



# Corporate Water Gauge®

A Context-Based Solution for Measuring the  
Sustainability of Organizational Water Use

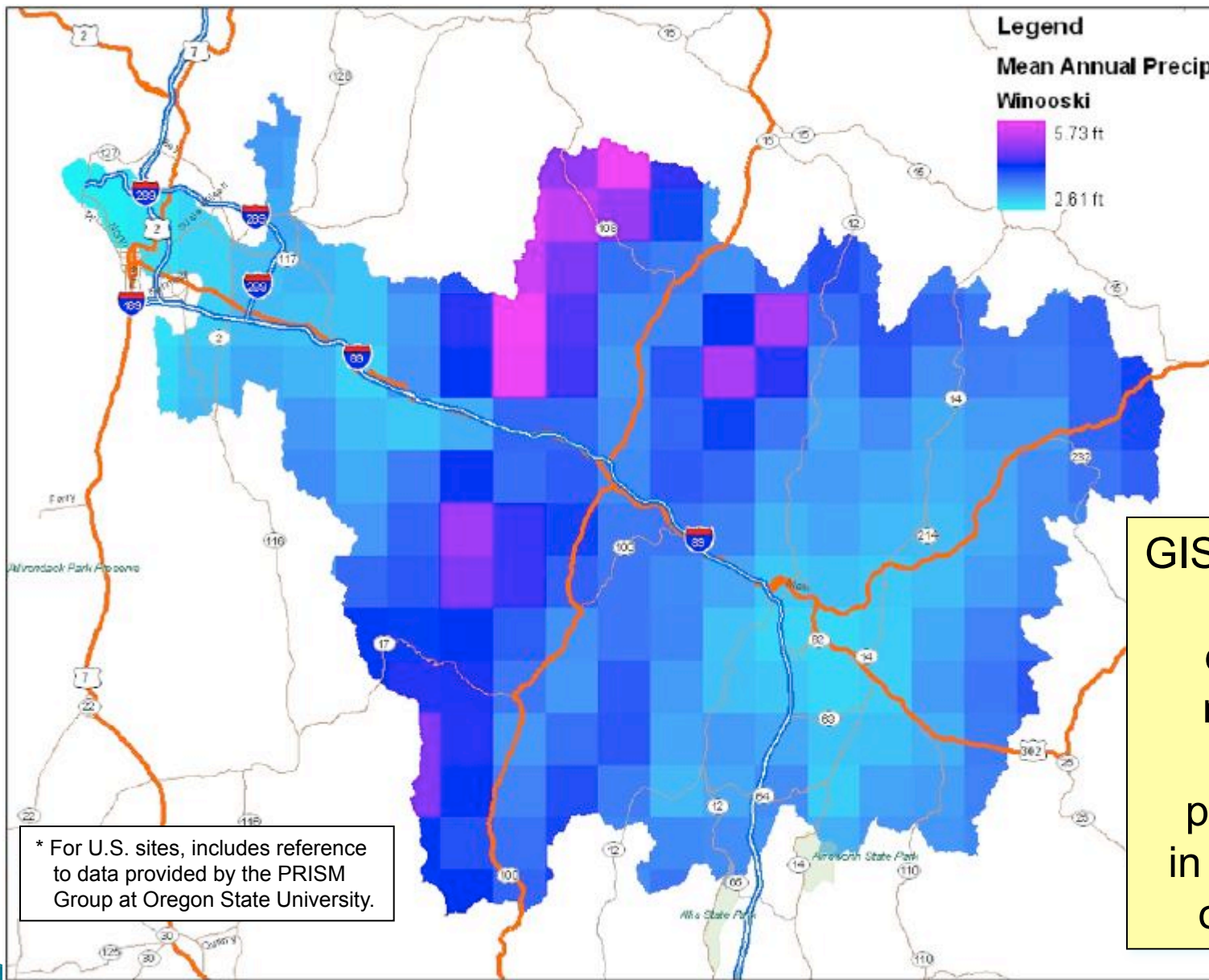
Center for Sustainable Organizations  
Thetford Center, VT  
May, 2012

