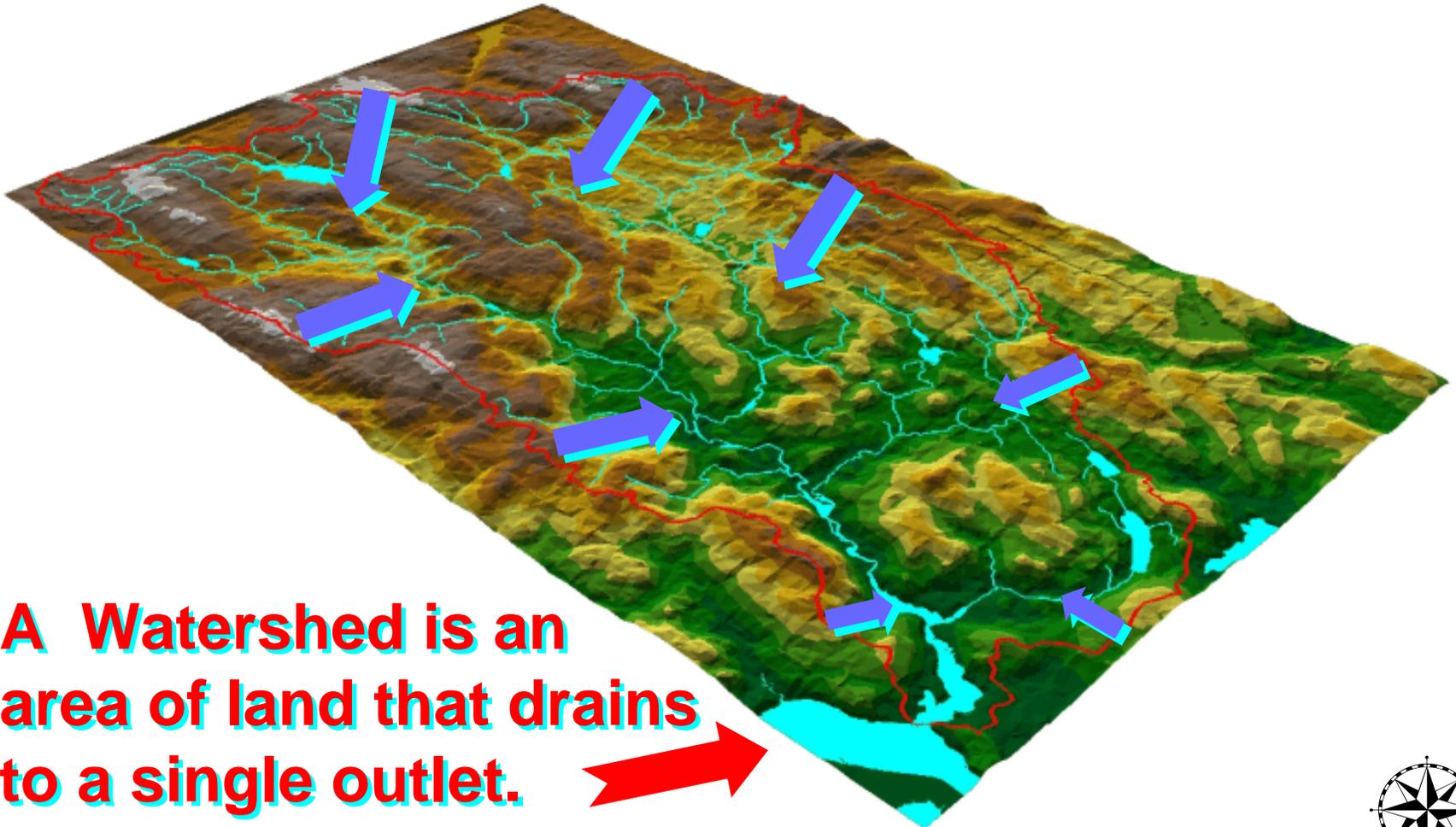


*Resource-Based
Land Use Planning
A Watershed Perspective*

*Alfred Wanger
California Coastal Commission*

What is a Watershed?



A Watershed is an area of land that drains to a single outlet.





WARNING

OCEAN WATER CONTACT MAY
CAUSE ILLNESS
BACTERIA LEVELS EXCEED
HEALTH STANDARDS



¡ AVISO !

