

An aerial photograph of a river delta, showing a complex network of waterways and land. The water is a dark blue-grey, and the land is a mix of green and brown. A prominent green horizontal bar is overlaid across the middle of the image, containing white text.

# **The New Business As Usual:**

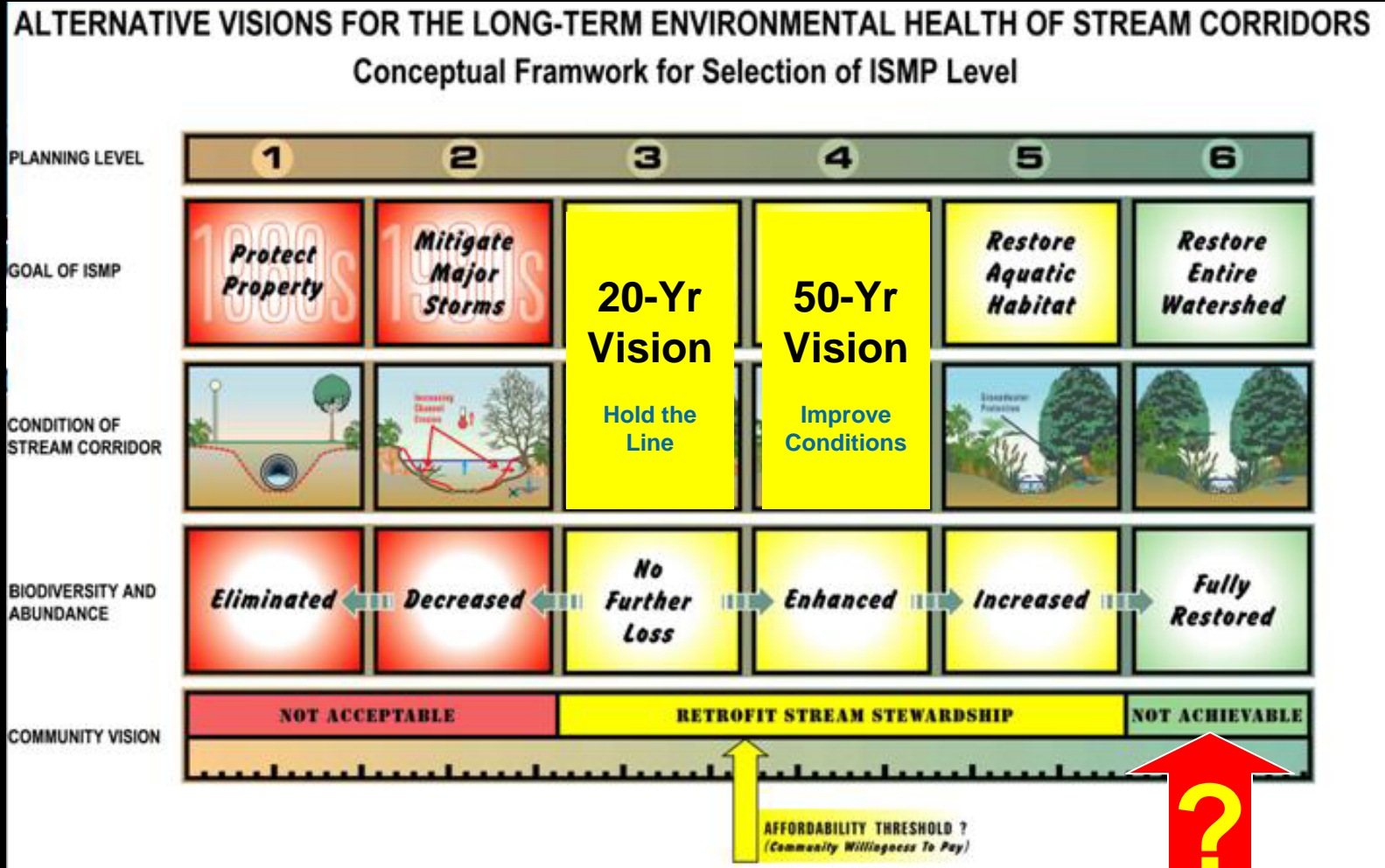
**Create Liveable Communities & Protect Stream Health**

***“Performance Targets and  
the Water Balance Model”***



**To reduce RISK,  
urban development must function hydrologically  
like NATURAL systems**

# What we believed to be 'unachievable' in 1998 may in fact now be within our grasp



Now achievable?

