A 21st Century Assessment of the Yuba River Watershed

Summary of Key Findings by th

South Yuba River Citizens League (SYRCL

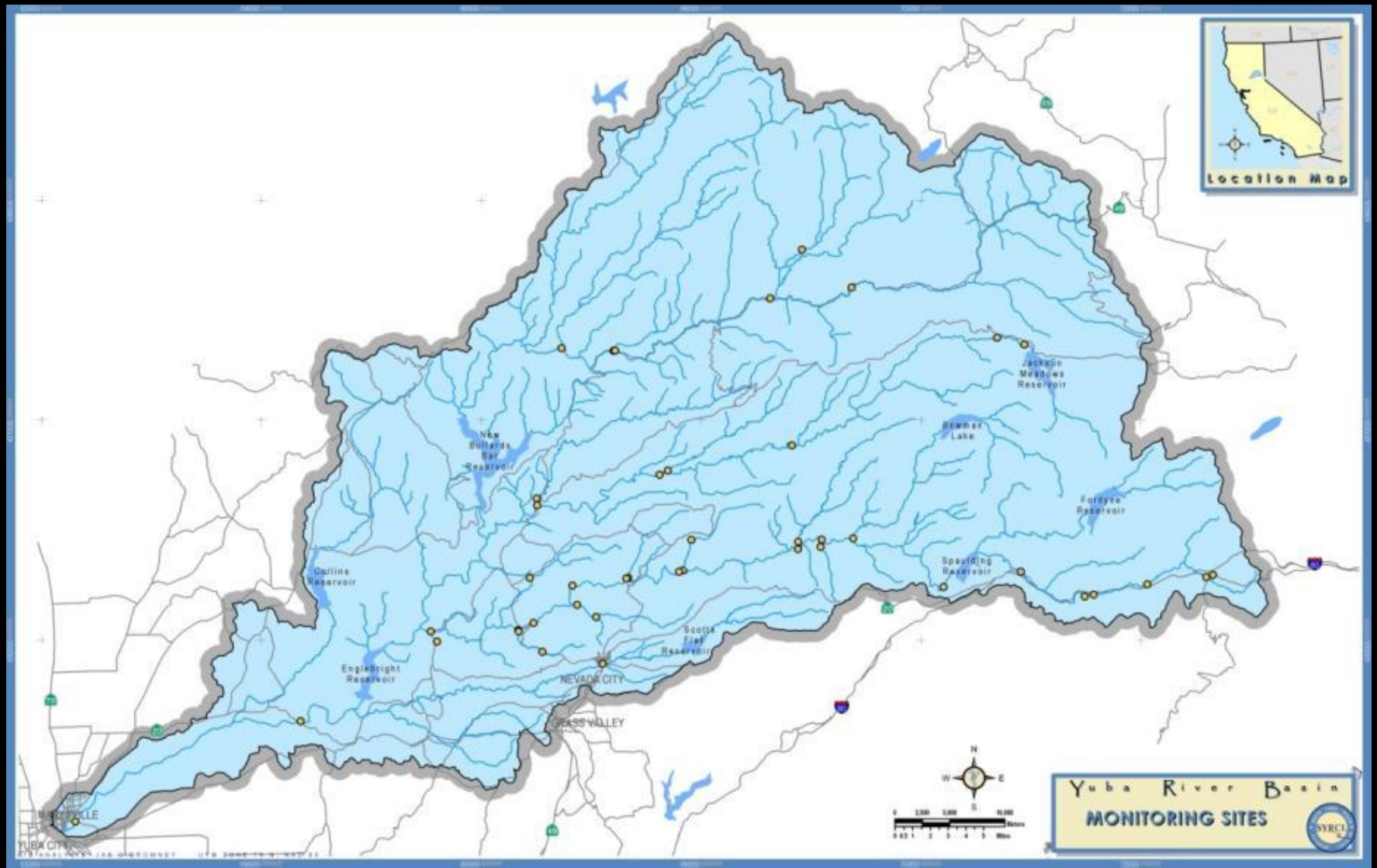
SYRCL's Mission: To protect and restore the Yuba River and the "Greater" Yuba Watershed

The Yuba Watershed, defined

"A Watershed is simply a network of communities—human and ecological—drawn together by the commonality of a shared waterway."

