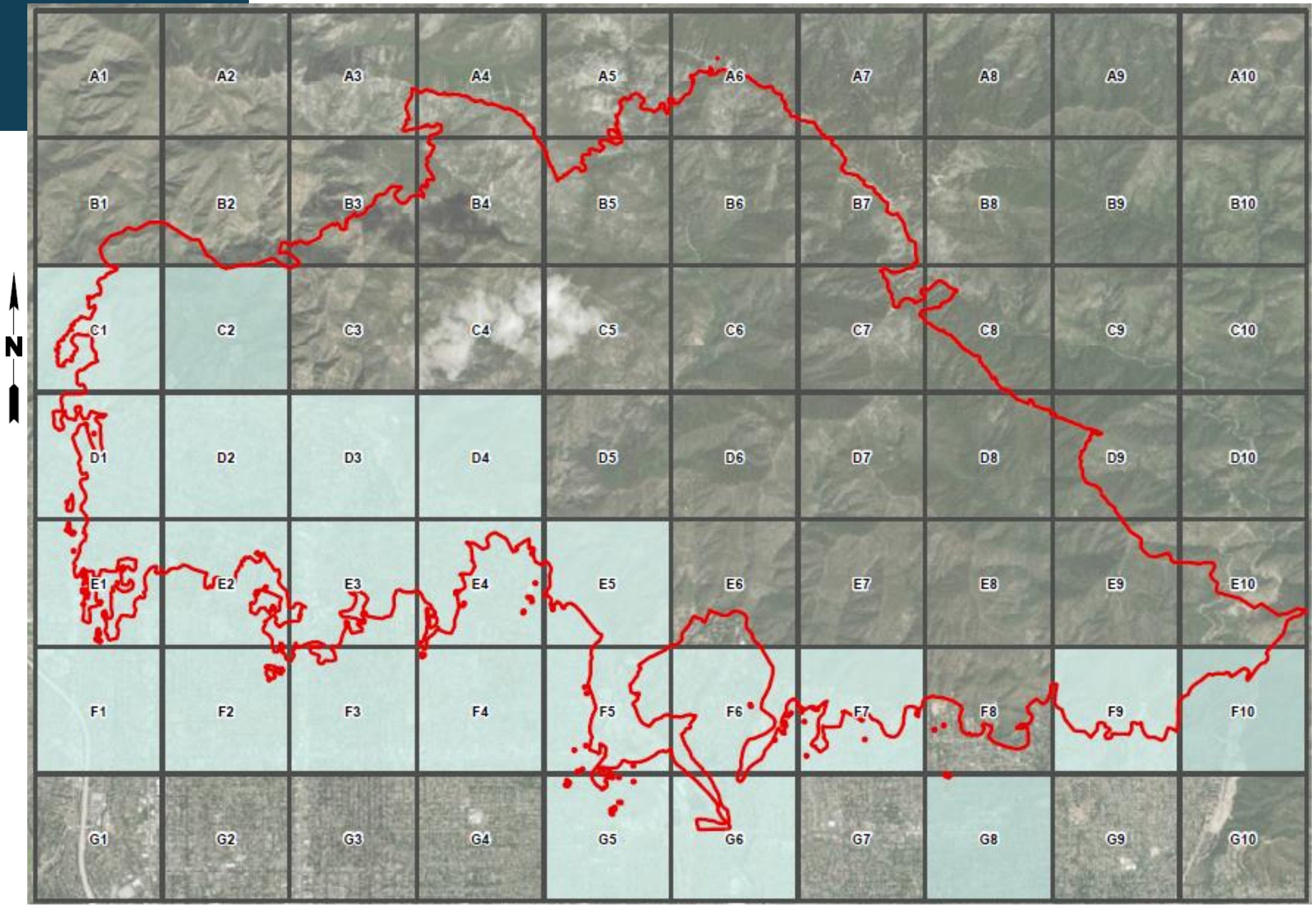
BENZO(A)PYRENE

LEGEND

- Eaton Fire Boundary
- Reference Grid

Percent Exceedance

- 0% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- 80% - 90%
- 90% - 100%



Eaton - % of Samples with Exceedances

DIOXIN(TEQ)

