



Chesapeake Healthy Watersheds Assessment

SIGNALS OF CHANGE INDICATORS TO SERVE MULTIPLE OUTCOMES

UPDATES

Chesapeake Bay Watershed Health Index



Landscape Condition



Hydrology



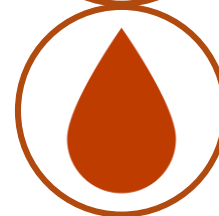
Geomorphology



Habitat

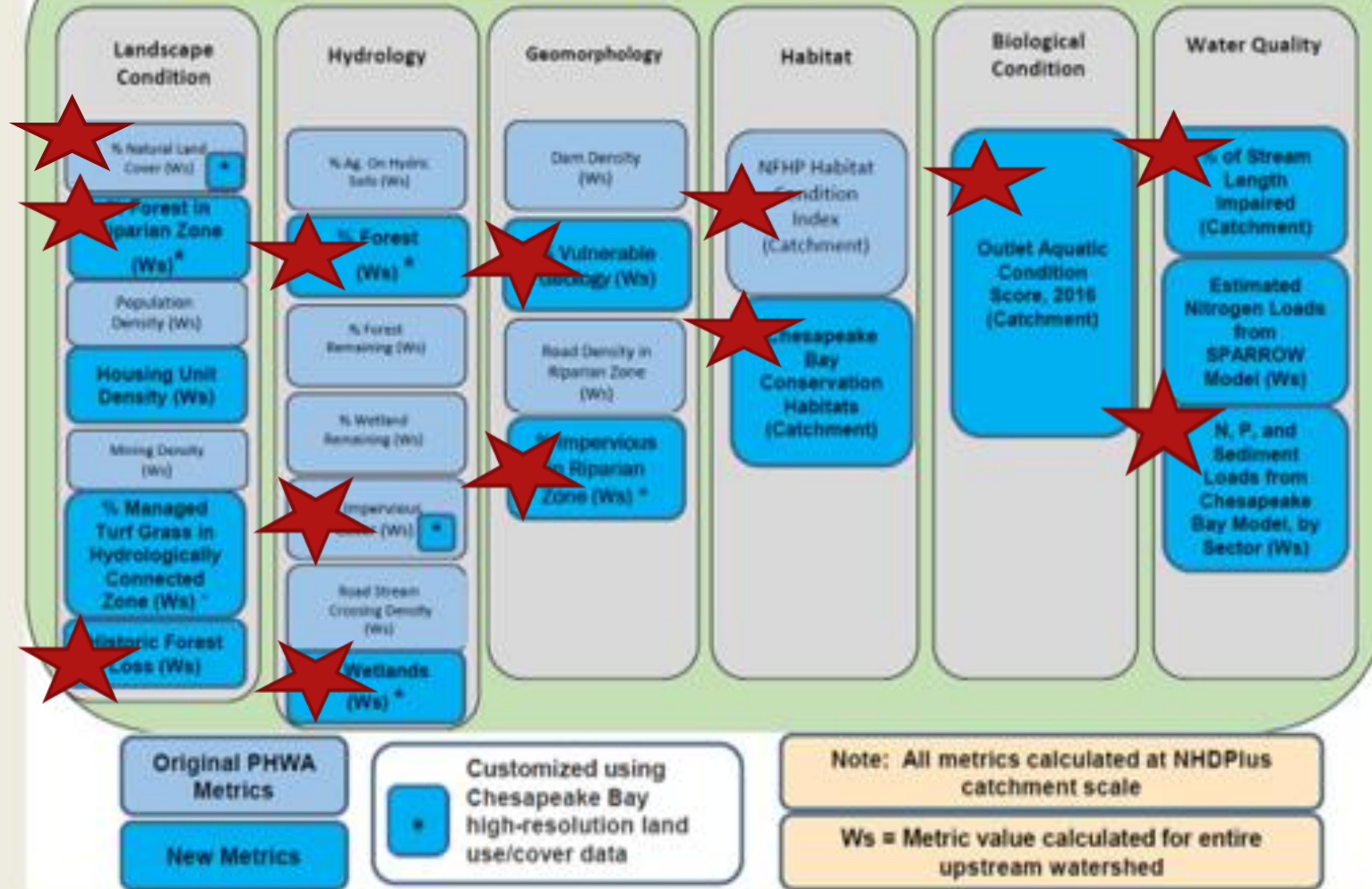


Biological Condition



Water Quality

Chesapeake Bay Watershed Health Index **DRAFT**



CHESAPEAKE BAY WATERSHED VULNERABILITY INDEX



Land Use Change



Water Use

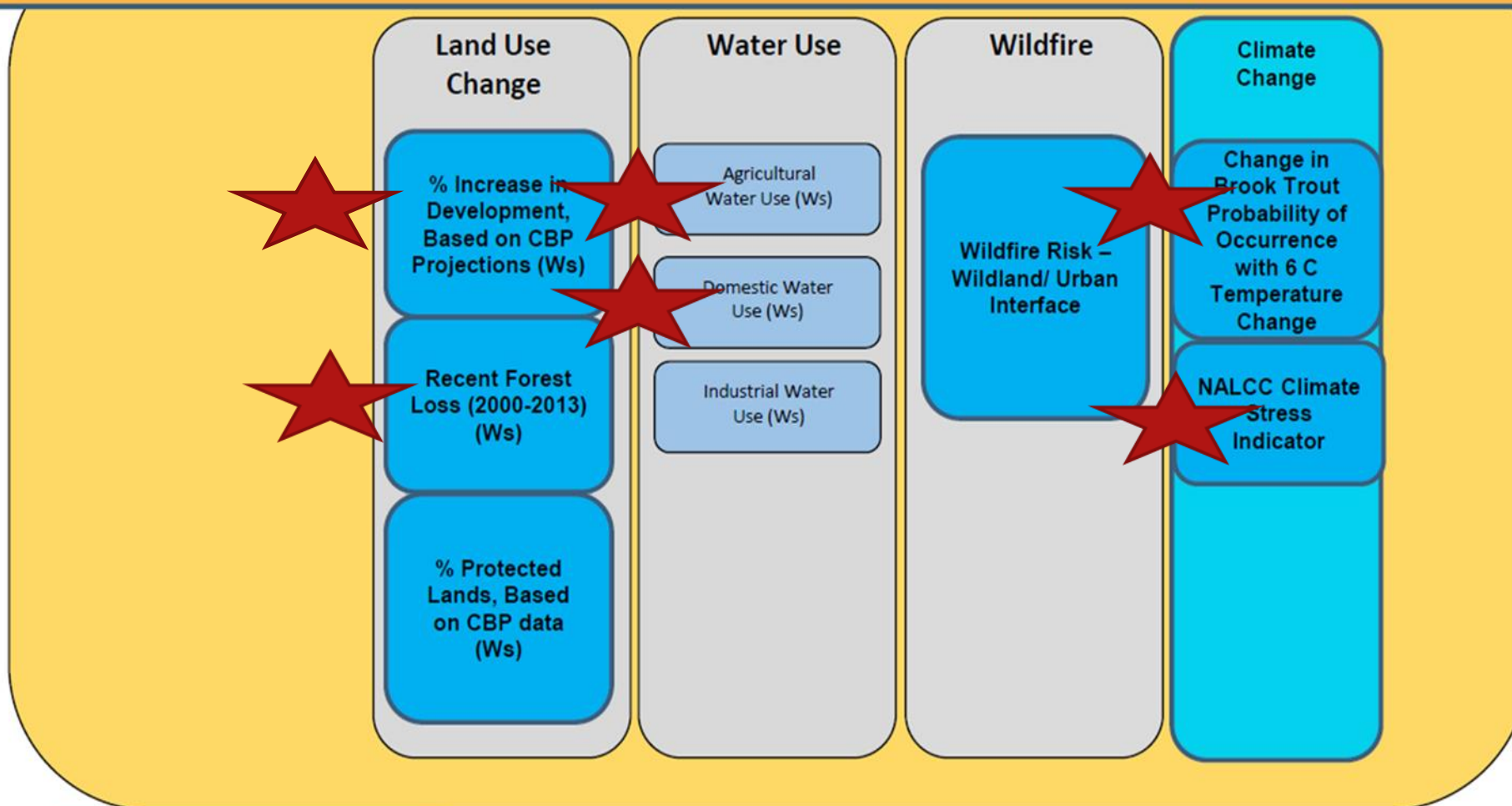


Wildfire



Climate Change

Chesapeake Bay Watershed Vulnerability Indicators ****DRAFT****



Original PHWA Metrics

New Metrics

Note: All metrics calculated at NHDPlus catchment scale

Ws = Metric value calculated for entire upstream watershed

-
- % Forest Cover
 - % Impervious Cover
 - Landscape Condition Index
 - Hydrology Index
 - Geomorphology Index
 - Habitat Index
 - Biological Condition Index
 - Water Quality Index
 - Vulnerability Indices
 - Land Use Change
 - Water Use
 - Wildfire
 - Climate Change

**Watershed Characteristics
(metrics and indices)**

**Indicators
of
Watershed Health**

- Stream flow alteration
- Stream temperature alteration
- Stream / floodplain connectivity
- Aquatic community composition
- Toxics
- Emerging contaminants
- Fish Diseases
- Bacteria
- Nutrients
- Sediment

**Diagnostic Measures
of Stream Health**

WATERSHED HEALTH
AND VULNERABILITY

Signals of Change

WATERSHED HEALTH
AND VULNERABILITY

Management Questions