# Introduction

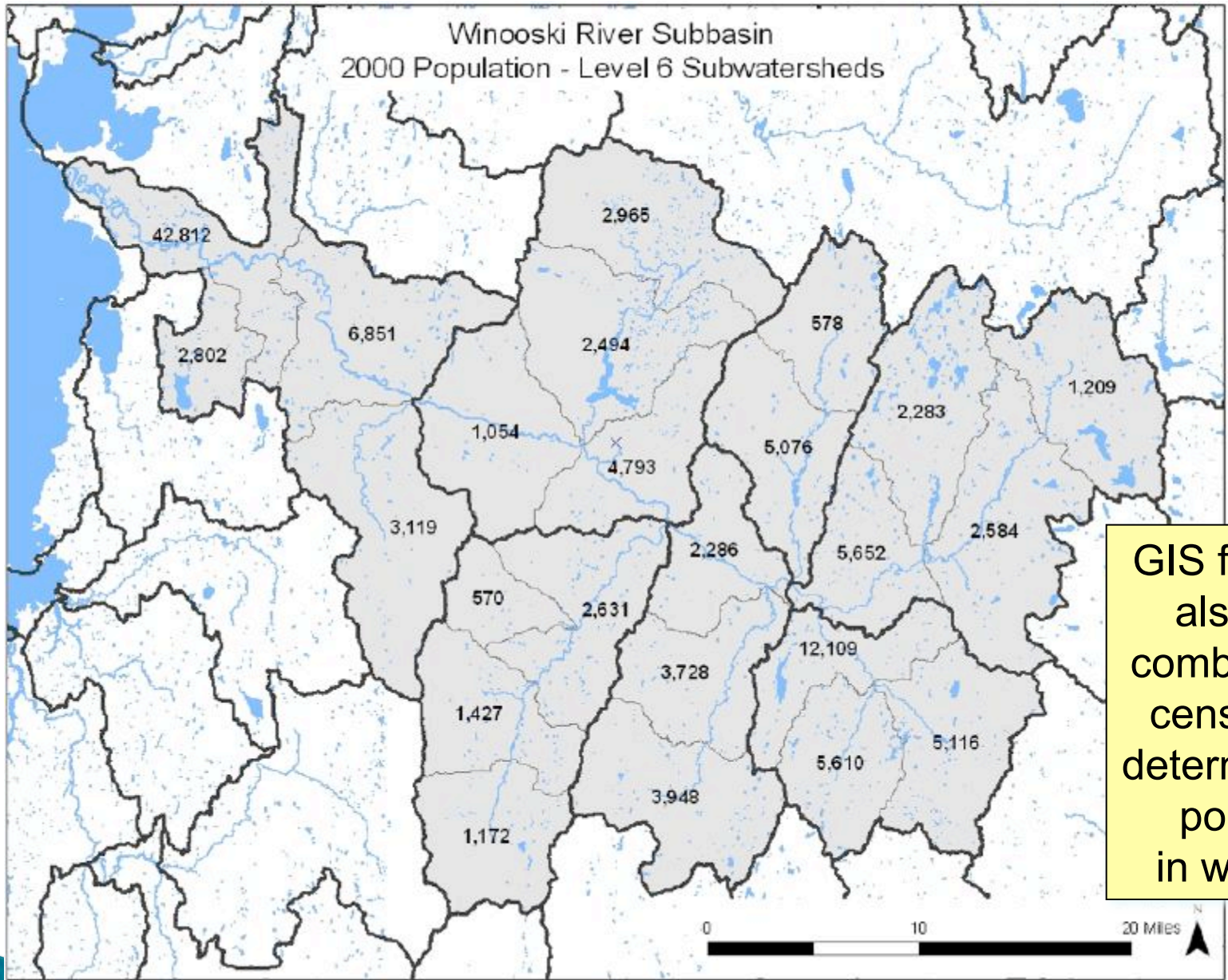
- ▶ A new metric for measuring the ecological sustainability of an organization's water use
- ▶ Based on the *context-based* approach to sustainability measurement and reporting developed by the *Center for Sustainable Organizations* ([www.sustainableorganizations.org](http://www.sustainableorganizations.org))
  - *Rate of consumption* measured against *rate of renewable supply* determines sustainability performance
- ▶ A watershed-centric approach
- ▶ Technology-enabled
  - GIS for spatial analysis
  - Spreadsheet-based metric

# A 4-Step Method

1. Identify watershed(s) in which facilities have impact (sources and sinks of water)
2. Determine net renewable water supplies in watershed(s) of interest, and allocate proportionate shares to facilities
3. Determine net water consumption by facilities in watershed(s) of interest
4. Populate *Corporate Water Gauge*<sup>®</sup> quotient with data developed in steps 1 through 3 above, and compute sustainability scores, accordingly