LEGEND

Eaton Fire Boundary

Reference Grid

Percent Exceedance

0% - 10%

10% - 20%

20% - 30%

30% - 40%

40% - 50%

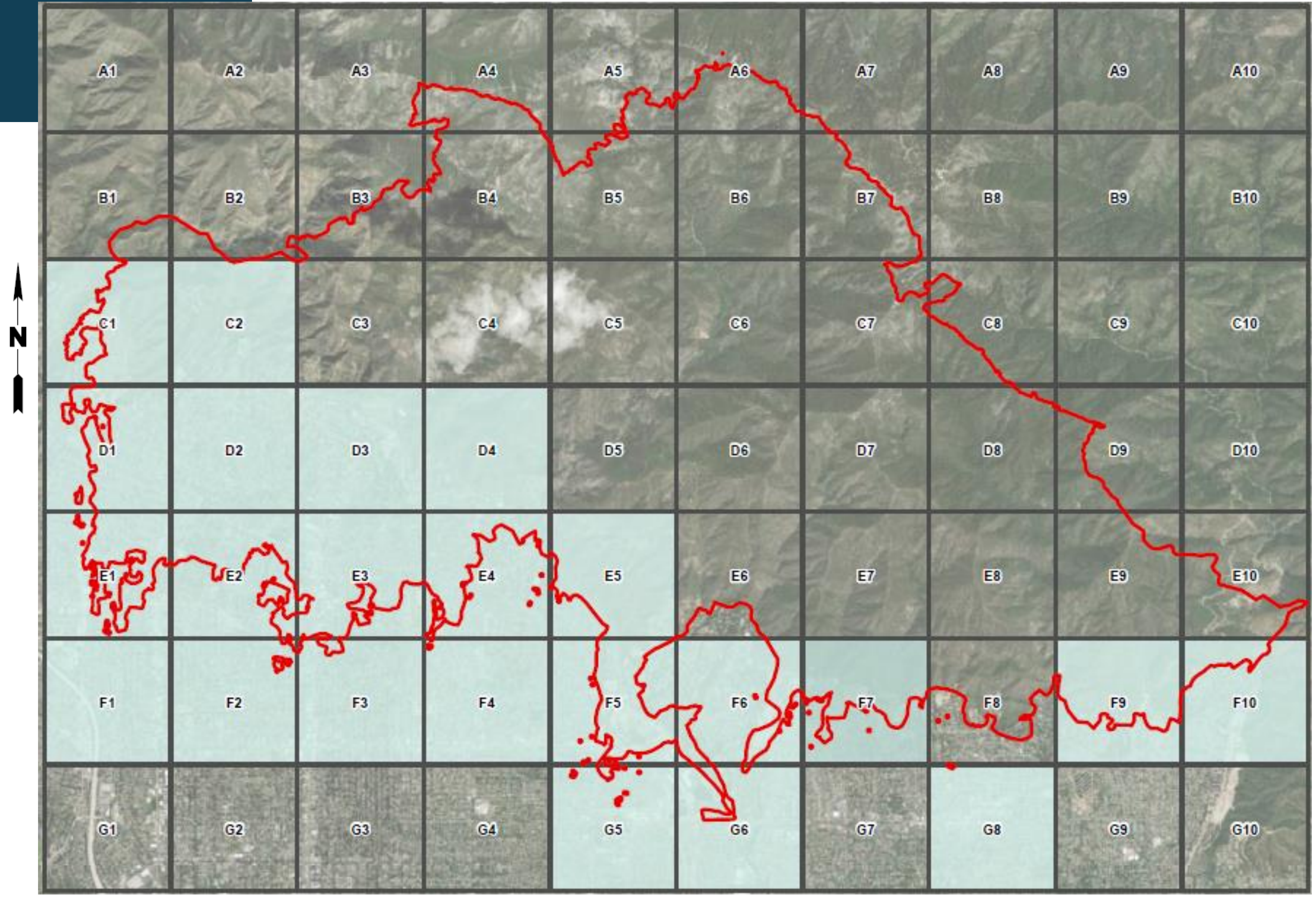
50% - 60%

60% - 70%

70% - 80%

80% - 90%

90% - 100%



Eaton Findings

- Assessment revealed a higher percentage of soil samples from intact parcels had lead levels above health-based screening thresholds downwind of the Eaton Fire
  - Consistent with the known age of the housing stock in Altadena and the potential for lead-based paint
  - Consistent with reports of elevated lead in air samples collected in the days immediately following the fire
- Soil impacts from other potentially fire-related chemicals are not evident

Palisades - % of Samples with Exceedances*

% Exceedances of Screening Levels	Palisades Ash Samples	Palisades Destroyed Soil Samples	Palisades Minorly Affected Soil Samples	Palisades Not Damaged Soil Samples	Palisades Outside Fire Boundary Soil Samples	Palisades Ambient Soil Samples
Metals						
Antimony	3.0				0.1	
Arsenic	24.2	13.8	10.2	10.9	25.6	
Cadmium	12.1	11.4	2.8	7.5	0.1	
Cobalt	9.1		0.9	1.3	3.9	
Lead	24.2	10.8	5.6	5.4	8.9	16.9
Mercury				0.1	0.3	
Thallium	6.1	9.0	0.7	4.5		
PAHs						
Benzo(A)Anthracene	3.0	1.2		0.3	0.7	
Benzo(A)Pyrene	3.0	4.2	2.8	6.7	8.3	2.4
Benzo(B)Fluoranthene		1.8		0.5	1.7	
Dibenzo(A,H)Anthracene	3.0	4.2	0.6	3.4	6.8	
Indeno(1,2,3-Cd)Pyrene		0.6		0.3	0.5	
Naphthalene	9.1				0.2	
Dioxins						
Dioxin_TEQ	12.1					Results Pending