EL CONTACTO CON AGUA DEL
OCEANO PUEDE CAUSAR
ENFERMEDADES

LOS NIVELES DE BACTERIAS
EXCEDEN LOS APROBADOS
DE SALUD

 STATE WATER RESOURCES CONTROL AUTHORITY
CALIFORNIA WATER RESOURCES CONTROL AUTHORITY
WWW.CALIFORNIAWATERRESOURCESCONTROL.COM



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Poor Management Practices



Better Management Practices



This BMP might also work
in parts of California.....





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INTENSITY OF LAND USE



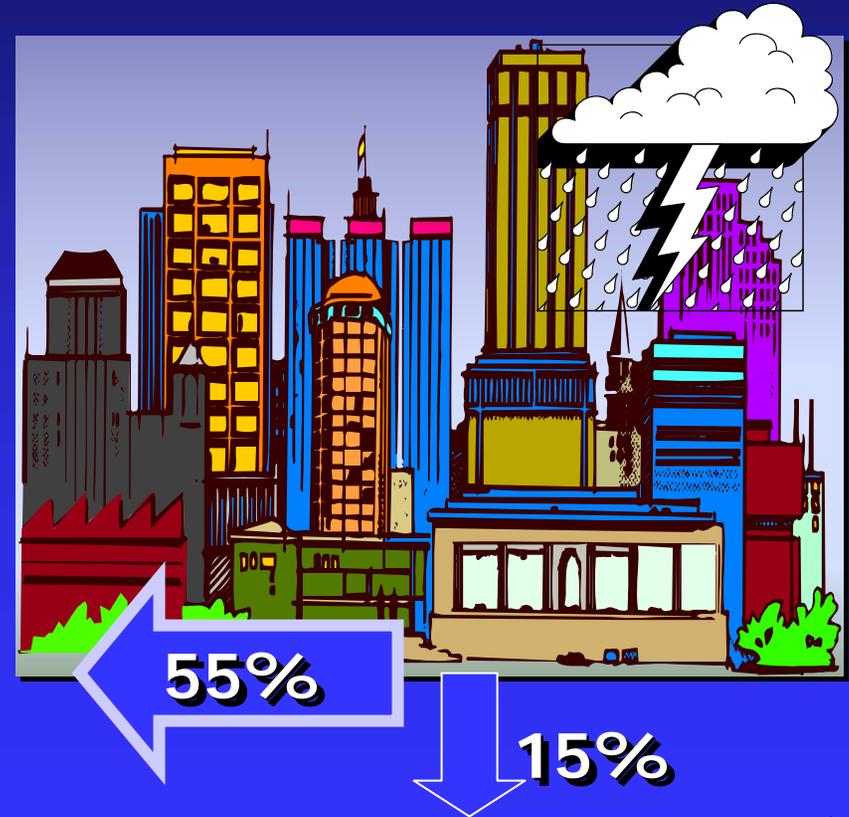
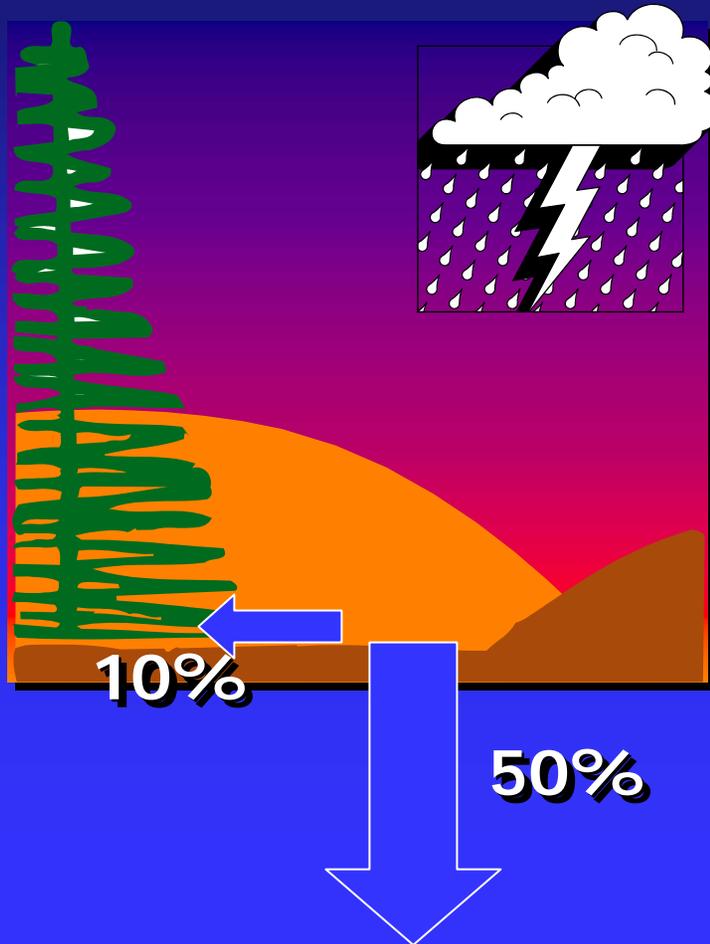
POTENTIAL WATER QUALITY PROBLEMS



