Fish Habitat Outcome: What Can Local Governments Do?

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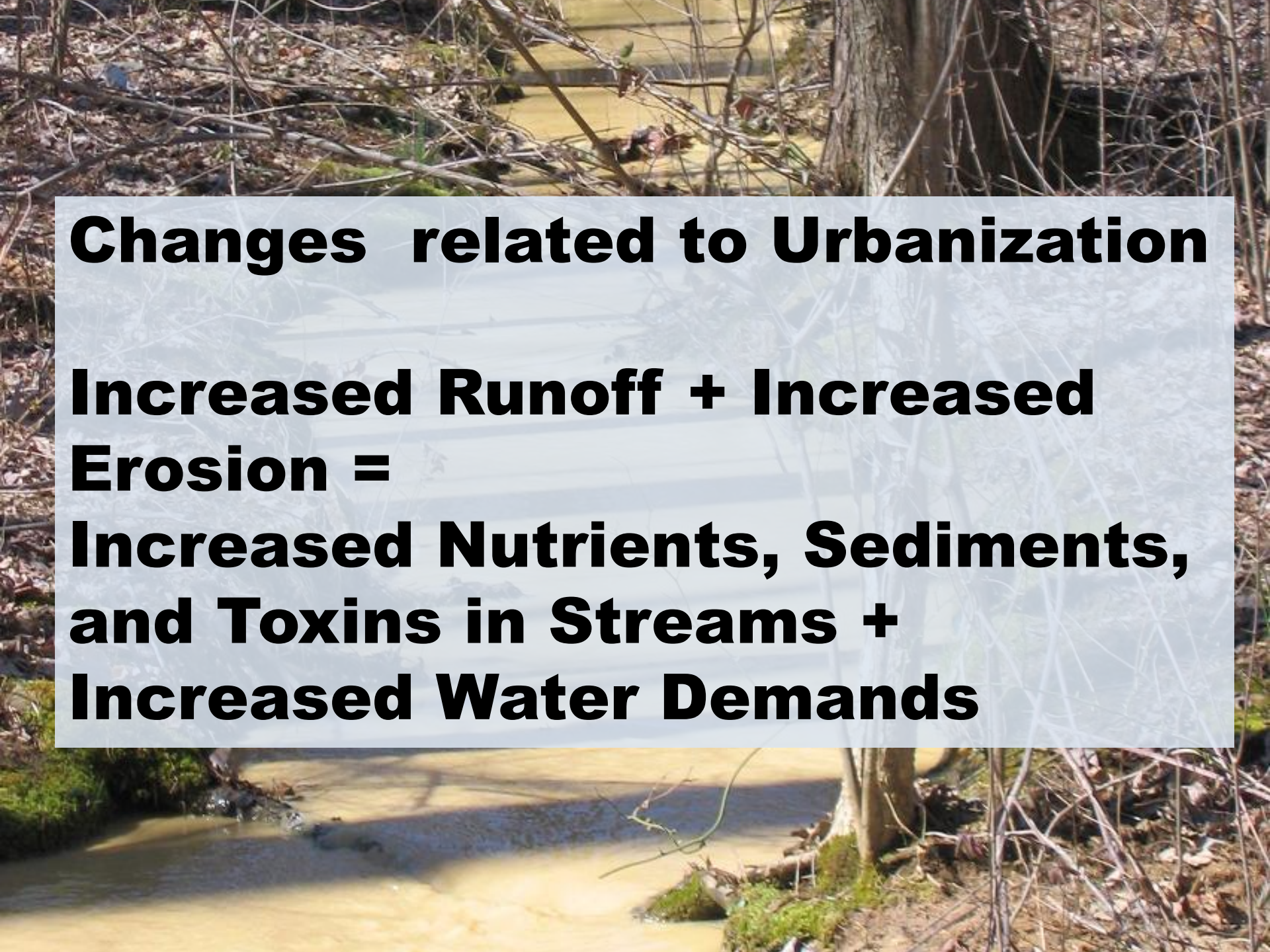
If the fish are there, they will come!