**For a performance target to be implemented and effective, it must:**

- Support a desired outcome
- Synthesize complexity
- Be quantifiable
- Be practical
- Be flexible
- Have a feedback loop
- Incorporate 'learn by doing'

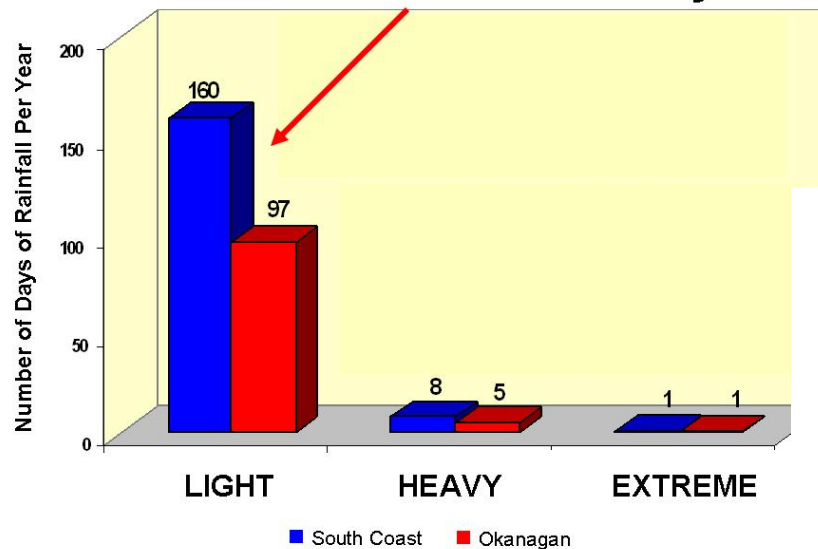
**Runoff percentage is the performance target  
because ....**

**.... local government exerts control over  
runoff volume through its land  
development and infrastructure policies,  
practices and actions**