AMOUNT OF IMPERVIOUS SURFACE



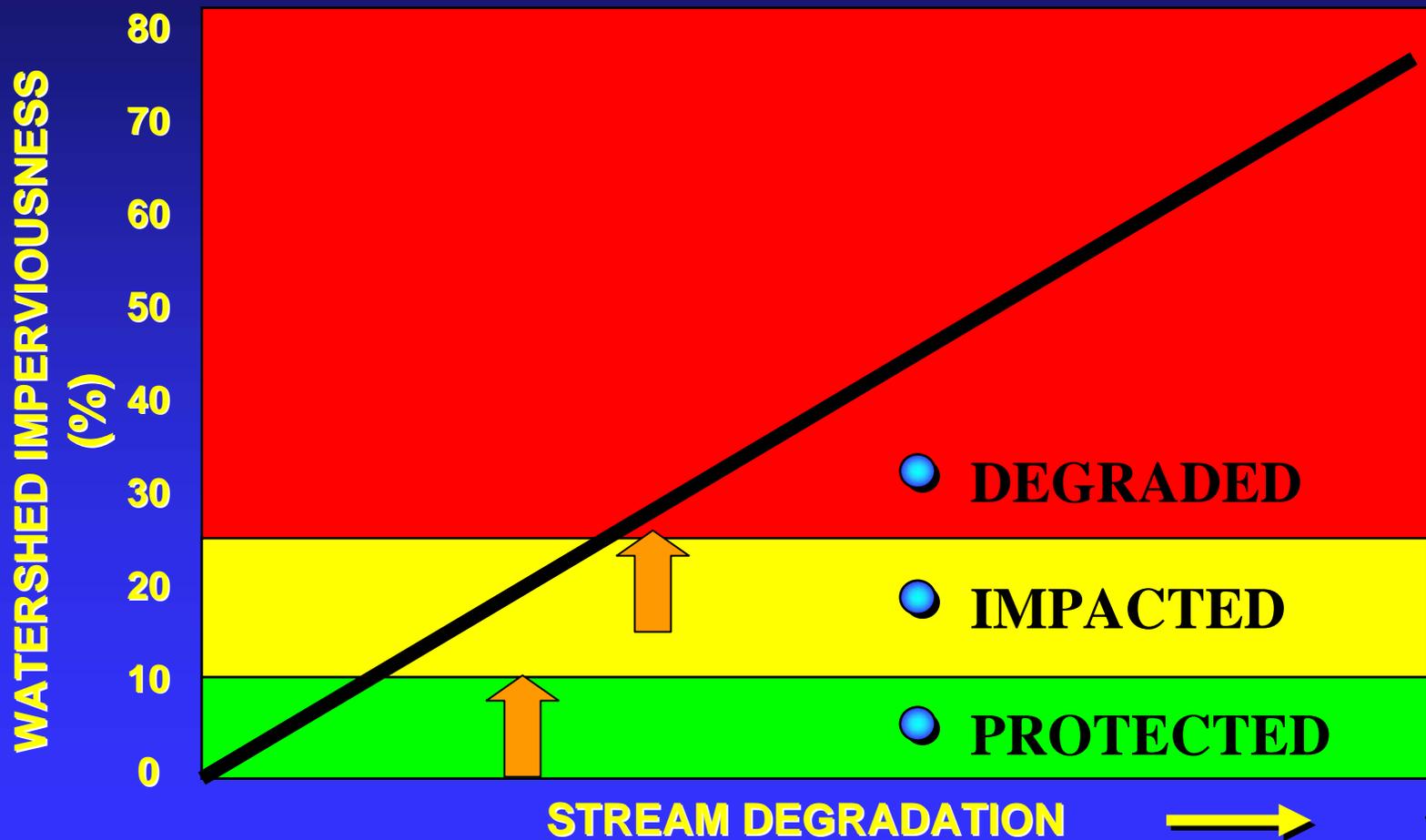
Development Impacts on the Water Cycle



Impacts to Water Supplies and Ecosystems



