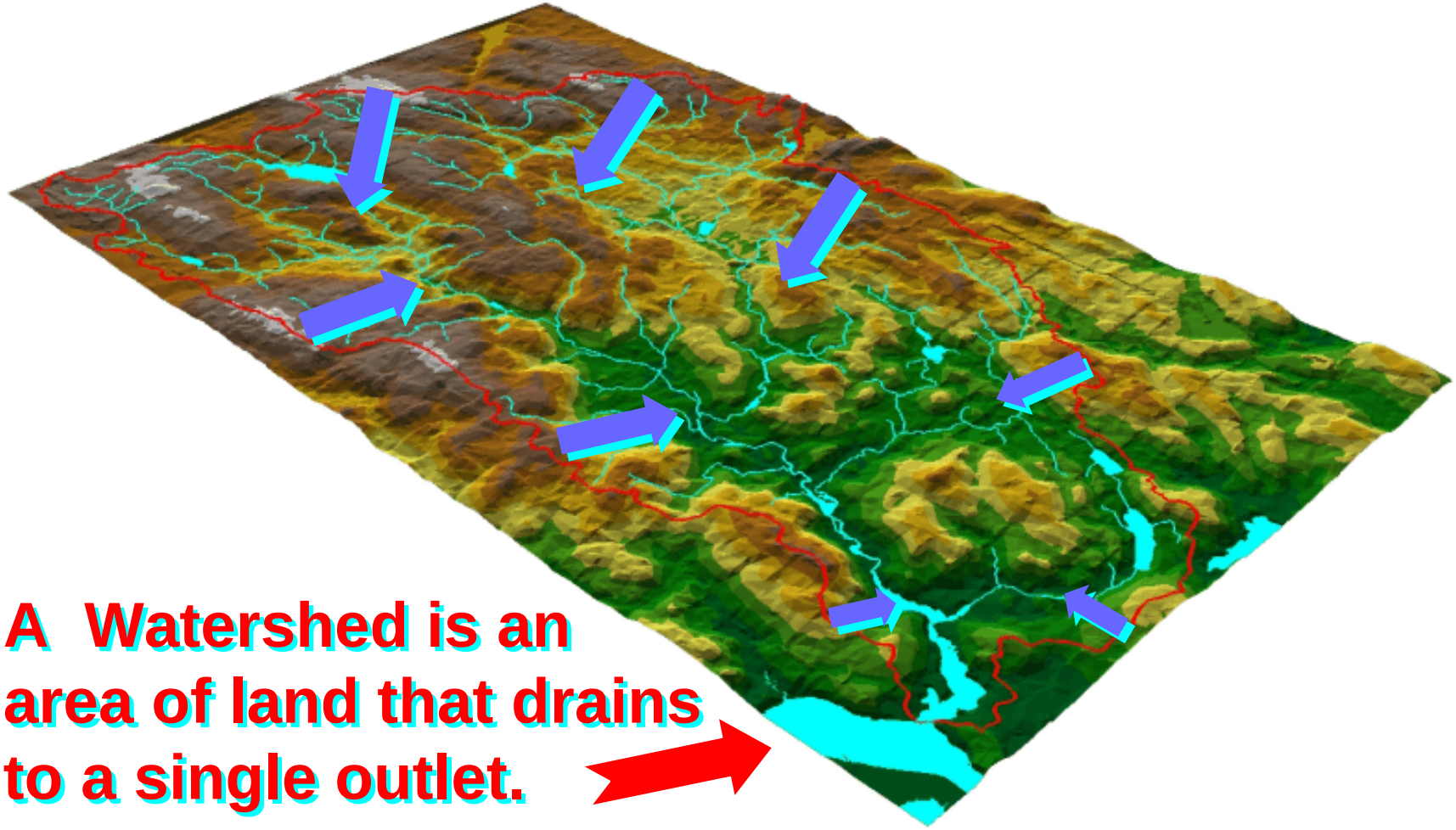
Resource-Based Land Use Planning A Watershed Perspective