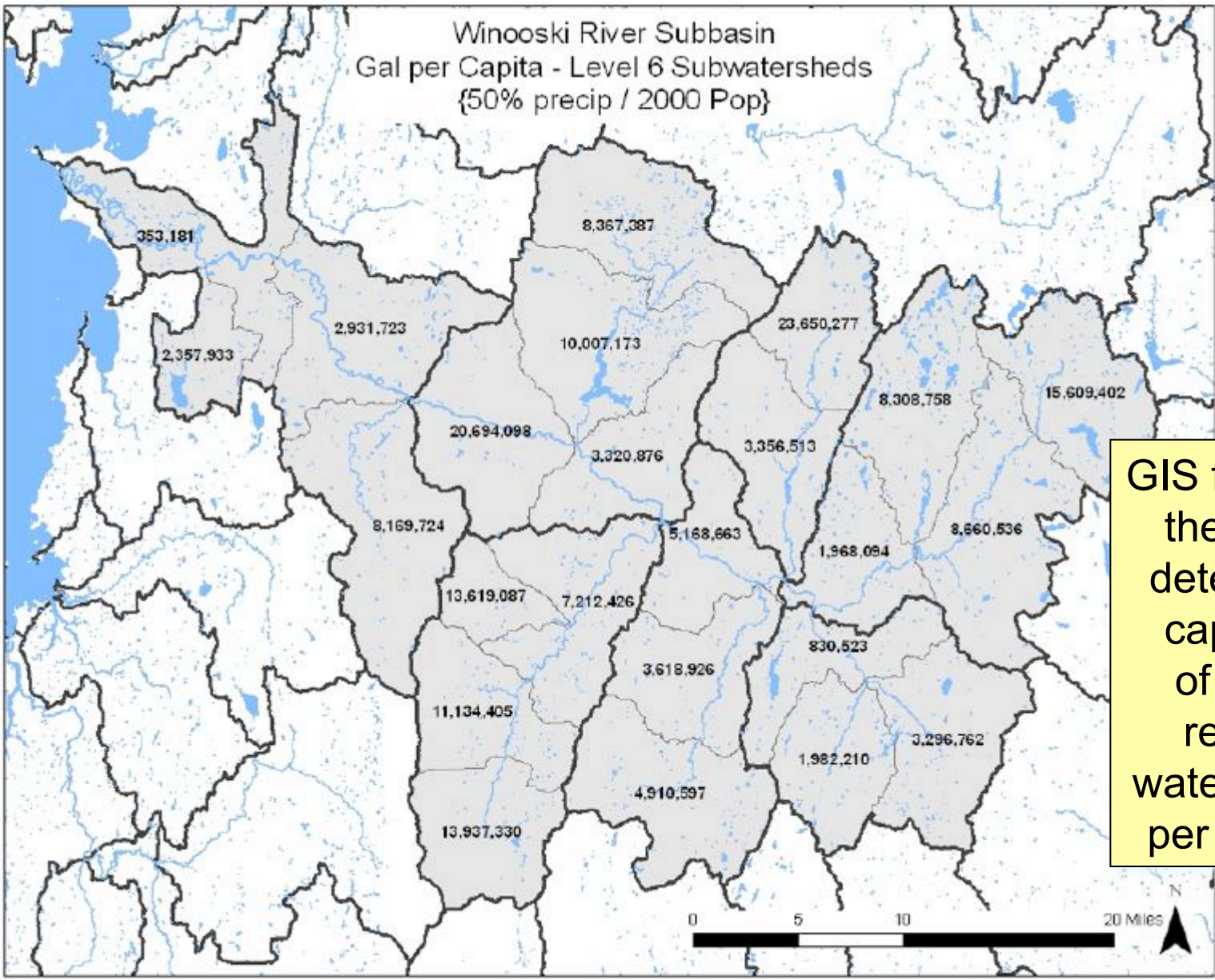
GIS functionality used to determine renewable levels of precipitation in watersheds of interest\*



GIS functionality also used in combination with census data to determine human populations in watersheds



Winooski River Subbasin  
Gal per Capita - Level 6 Subwatersheds  
{50% precip / 2000 Pop}



GIS functionality then used to determine per capita levels of available renewable water resources per watershed



# Key Principles

- ▶ Sustainability of water use should be grounded in knowledge of site-specific precipitation levels
- ▶ Renewable supplies should be determined by reference to associated watershed boundaries
- ▶ Stocks of surface and groundwater resources should be preserved and not drawn down
- ▶ Human use of water resources should be balanced with ecological needs
- ▶ Water use should be measured against available renewable supplies that are allocated to individual facilities using per capita and/or economic criteria

# Advantages Over Other Tools

- ▶ Measures sustainability performance with local context taken fully into account
  - Assesses water use in terms of local renewable water resource levels, which are allocated to a facility in per capita terms and/or as a function of economic factors
  - Makes it possible to score sustainability performance at a local, regional, national, global, and enterprise-wide level with local contexts taken fully into account
- ▶ Makes use of advanced GIS tools in combination with site-specific datasets
- ▶ Results in measures that are more fully compliant with GRI (i.e., includes ‘sustainability context’ )

# What Form Does It Take?

- ▶ An integrated offering:
  - An advanced water sustainability metric embodied in a spreadsheet
  - A GIS technique for measuring water supply and use in watersheds (using third-party datasets)
  - A consulting service for teaching and/or using the Corporate Water Gauge<sup>®</sup> (CWG)
- ▶ Output:
  - Spreadsheet files with computed sustainability scores
  - Graphical depictions of relevant watershed areas and data
  - Relevant GIS shapefiles w/site-specific data
  - Methodology/license for using the CWG

# How Can a Company Acquire It?

- ▶ Perpetual, non-exclusive licenses to obtain and use the Corporate Water Gauge™ are granted to clients who engage us to either:
  - Provide related training, or
  - Assist with at least one application at a site of their choosing
- ▶ Minimum fees apply
- ▶ When used independently of our assistance, clients must provide their own GIS and spreadsheet systems
  - ArcGIS and related datasets
  - Microsoft Excel

# Contact us for more info!

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[www.sustainableorganizations.org](http://www.sustainableorganizations.org)