Waterway Health & Imperviousness

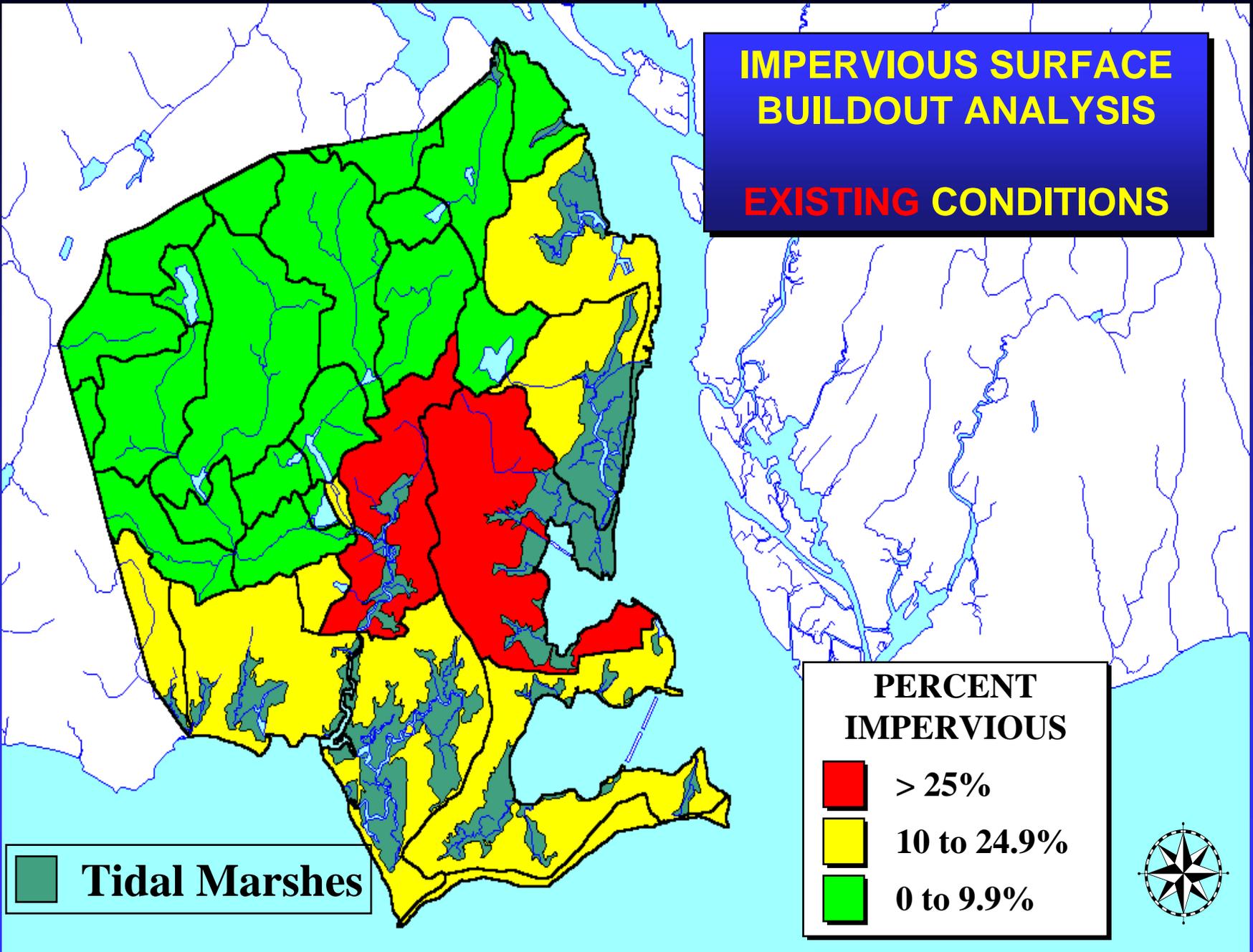


ADAPTED FROM SCHUELER, ET. AL., 1992



IMPERVIOUS SURFACE BUILDOUT ANALYSIS

EXISTING CONDITIONS