Jack Gregg
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

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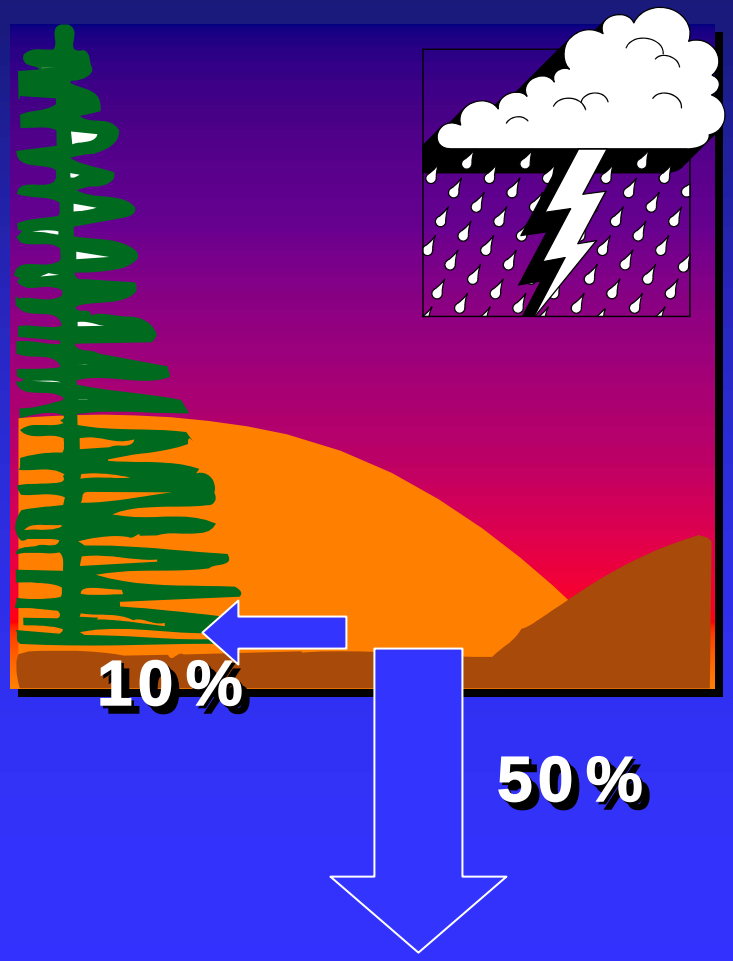
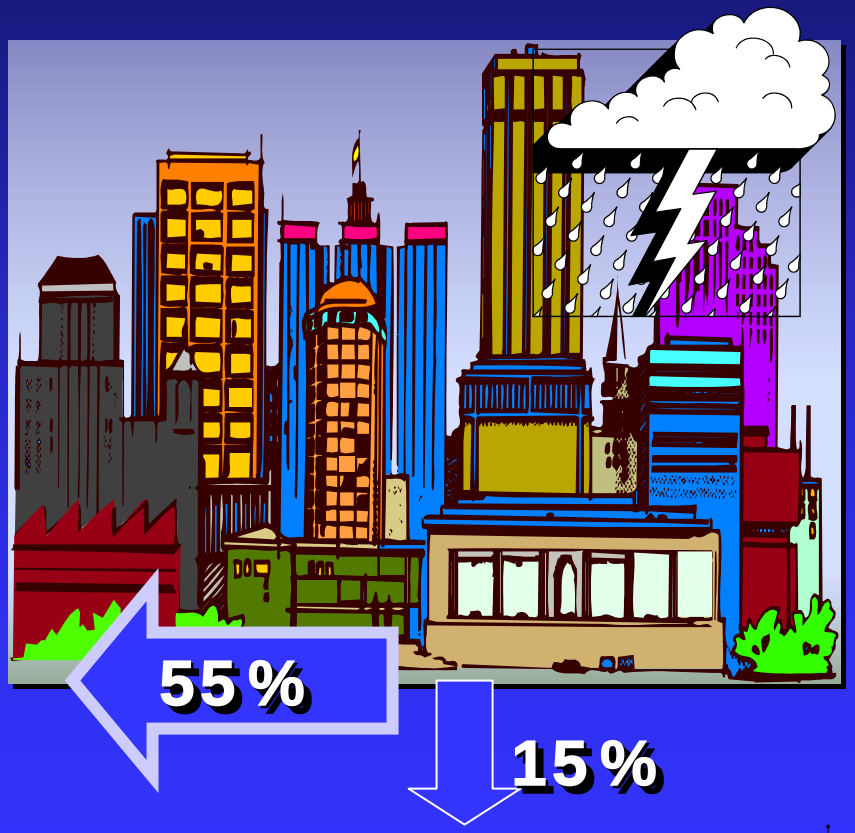
INTENSITY OF LAND USE