*Only compounds detected in either fire area illustrated in table

Palisades- - % of Samples with Exceedances

ARSENIC

LEGEND

- Reference Grid
- Palisades Fire Boundary

Percent Exceedance

- 0% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
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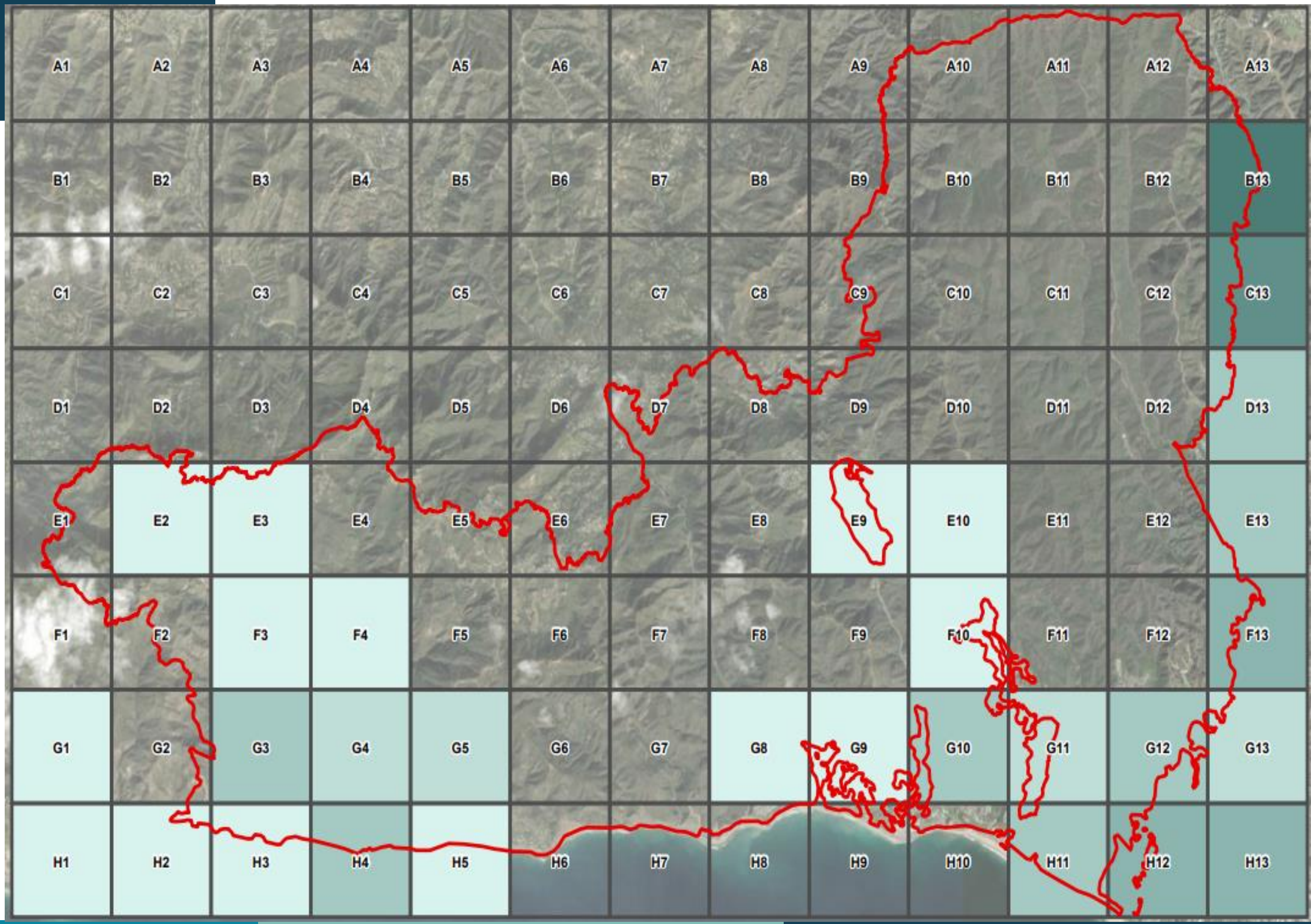
- 90% - 100%