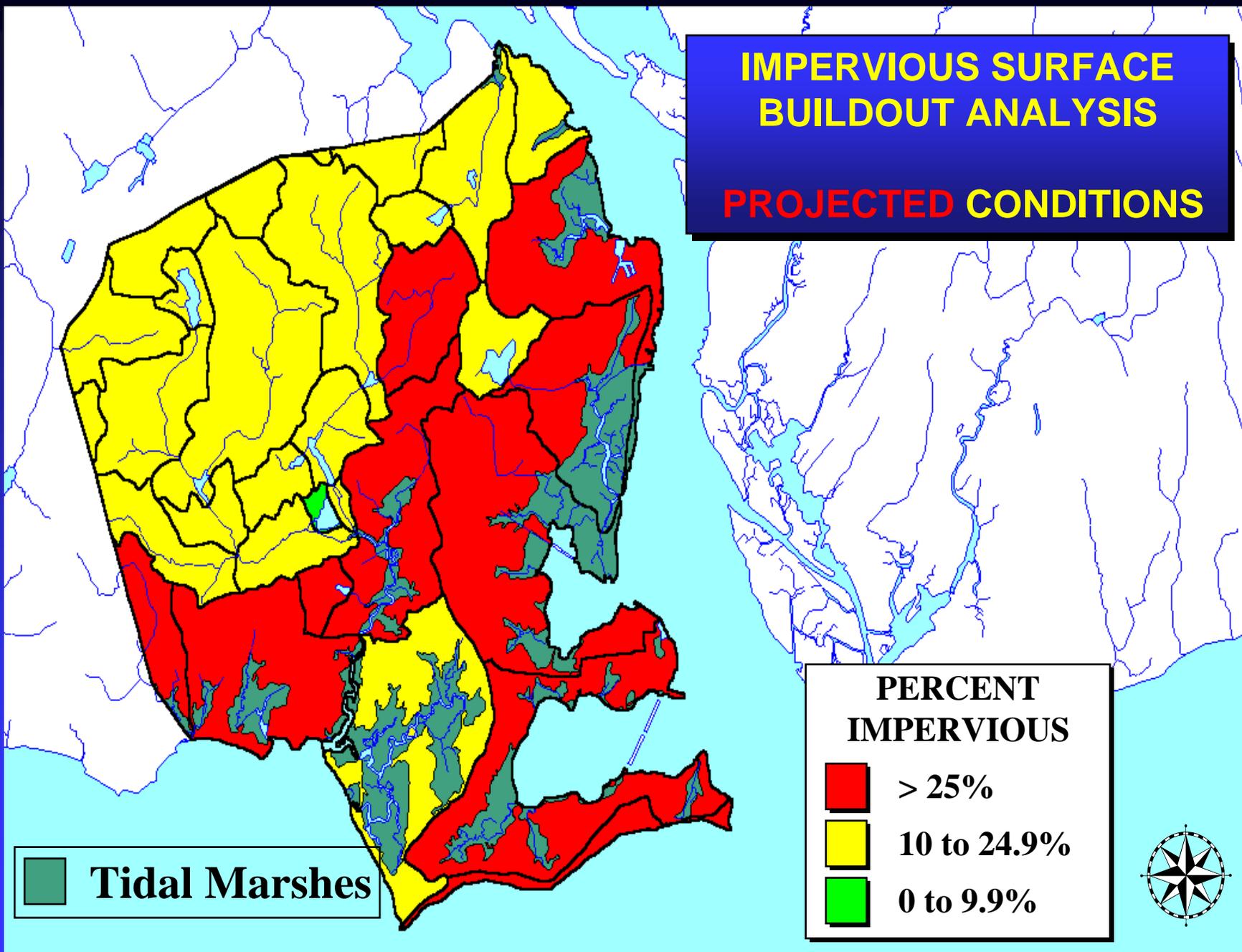
 Tidal Marshes

PERCENT IMPERVIOUS

-  > 25%
-  10 to 24.9%
-  0 to 9.9%

IMPERVIOUS SURFACE BUILDOUT ANALYSIS