POTENTIAL WATER QUALITY PROBLEMS

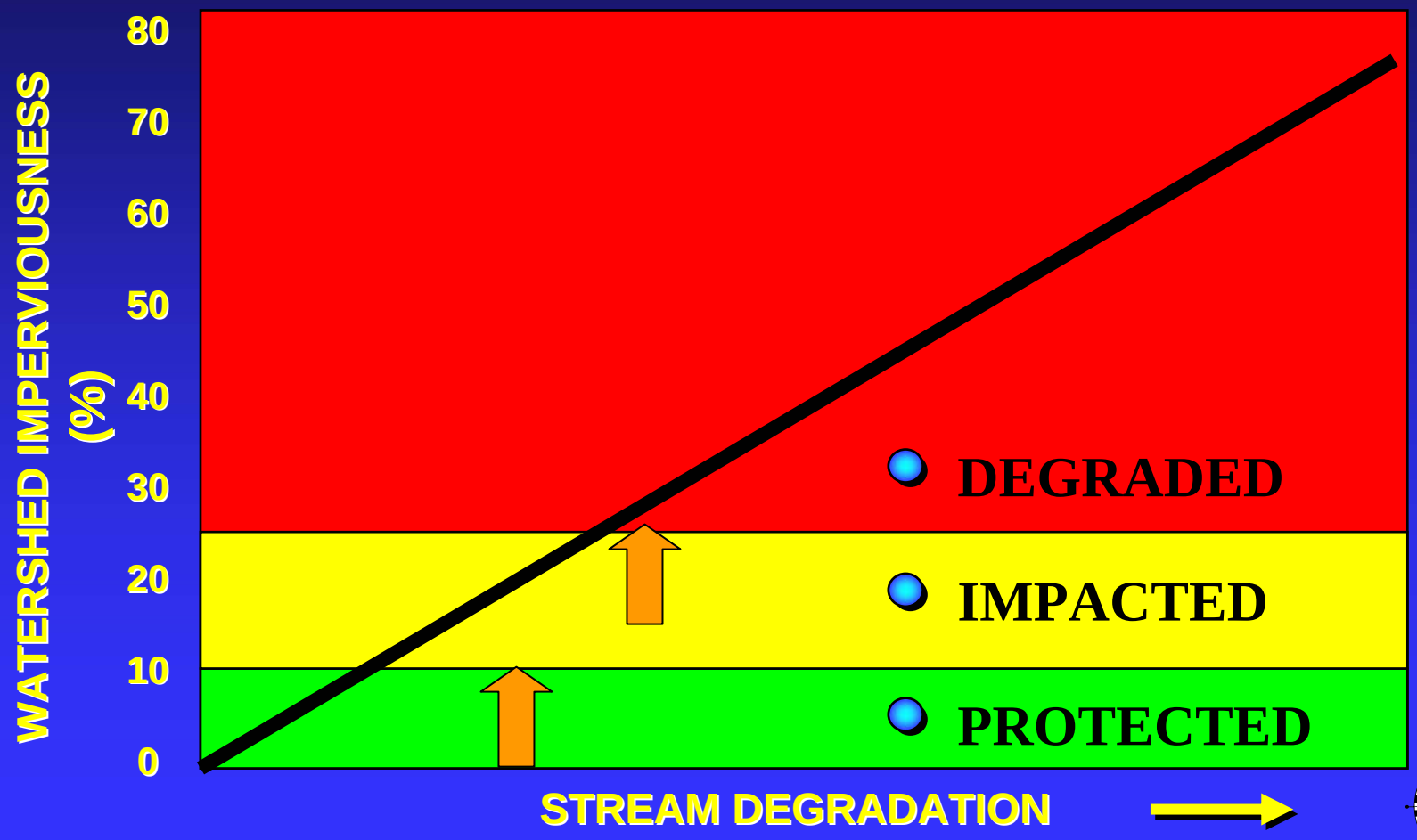
AMOUNT OF IMPERVIOUS SURFACE

Development Impacts on the Water Cycle

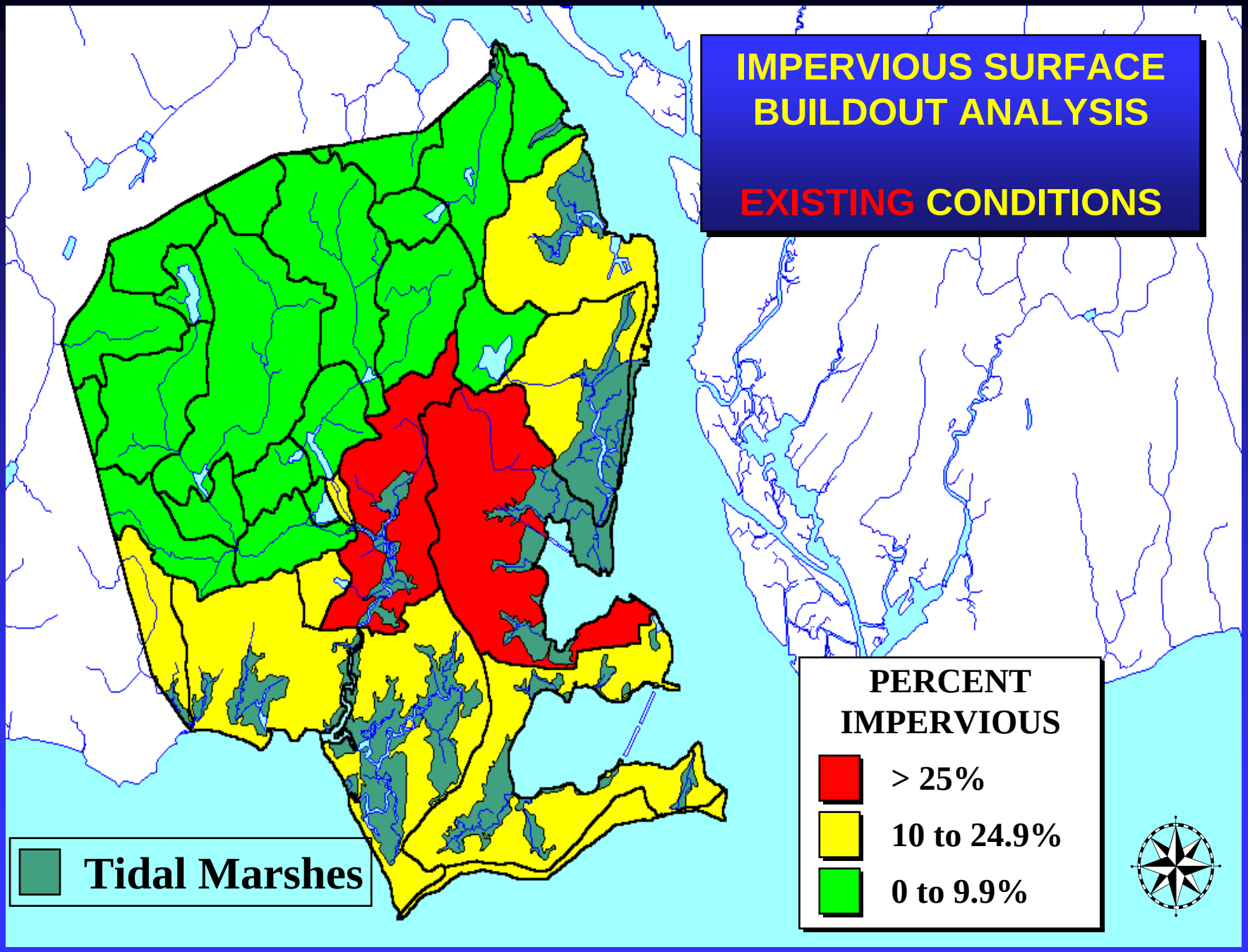


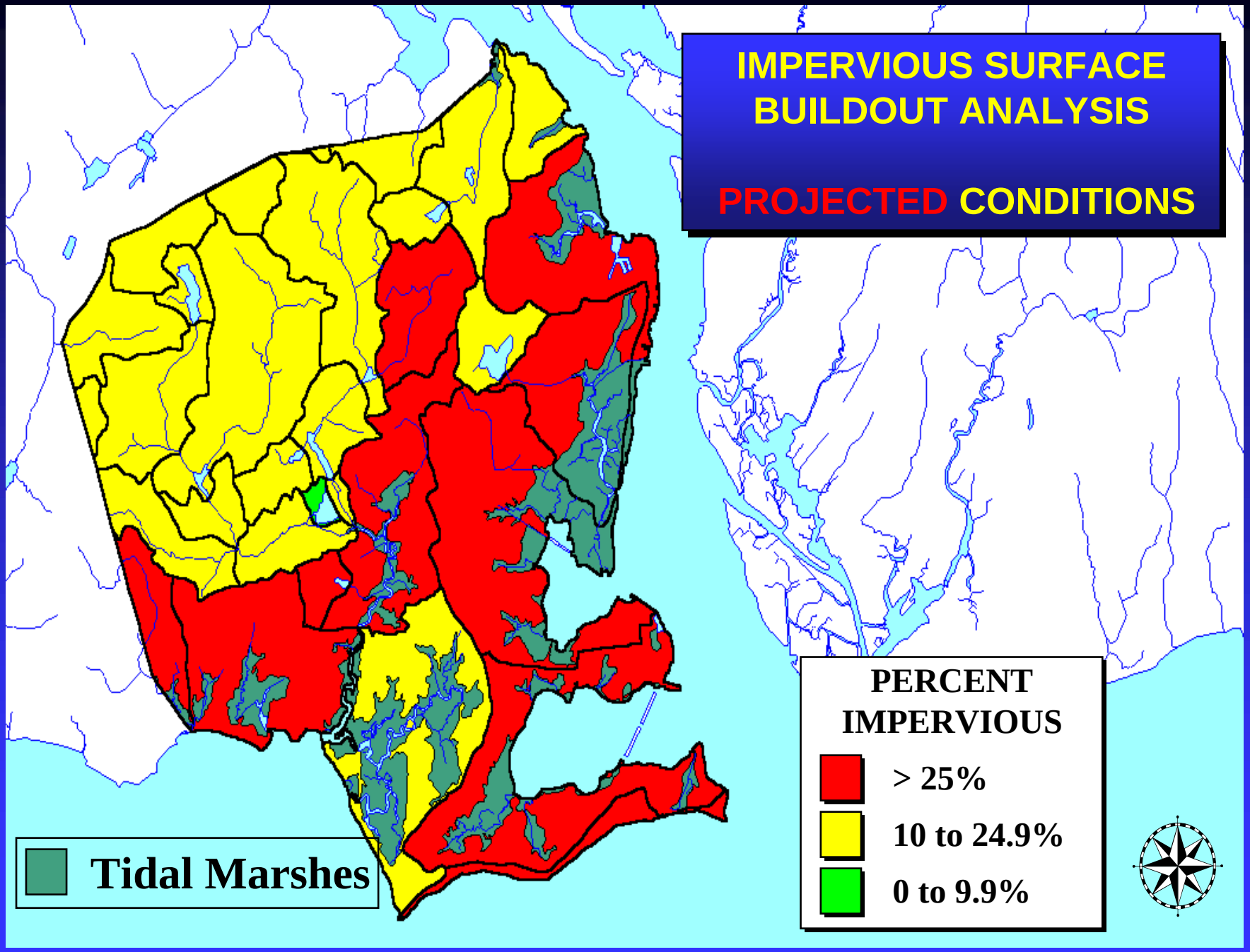


Waterway Health & Imperviousness