And they will fish!

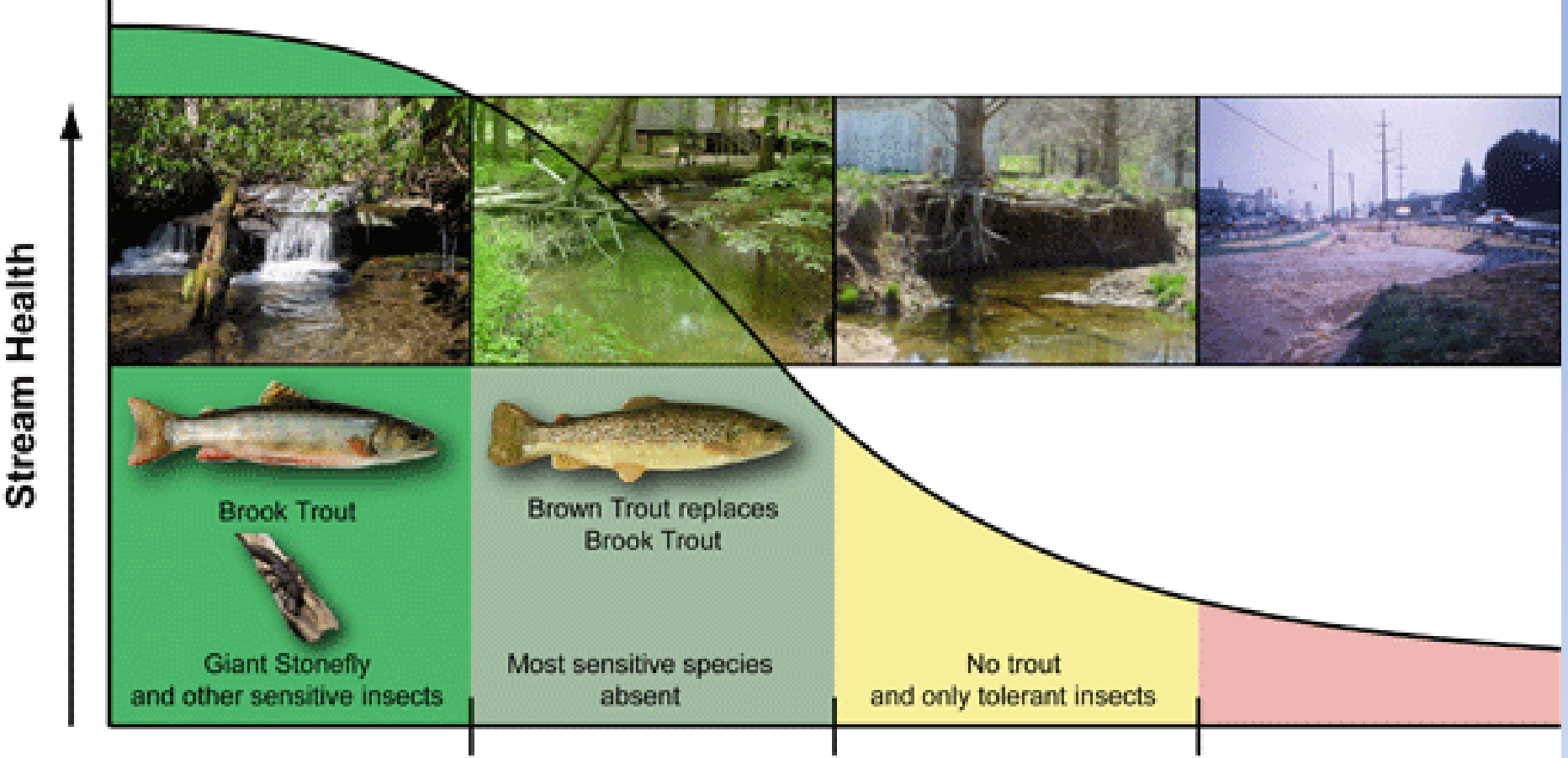
And they will eat!


