

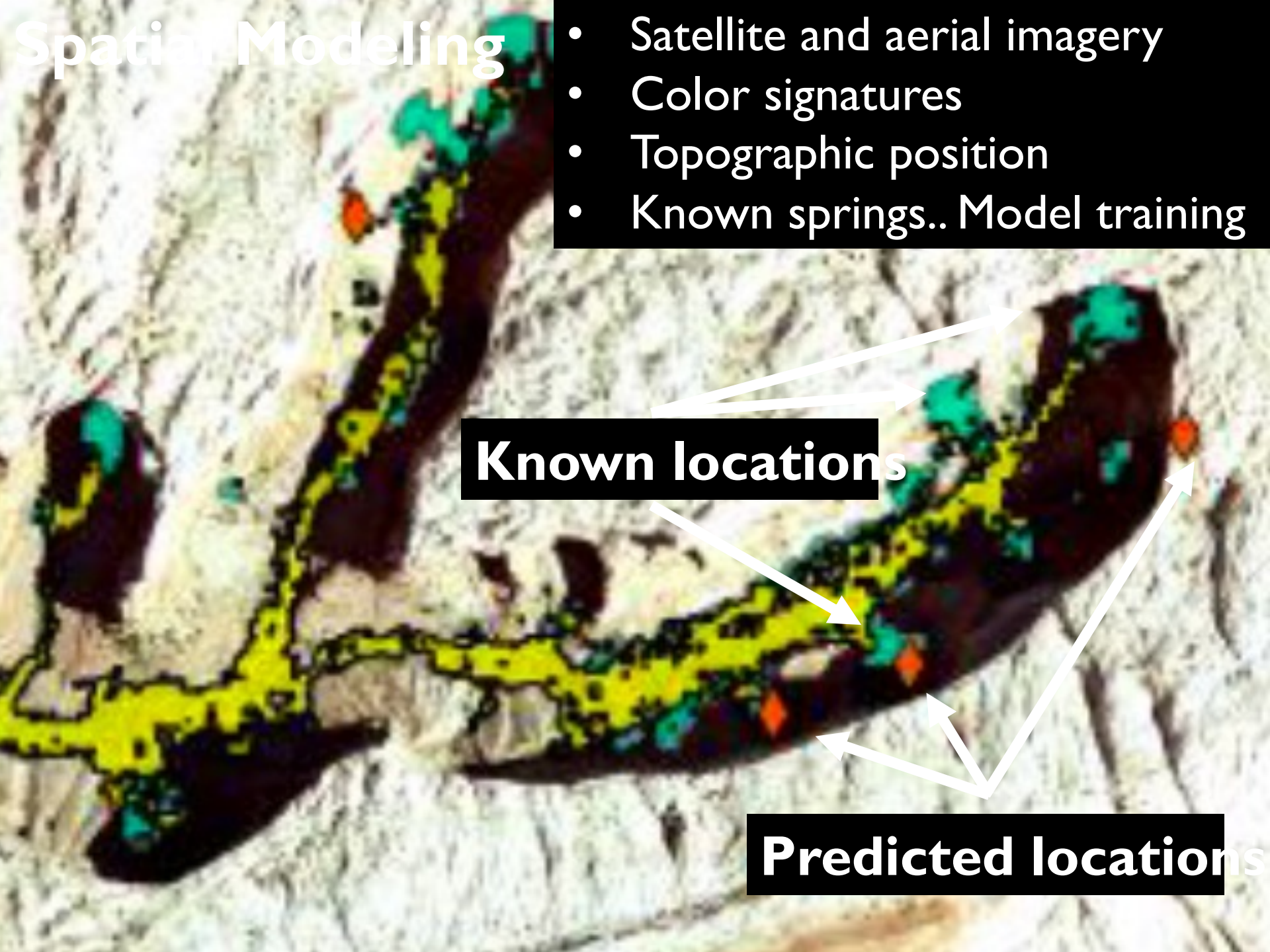
Escalante River watershed: Springs inventory and monitoring



- 1) the extent of spring resources within the watershed;
- 2) baseline for future condition of these ecosystems;
- 3) identification of particular springs for future monitoring

Spatial Modeling

- Satellite and aerial imagery
- Color signatures
- Topographic position
- Known springs.. Model training









Known locations

Predicted locations

Validation Survey App

- Volunteers navigate to a potential spring site identified by the model
- Verify the presence or absence of a spring
- Record: type of spring; approximate size, levels of disturbance; and ecological significance
- Volunteer will mark the location of the spring and take a photo

2:15   

My Survey   

Please enter in Site ID *
(5 digits)

▼ **Groundwater Dependent Ecosystem Characteristics**

Evidence of Groundwater (GW: spring, wet ground) *

Yes


No

▼ **Spring Rating and Additional Notes**

Based on survey results, rate the sites ecological importance

High Ecological Significance (*strong discharge, diverse species list, complex microtopography, distinctive species, large areal extent (>100 sq. m.), lack of flooding, major disturbance, trampling or exotic species*)

Medium Ecological Significance (*moderate to low discharge, less diverse flora and microtopography, smaller size (<100 sq.m.) signs of disturbance and/or exotics present, sometimes dominated by 1 or a few species*)



Post-survey/inventory

- Field data will be uploaded from the tablets/iPads and stored in a central database
- Escalante springs inventory may be added to the Spring Stewardship Institute's national database
- Ecologically significant springs can be surveyed in detail and monitored