ADAPTED FROM SCHUELER, ET. AL., 1992


IMPERVIOUS SURFACE BUILDOUT ANALYSIS
EXISTING CONDITIONS
PERCENT IMPERVIOUS
> 25%
10 to 24.9%
0 to 9.9%
Tidal Marshes


IMPERVIOUS SURFACE BUILDOUT ANALYSIS
PROJECTED CONDITIONS
PERCENT IMPERVIOUS
> 25%
10 to 24.9%
0 to 9.9%
Tidal Marshes

"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

Water Quality is dependent on Land Use

Land Use is a Local Decision

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

Natural Resource Based Planning

inventory natural resources

open space plan

watershed plan

General plan

change regulations

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

"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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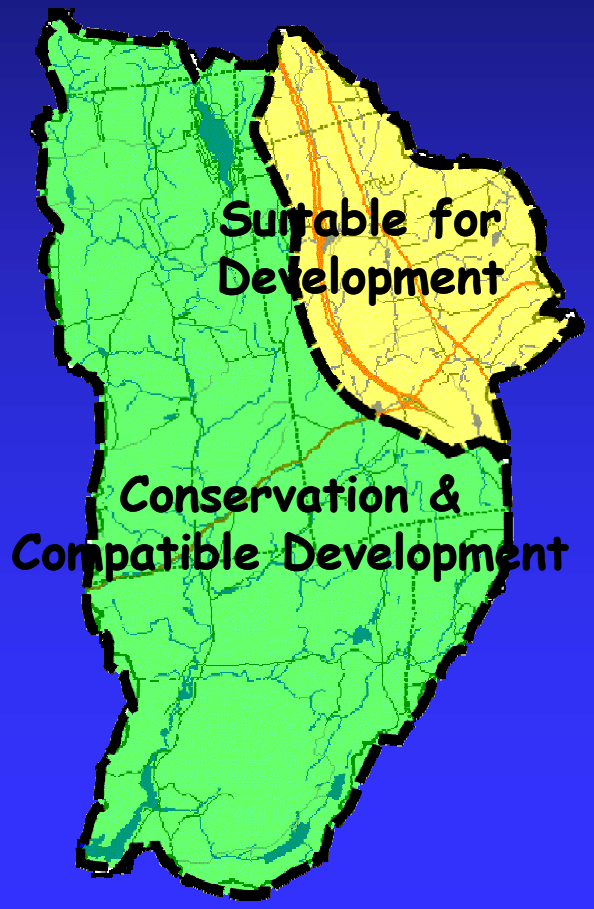
Poor Management Practices

