Modulators

Vegetation (fuel)
- Biomass
  - Total fuel load
  - Fuel load by size class

- Structure
  - Vertical arrangement
  - Horizontal connectivity

Fire weather & Ignitions

Context
- Environmental
  e.g., long-term drought
- Management
  e.g., logging or grazing
- Social
  e.g., fire policy

Core parameters

- Fire characteristics
  - Fire type (vegetation layer)
  - Intensity (energy release)

- Temporal distribution
  - Seasonality
  - Frequency (return interval)
  - Duration of heating

- Spatial pattern
  - Extent (total burn area)
  - Shape (length vs. breadth)
  - Location & number of ignitions
  - Completeness of burn (patchiness)

Effects

Direct
- Physical severity
  - Heating depth
  - Soil structure & nutrients

- Biological severity (mortality)

- Social & economic severity

Indirect
- Community succession
  - Growth conditions
  - Wildlife habitat

- Physical conditions
  - Aquatic environment
  - Weather & climate

- Landscape planning & fire management policy