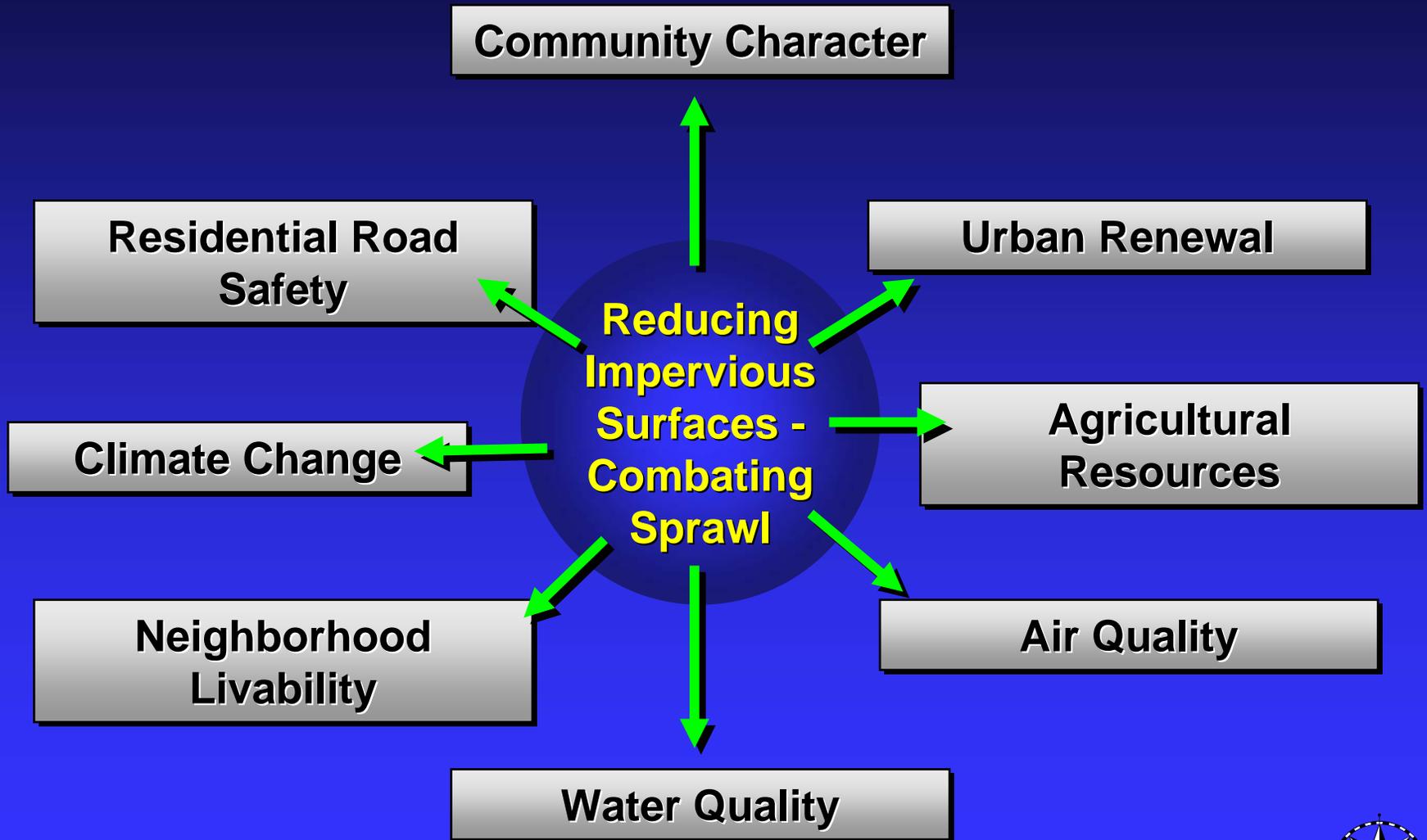
PROJECTED CONDITIONS



“The biggest influence on future water supplies and quality in California is local land use planning.”