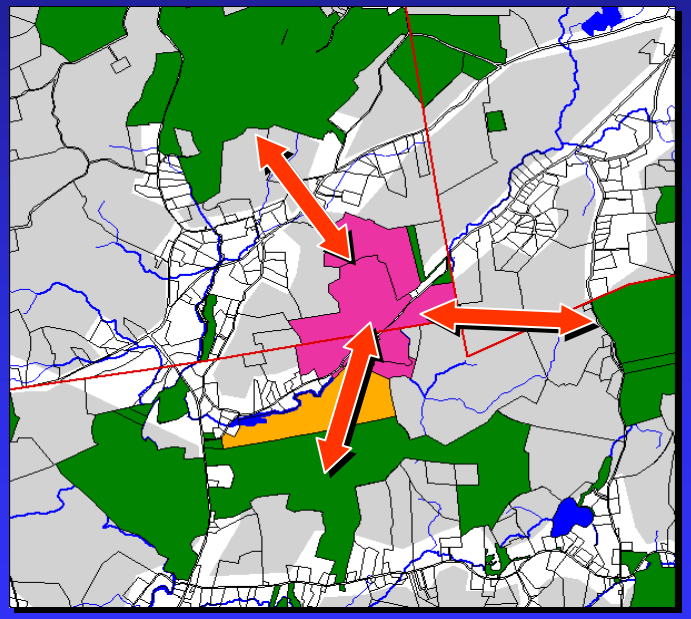
Better Management Practices

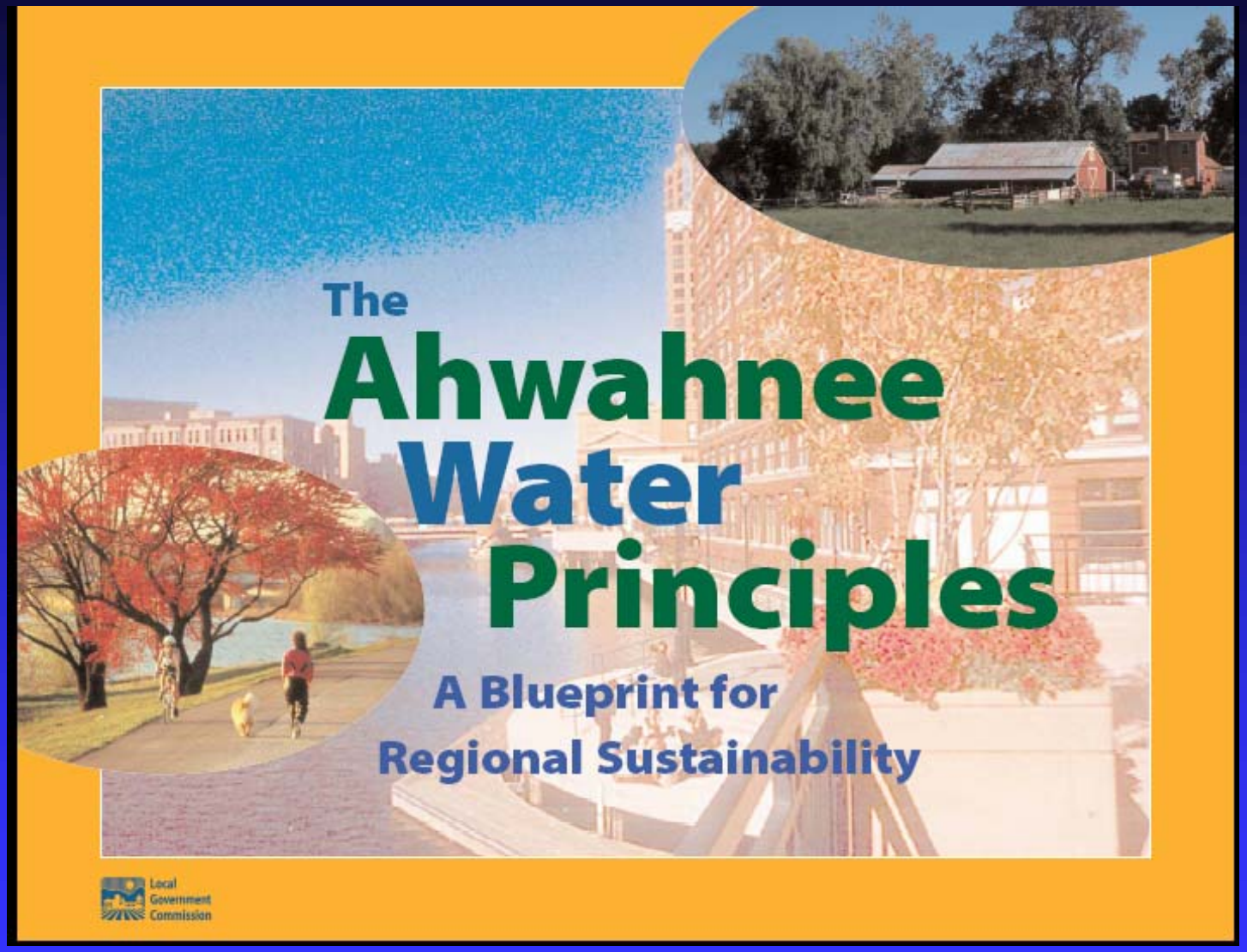
Develop An Action Plan

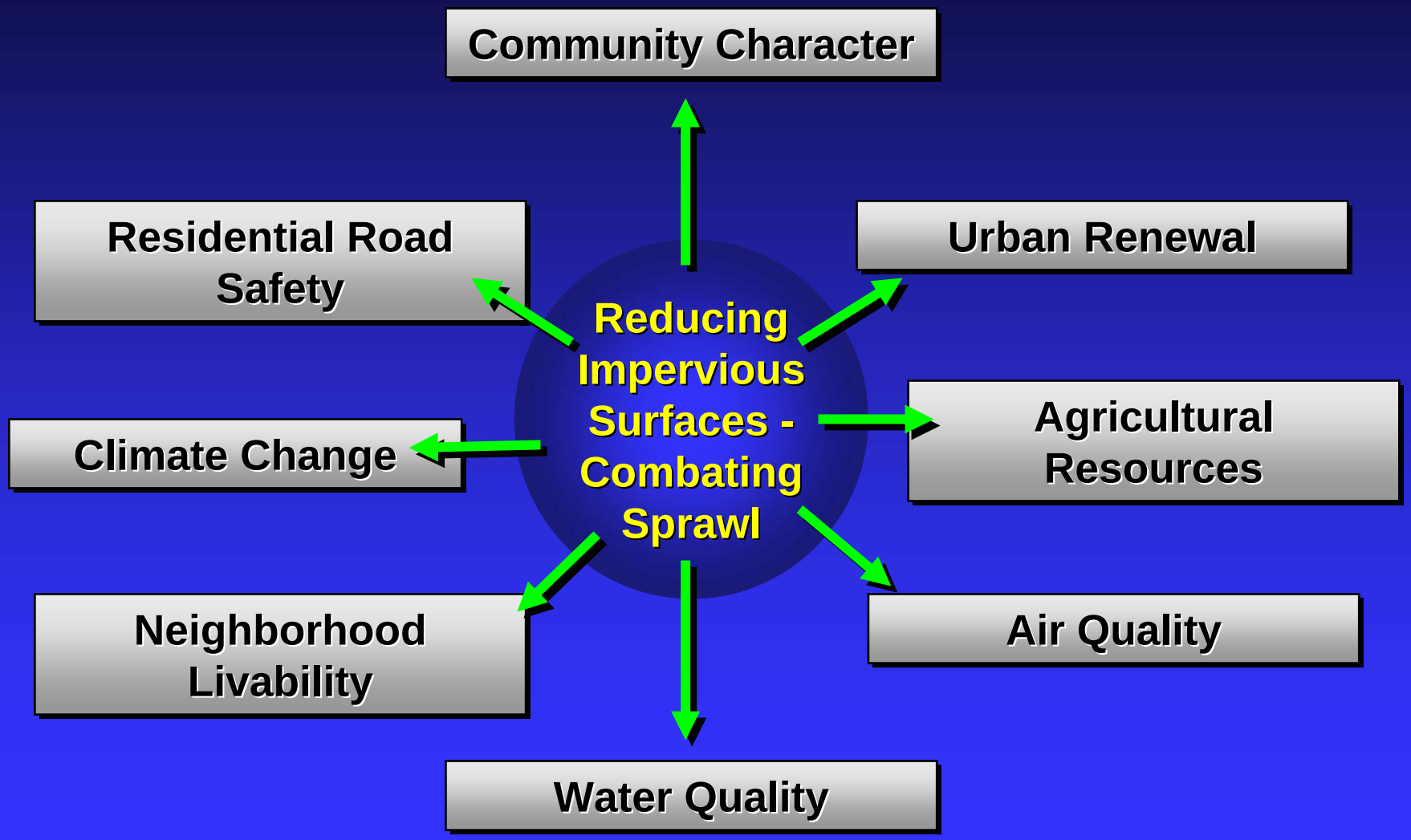
From the broad conceptual…



…to the specific parcel level.




The
Ahwahnee
Water
Principles
A Blueprint for
Regional Sustainability
Local
Government
Commission

www.lgc.org

It's Not Just About Water...