N



Palisades - % of Samples with Exceedances

CADMIUM

LEGEND

Reference Grid

Palisades Fire Boundary

Percent Exceedance

0% - 10%

10% - 20%

20% - 30%

30% - 40%

40% - 50%

50% - 60%

60% - 70%

70% - 80%

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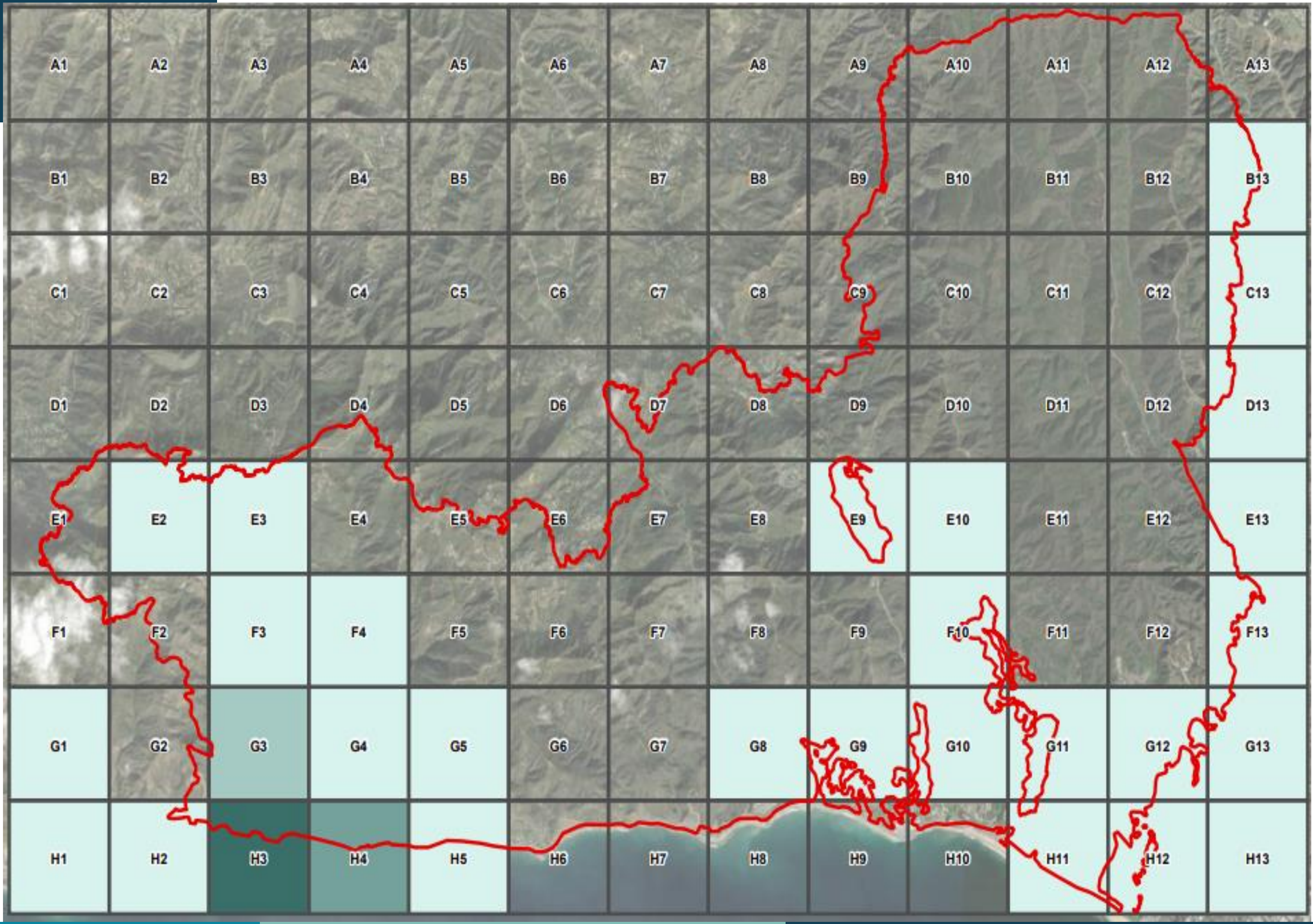
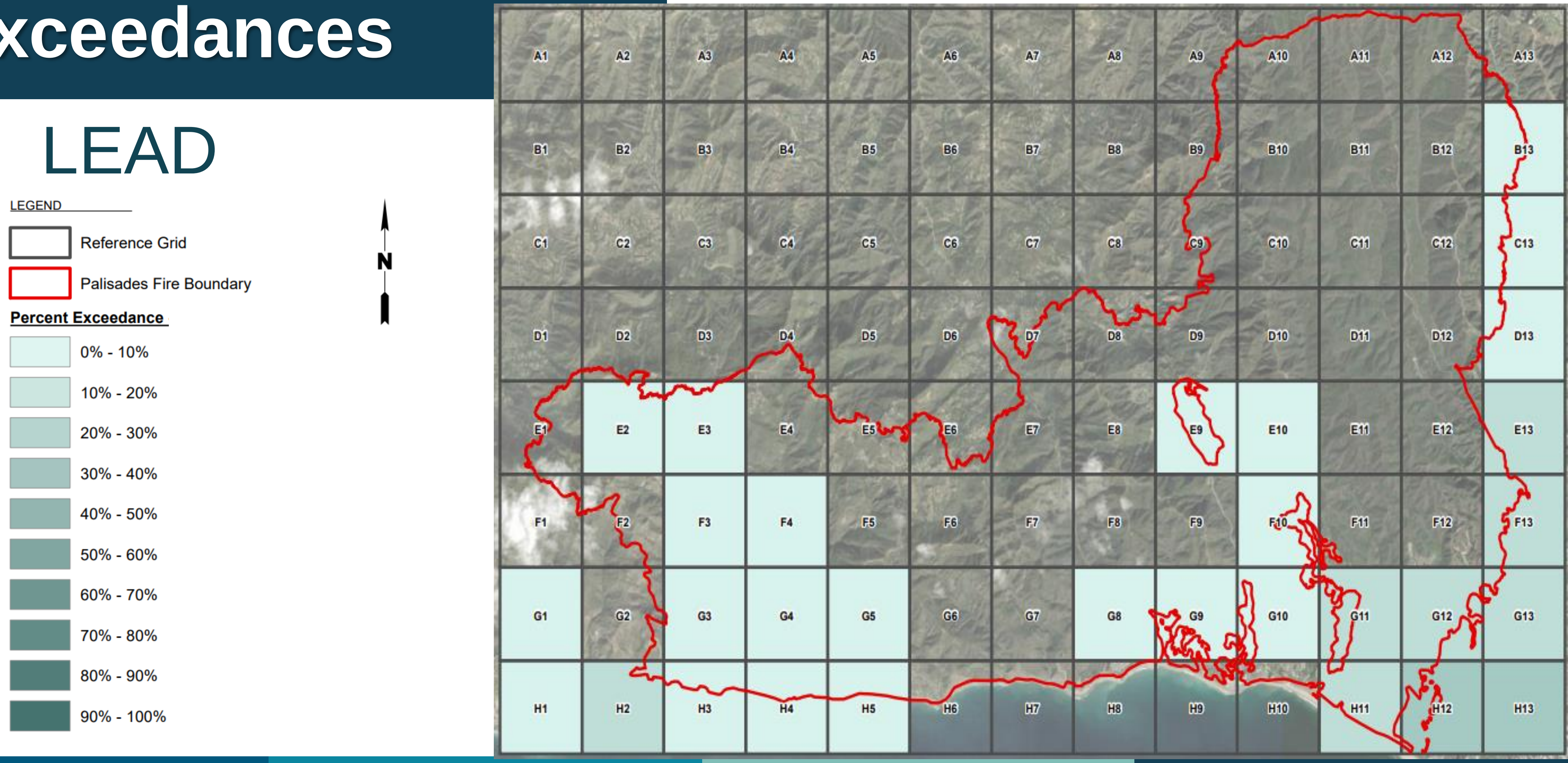
N