Changes in land use are
associated with changing habitat

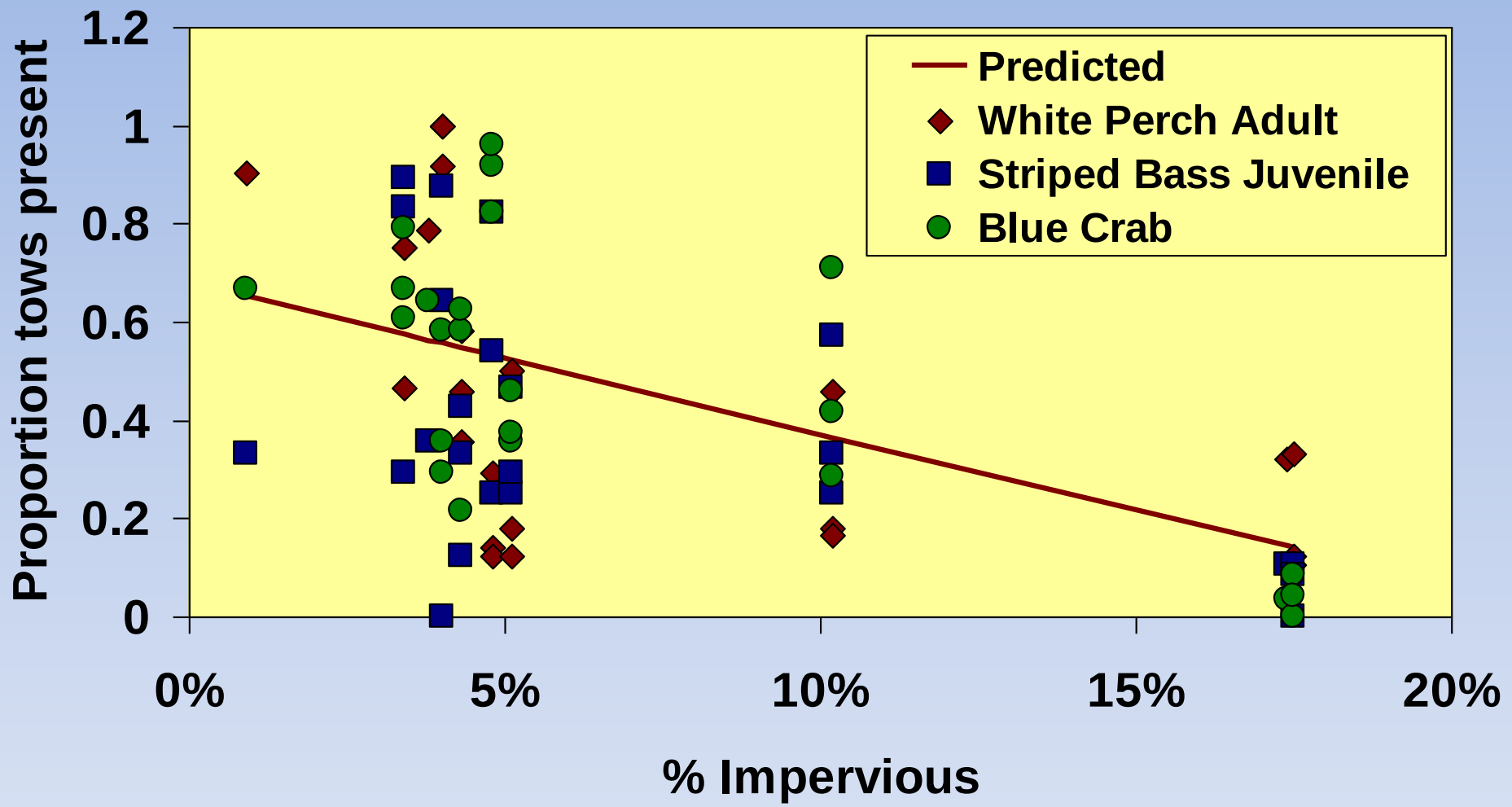


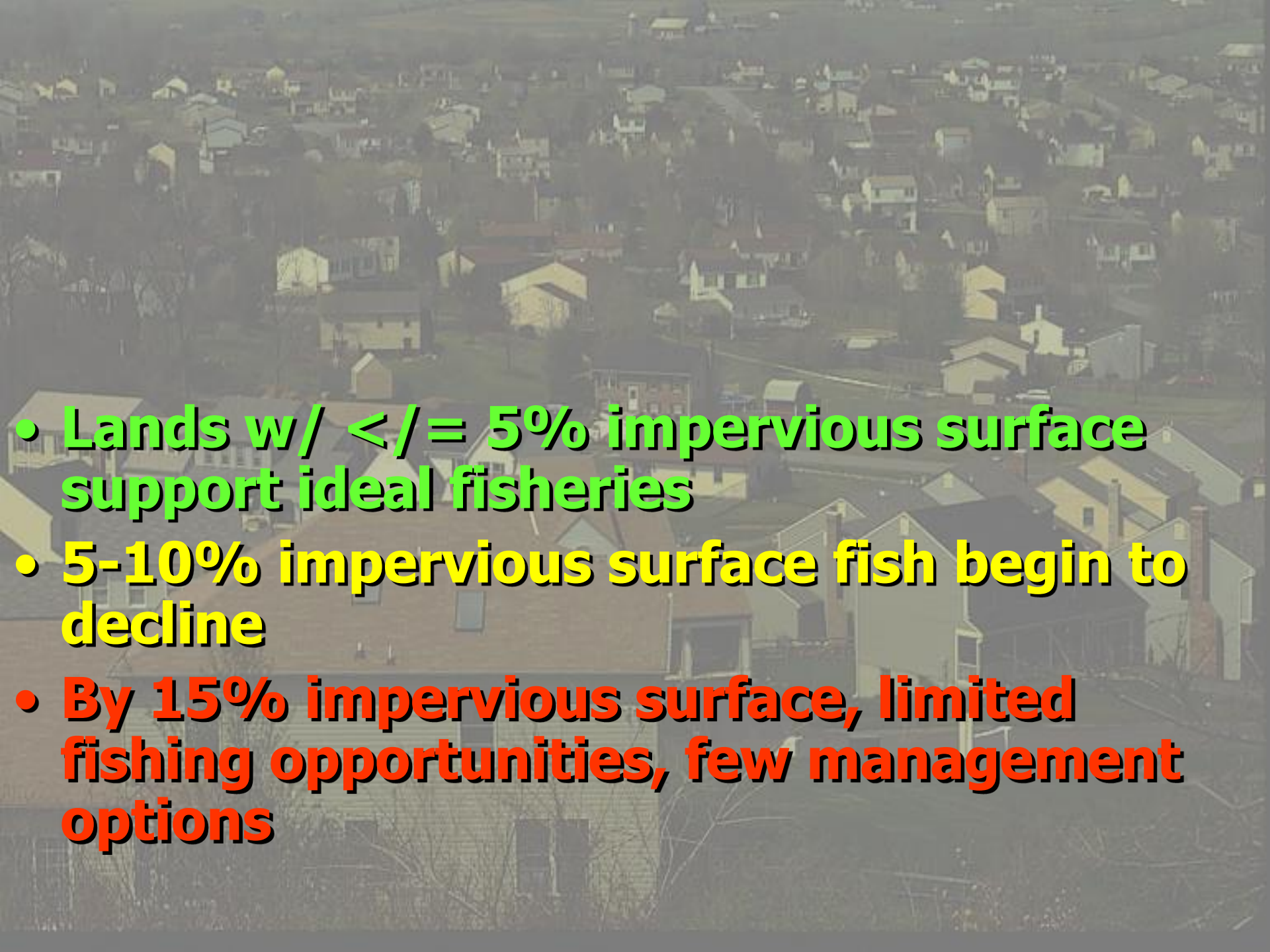
Changes related to Urbanization

Increased Runoff + Increased Erosion =
Increased Nutrients, Sediments, and Toxins in Streams +
Increased Water Demands

