

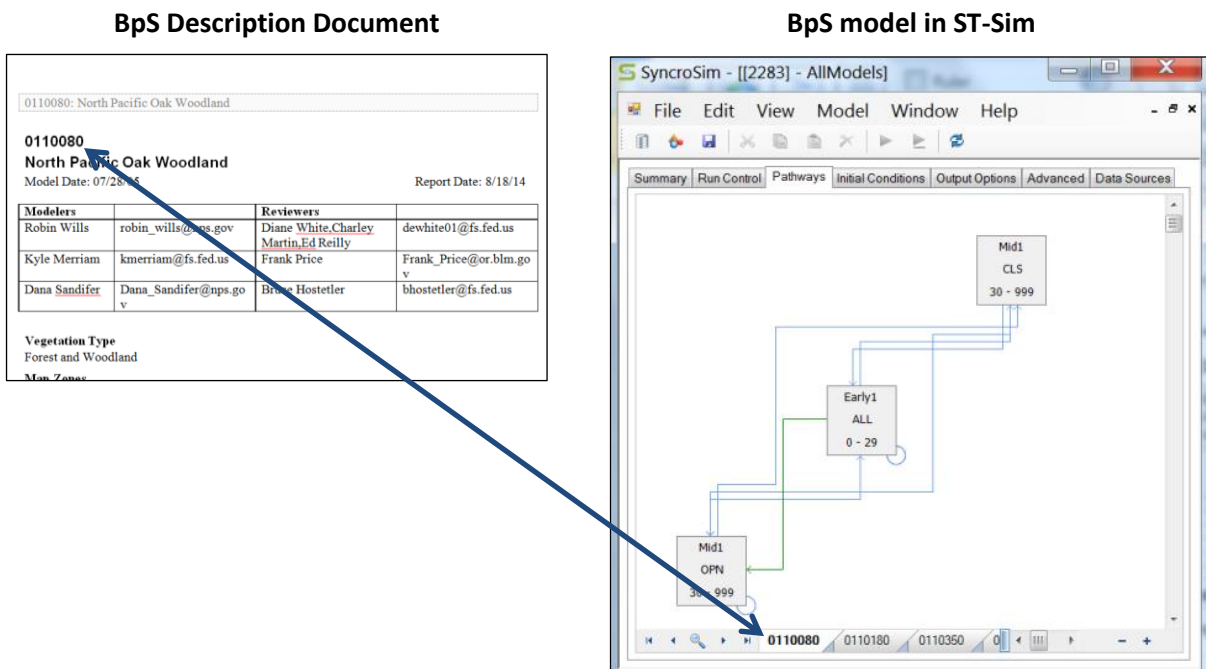
# How to link the BpS model and description

## Background

A BpS model consists of two parts: 1) a descriptive document and 2) a quantitative state-and-transition model. It can be hard to understand one part without the other. This tutorial shows how to link the two components. See the tutorial: **How to link the BpS model with the spatial data** to learn how to link the model information to the BpS and Sclass spatial data.

## Link the description to the model with the BpS code

- Every LANDFIRE BpS is identified by a unique 7 digit BpS code. This code is found at the top of each description document and on the Pathways tab in the ST-Sim (and VDDT) library.



## Link the succession class information through the cover and structure

- Each succession class in a LANDFIRE BpS model is identified by a unique combination of cover and structure attributes. The cover/structure combination for each class is identified in the Succession Classes section of the description document and in the box-and-arrow diagram on the Pathways tab of ST-Sim.
- The succession class description often contains information that will help the user interpret the quantitative information found in the model class properties table.

**DESCRIPTION DOCUMENT**

**ST-SIM**

**Succession Classes Section**

**Succession Classes**

Class A 10

**Structural Information**

Upper Layer Lifeform: Tree  
 Upper Layer Canopy Cover: 0 - 80%  
 Upper Layer Canopy Height: Tree 0m - Tree 10m  
 Tree Size Class: Pole 5-9" DBH

Early Development 1 - All Structures

Structural characteristics of a class. Lifeform, cover and height are used to map the class.

**Indicator Species**

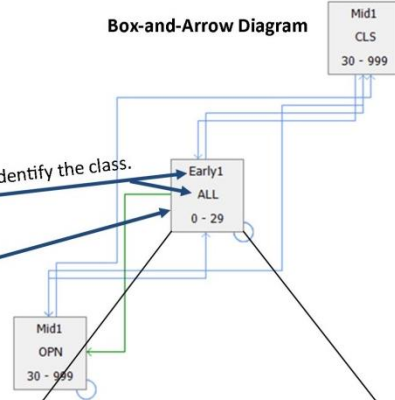
Symbol	Scientific Name	Common Name	Canopy Position
QUGA4	Quercus garryana	Oregon white oak	Upper
FEID	Festuca idahoensis	Idaho fescue	Lower
TODI	Toxicodendron diversilobum	Pacific poison oak	Middle
ACMA3	Acer macrophyllum	Bigleaf maple	Middle

**Description**

Bunchgrass/forb groundcover with resprouting oak and oak saplings following stand replacement fire. Poison oak, bay, and bigleaf maple may be common in the understory in CA but not in OR. Replacement fire resets the stand, while surface fire or mixed severity fire may occur. The stand will normally (with occasional fires) pass to class C (mid-open), however, in the absence of fire the stand will close and succeed to class B (mid-closed). A reviewer suggested that QUKE (which indicates disturbance) be added to the species composition for this class. Also, the

The description typically contains additional information about the model transitions such as assumptions, information quality and data sources.

**Box-and-Arrow Diagram**



**Class Properties**

[2283] - AllModels - Early1:ALL

Deterministic Transitions				
From Class	To Class	Age Min	Age Max	Location
Early1:ALL	Mid1:OPN	0	29	B2

Probabilistic Transitions						
From Class	To Class	Transition Type	Prob	Age Shift	TST Min	
Early1:ALL	Early1:ALL	MixedFire	0.0800	0	0	
Early1:ALL	Early1:ALL	ReplacementFire	0.0050	-29	0	
Early1:ALL	Early1:ALL	SurfaceFire	0.0200	0	0	
Early1:ALL	Mid1:CLS	AltSuccession	1.0000	0	28	