Palisades - % of Samples with Exceedances

LEAD



Palisades - % of Samples with Exceedances

BENZO(A)PYRENE

LEGEND

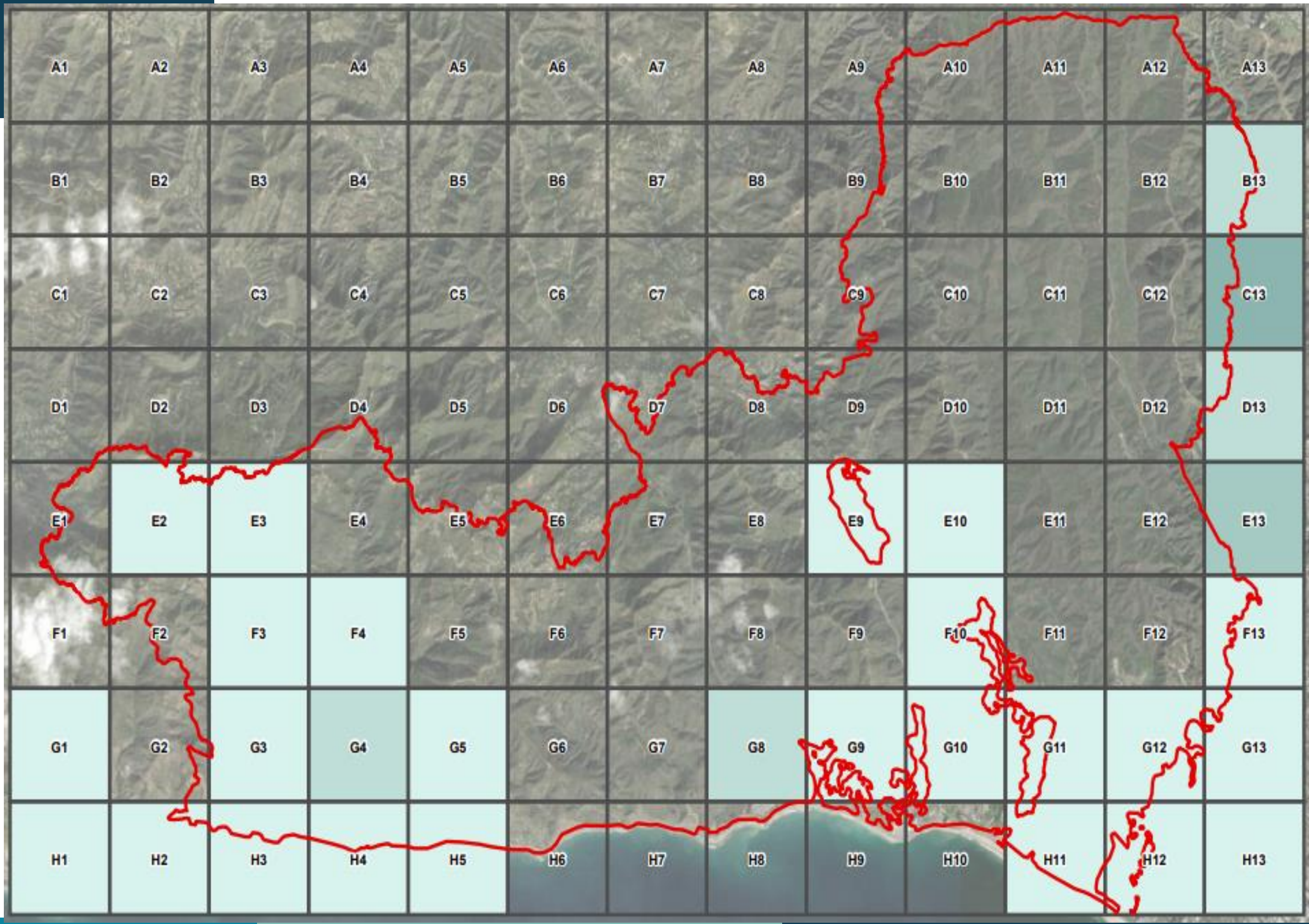
Reference Grid

Palisades Fire Boundary

Percent Exceedance

0% - 10%
10% - 20%
20% - 30%
30% - 40%
40% - 50%
50% - 60%
60% - 70%
70% - 80%
80% - 90%
90% - 100%

N



Palisades Findings

- Differences were observed between the Eaton and Palisades Fire Areas in the chemicals types and the pattern of exceedances for soil sample results

- Widespread contamination from potentially fire-related chemicals are not evident
  - Sampling identified soil samples from isolated areas with heavy metal and PAH concentrations above screening levels
  - The source for these localized impacts is unknown at this time, but these impacts are not consistent with communitywide impacts from fire-related related smoke plumes

Recommendations

- This assessment provides a representative analysis of soil conditions for intact parcels near the fires.
  - Individual parcels may have unique factors that result in differences compared to these representative samples.
  - The reported results are not intended to imply cleanup is necessary but are intended to identify areas potentially requiring additional evaluation.
- People concerned about their specific property can consult an environmental professional about evaluating their property.
- Community members are encouraged to take appropriate precautions if your home is in one of the areas where soil samples exceedances of screening thresholds have been observed.
  - Refer to the Los Angeles County Department of Public Health’s FAQs for best practices to minimize exposure to these potential hazards.