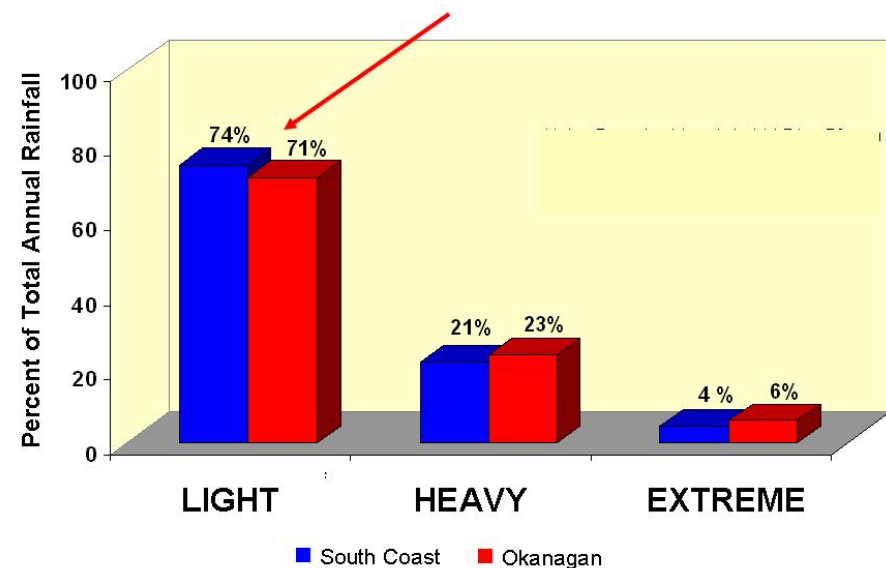


# In 2000, we went back to basics and developed the concept of a Rainfall Spectrum

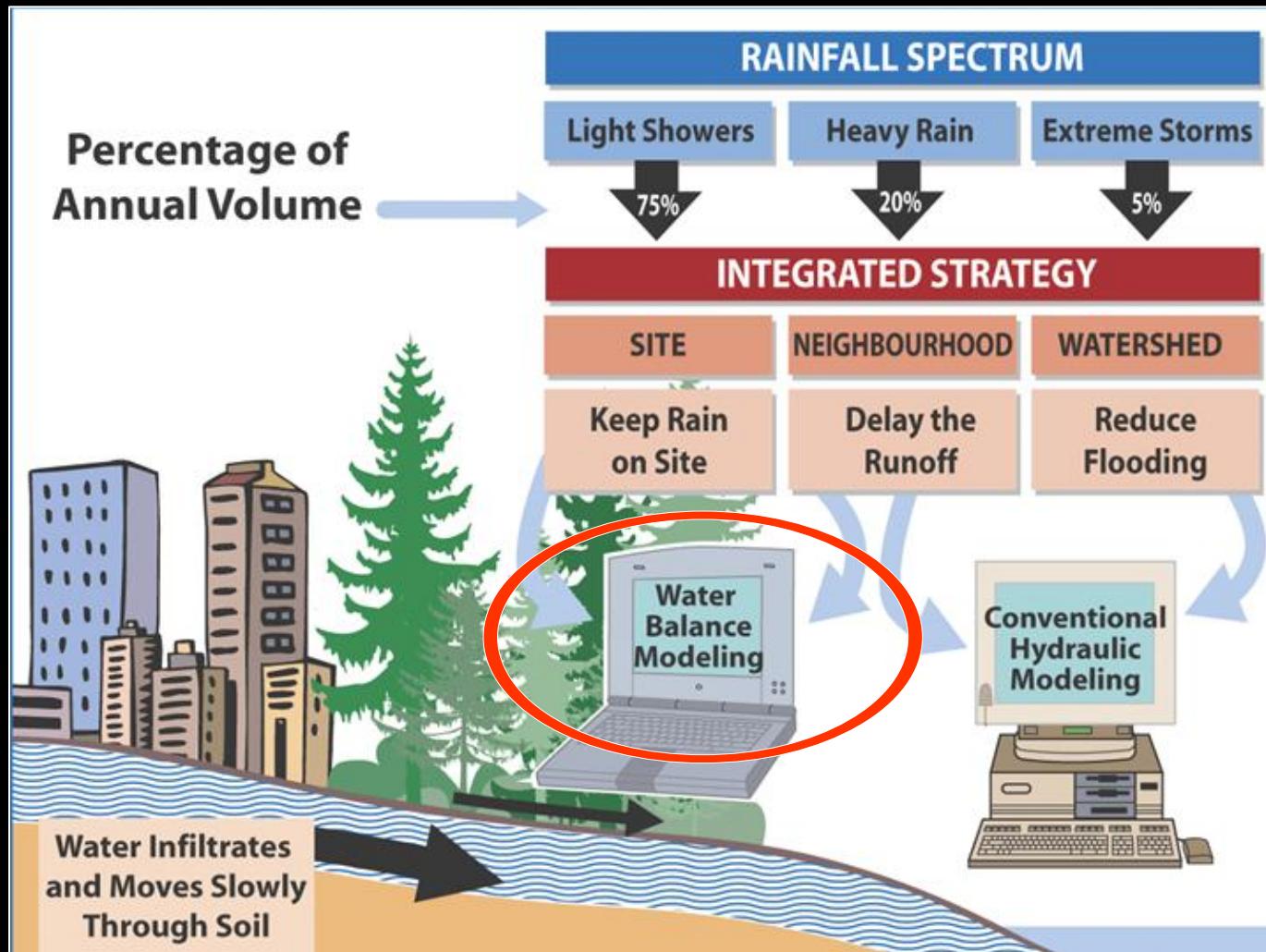
The 'Light Shower' Category Accounts for Most of the Rainfall Days