Celeste Cantu, Former Executive Director
California State Water Resources Control Board

It's Not Just About Water...



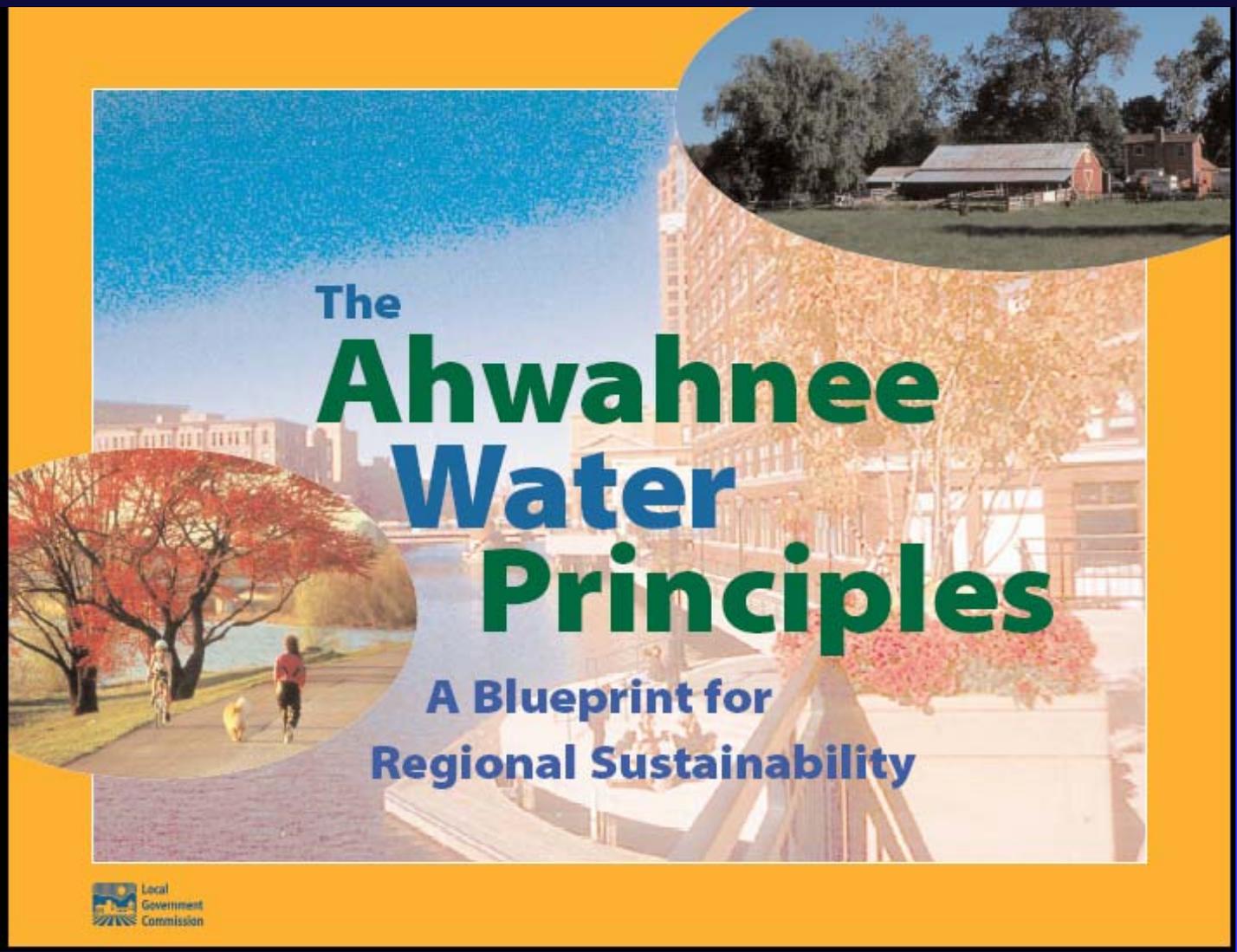
**Water Quality is dependent on
Land Use**