Eaton - % of Samples with Exceedances

MERCURY

LEGEND

- Eaton Fire Boundary
- Reference Grid

Percent Exceedance

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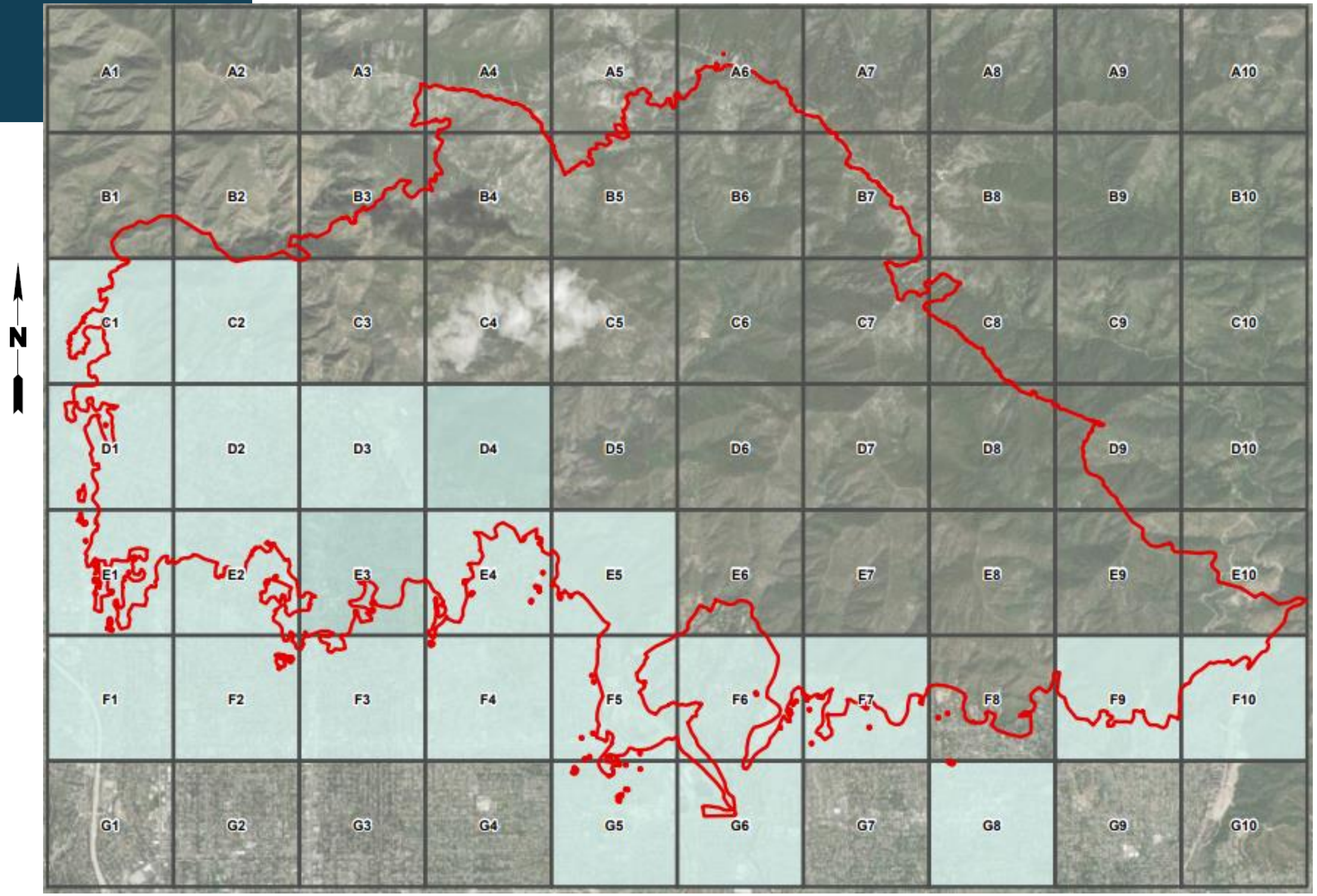
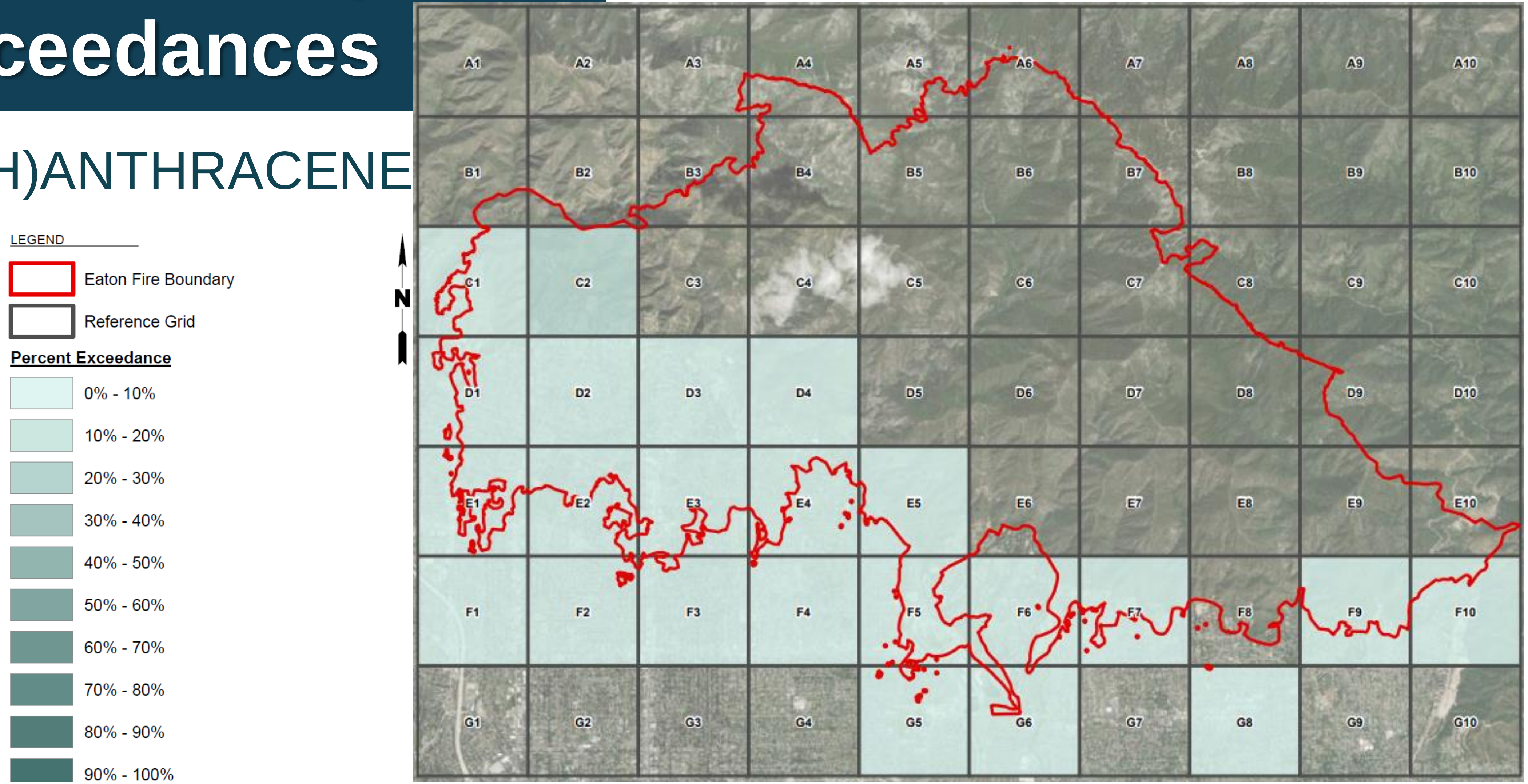