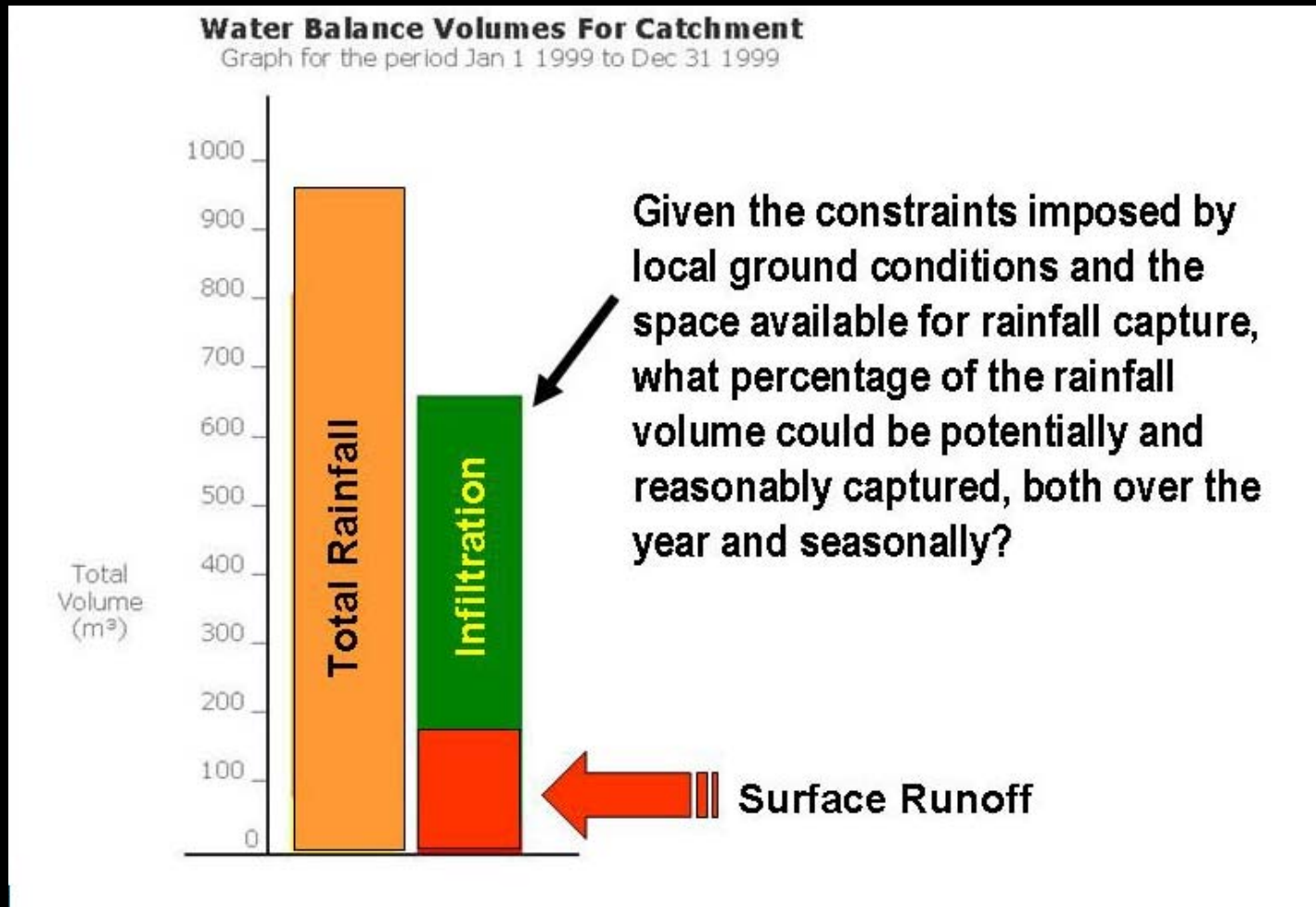
Light Showers Account for Most of the Annual Rainfall Volume



# The understanding of rainfall patterns resulted in the next decision tool: the Integrated Strategy for Managing Rainfall Spectrum



# The Rainfall Spectrum then led into the concept of Performance Targets for rainwater runoff capture





# Looking back to look ahead

- In 2002, we defined the Target Condition for a 'healthy watershed' as:
  - 10% impervious area = 90% rainfall capture
- We introduced the MAR (Mean Annual Rainfall) to define rainfall capture at the site scale:
  - for example, capture the first 20mm on the east coast of VI
- We recognized that affordability and achievability would determine what is realistic at a watershed scale