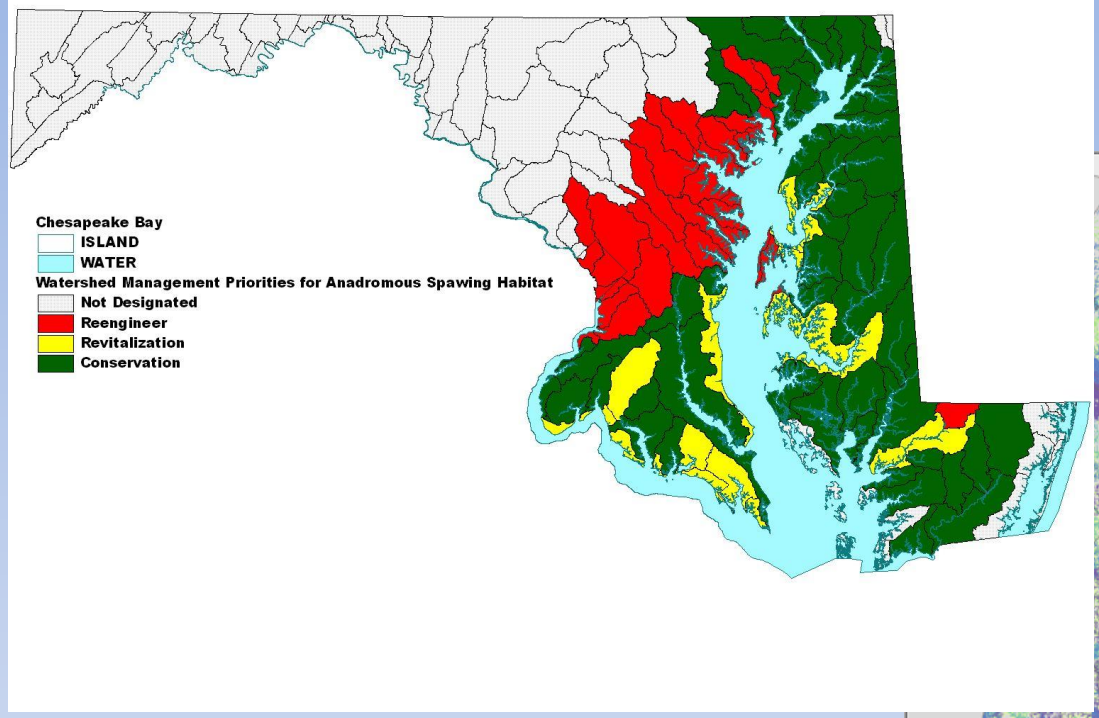


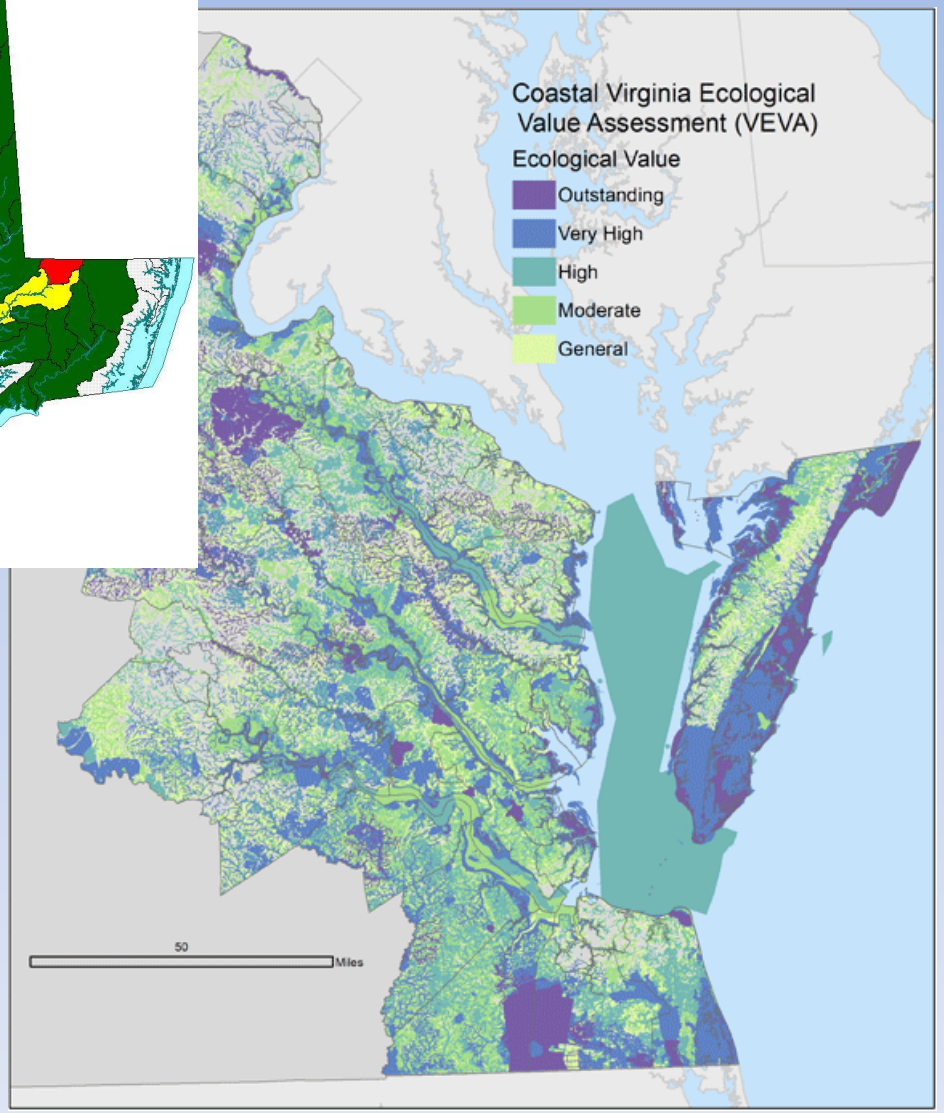
<5%	5-10%	10-20%	>20%
• Water cool and clean • Stream banks and bottom typically stable • Trout can be found • Endangered species can be found • Many fish species • Many salamander species • Many freshwater mussels • Many insect taxa	• Water may be warmer and slightly polluted • Erosion may be evident • No brook trout • Most rare and endangered species absent • Many pollution tolerant fish • Fewer salamander species • Only tolerant mussels • Fewer insect taxa	• Water warmer • Erosion usually obvious • Trout absent • Rare stream species absent • Fewer fish species • Only three tolerant salamander species • No native mussels • Mostly tolerant insects	• Water warm and pollution usually evident • Unstable habitat • Trout absent • Non-native species dominate some streams • Only tolerant fish species • One salamander species • No native mussels • Only tolerant insects


Predicted
White Perch Adult
Striped Bass Juvenile
Blue Crab
Proportion tows present
1.2
1
0.8
0.6
0.4
0.2
0
0%
5%
10%
15%
20%
% Impervious



- Lands w/ </= 5% impervious surface support ideal fisheries
- 5-10% impervious surface fish begin to decline
- By 15% impervious surface, limited fishing opportunities, few management options


Chesapeake Bay
ISLAND
WATER
Watershed Management Priorities for Anadromous Spawing Habitat
Not Designated
Reengineer
Revitalization
Conservation


Coastal Virginia Ecological
Value Assessment (VEVA)
Ecological Value
Outstanding
Very High
High
Moderate
General
50
Miles


Sustainable Growth
Includes Fish Habitat in the
Planning Process


What is good for fish
is good for people


Land Conservation is Fish Conservation
www.dnr.maryland.gov/fisheries/fhep