Eaton - % of Samples with Exceedances

DIZENZO(A,H)ANTHRACENE



Palisades - % of Samples with Exceedances

COBALT

LEGEND

- Reference Grid
- Palisades Fire Boundary

Percent Exceedance

- 0% - 10%
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- 50% - 60%
- 60% - 70%
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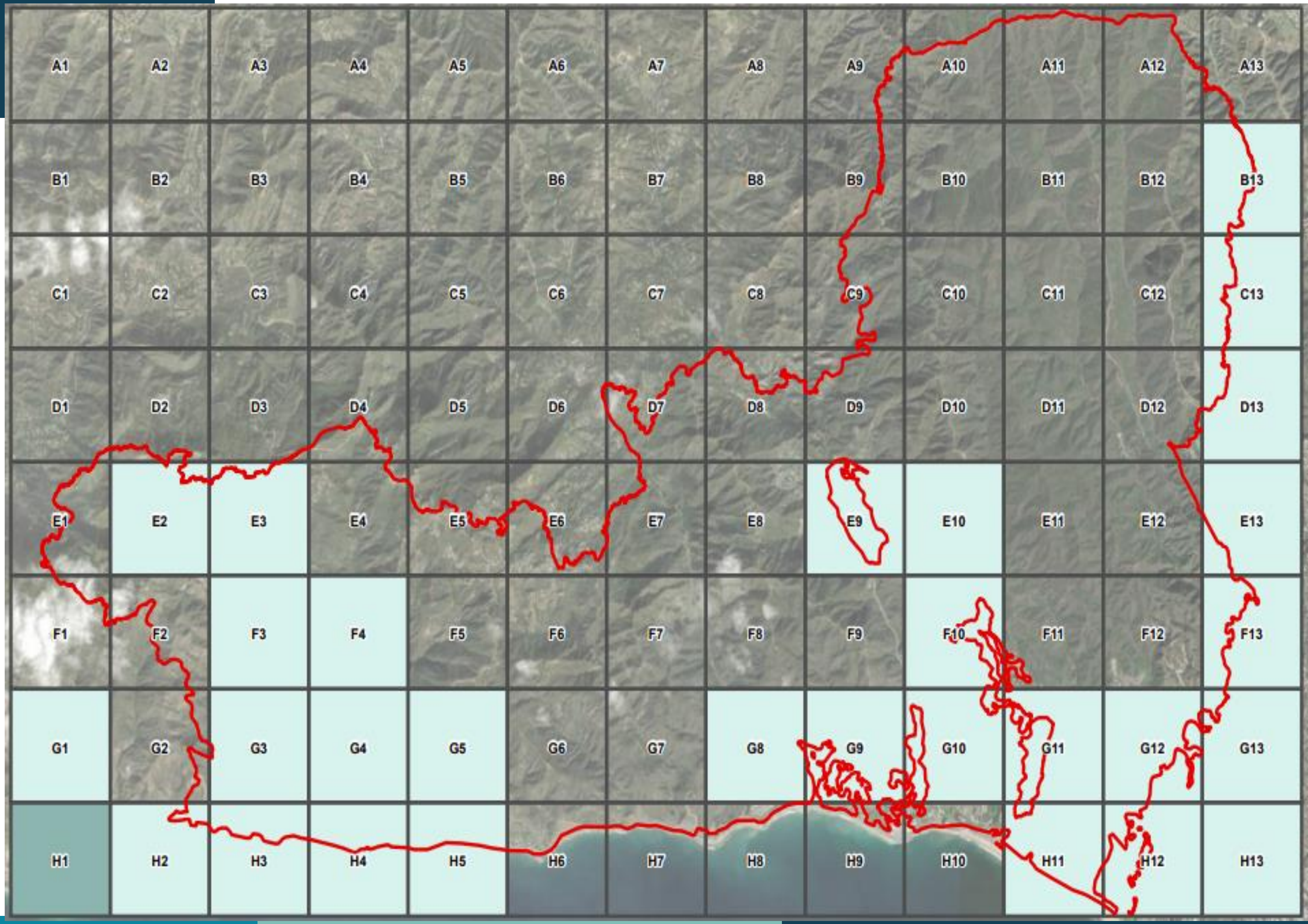
N



ROUX

Palisades - % of Samples with Exceedances

THALLIUM

LEGEND

- Reference Grid
- Palisades Fire Boundary

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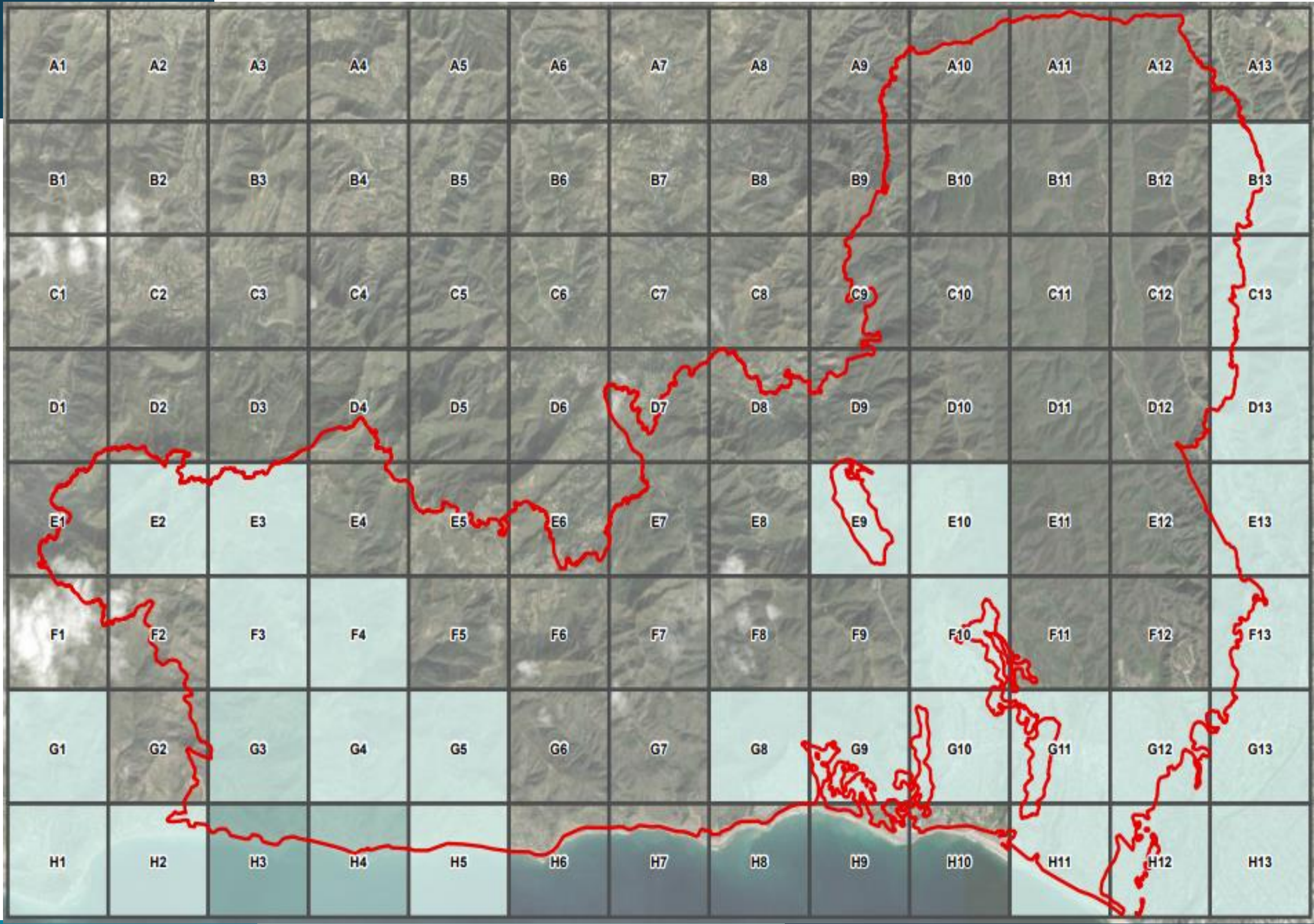