Land Use is a Local Decision



**Good decisions are made by well
informed boards, councils and
citizens**



The
Ahwahnee
Water
Principles

**A Blueprint for
Regional Sustainability**



Natural Resource Based Planning



Natural Resource Based Planning

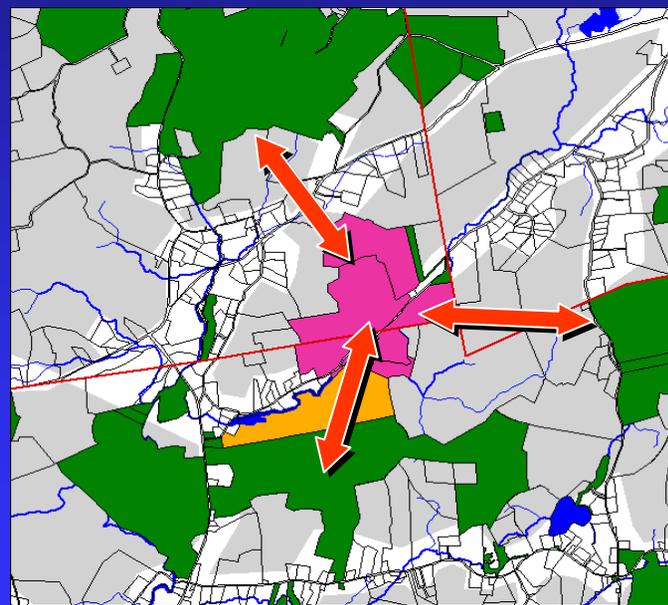
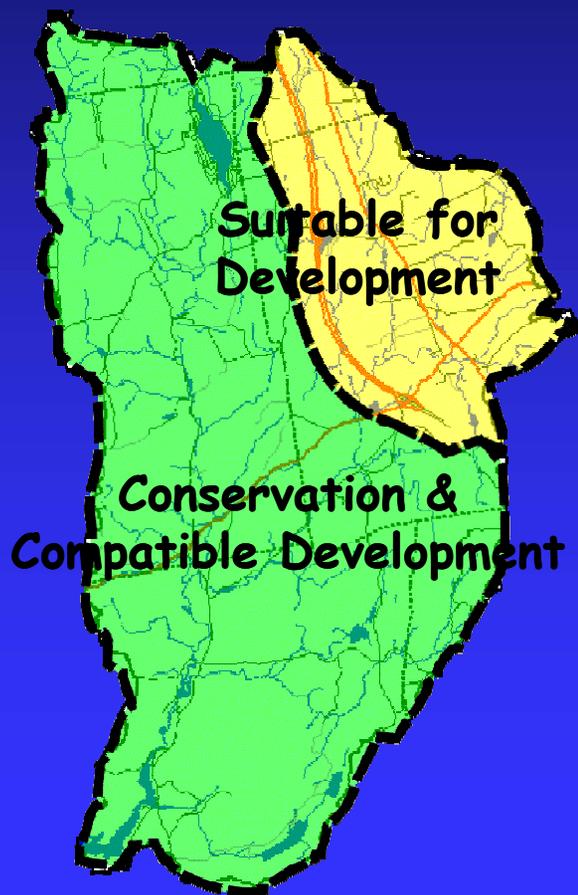
- put development in context of local and regional watersheds
- retain the natural landscape
- reduce impervious surfaces
- emphasize on-site drainage of stormwater and promote infiltration
- encourage riparian buffers



Develop An Action Plan

From the broad
conceptual...

...to the specific
parcel level.



“We need large scale community design to protect the biological and physical integrity of watersheds.”

Michael Thomas, Assistant Executive Officer
Central Coast Regional Water Quality Control Board



California Water and Land Use Partnership (Cal WaLUP)

A collaborative effort to advance Low Impact Development and improve land use planning to protect water supplies and natural resources.

Cal WALUP



Current Members:

- University of Southern California Sea Grant Program
- California Coastal Commission
- Center for Water and Land Use - UC Davis Extension
- Local Government Commission
- Los Angeles and San Gabriel Rivers Watershed Council
- Cal EPA, Office of Environmental Health Hazard Assessment
- University of California Sea Grant/Cooperative Extension
- State Water Resources Control Board
- NOAA Coastal Services Center
- US EPA
- California Stormwater Quality Association (CASQA)
- Southern California Water Resources Research Project (SCWRRP)
- Water Resources Institute

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California Coastal Commission
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