Flow free as a CSP:

# Possibility 1:

Variables: each color red, blue, yellow, ect.

Domain (each Variable): Any integer grid coordinate (x,y) in the input maze

Constraints:

* Cannot cover existing color
* Must be connected/continuous (can only add color in adjacent square)
* Max 2 adjacent squares colored by same color
* (somehow check board full)

Concern: how to check if board is full under conditions when treating colors as variables

Logically this seems to make more sence

# Possibility 2

Variables: each integer grid coordinate (x,y) in the input maze

Domain (each Variable): each possible color: red, blue, yellow, ect.

Constraints:

* Cannot cover existing color (cannot have more than one or replace)
* Must be connected/continuous (red touching red on 1-2 sides exactly)
* Each space filled

Concern: how to ensure that colors stay connected when treating spaces as variables

This is more like how map coloring was formed