Palisades - % of Samples with Exceedances

DIZENZO(A,H)ANTHRACENE

LEGEND

Reference Grid

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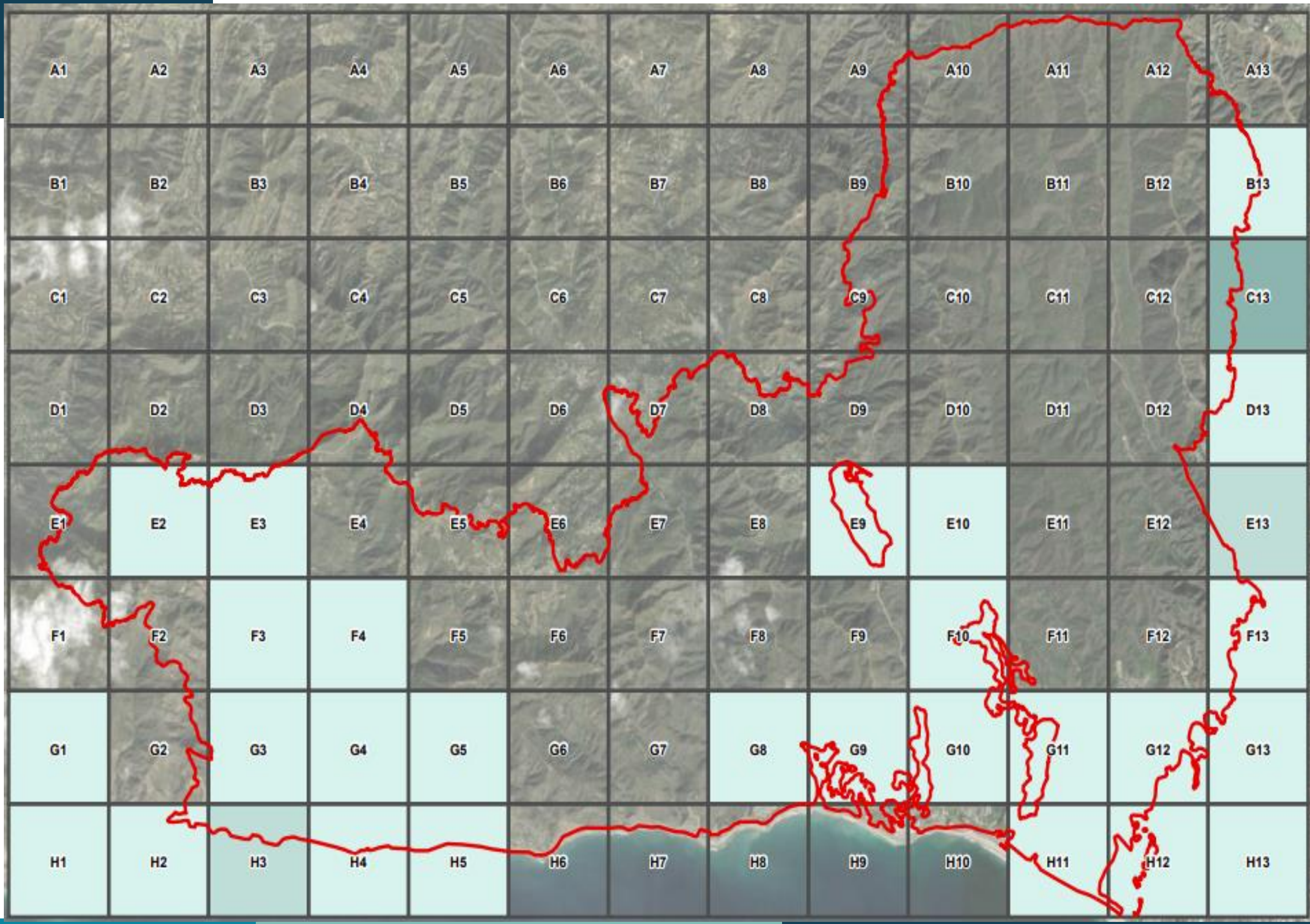

Palisades - % of Samples with Exceedances

DIOXIN(TEQ)

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