–Jason Rainey, SYRCL executive director

The Yuba River Basin: SYRCL River Monitoring Sites



SYRCL's Watershed Assessment includes two complimentary products:

1. The Yuba River Watershed Information System, known by its web address: YubaShed.org.
2. Printed publication: A 21st Century Assessment of the Yuba River Watershed

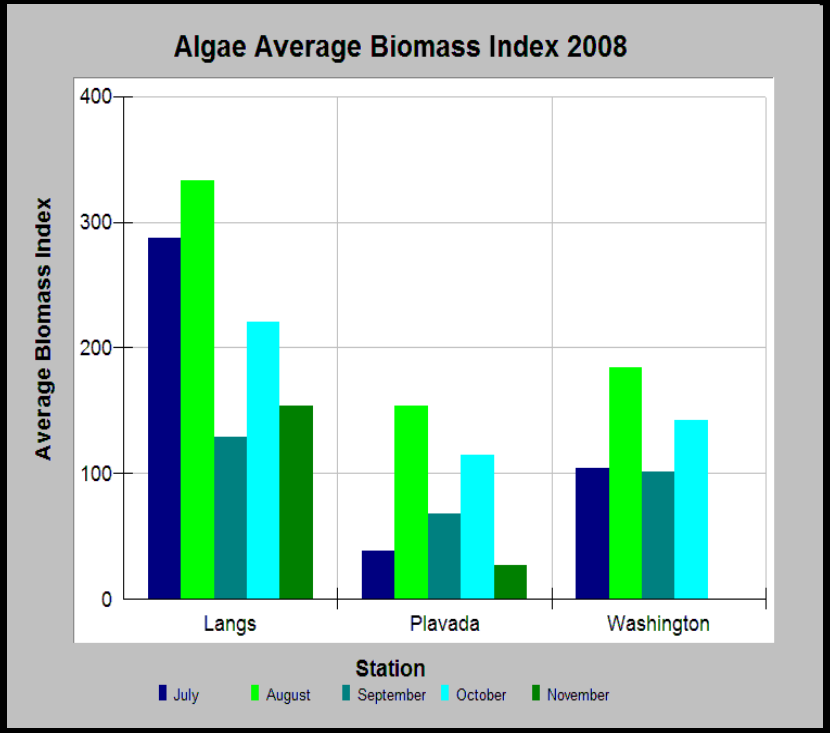
The products were completed in June 2010, with funding support by the California Department of Water Resources.

Yuba Shed

- YubaShed.org contains data tables and charts summarizing SYRCL's River Monitoring data, searchable by river reach and by category (e.g. temperature, aquatic insects, water quality lab results, algae, etc).

- YubaShed includes Maps, photos and other resources for citizen analysis and interpretation of monitoring results.

- YubaShed v.2 will include greater interactivity functions so support voluntary community-based watershed assessment and planning, at the scale of neighborhood tributaries.



Yuba Shed

- YubaShed.org also contains the presentation by SYRCL RiverScience Director Gary Reedy in March 2010 at the “State of the Yuba” Forum.

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Ways of Seeing the River

- Includes analysis of conventional approaches to Natural Resource Management
- A Maidu perspective on “traditional ecological knowledge” and stewardship within the Yuba Basin
- The Yuba River in the context of statewide water supply, irrigated agriculture and hydropower production.

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Impacts on Watershed Health

- Biodiversity Decline
- Mining Impacts
  - Mercury Contamination
  - Acid Mine Drainage
  - Arsenic, Lead and Asbestos Contamination
- Water Control
  - Build barriers (dams)
  - Water diversions

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Impacts on Watershed Health (cont.)

- Land Use Practices
  - Timber Extraction
  - Grazing
  - Fire Suppression
  - Invasive Species
  - Road Densities
  - Cumulative Effects

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Restoration Priorities

1. Remediation of Legacy Mining Effects
   - Minimizing physical and chemical hazards on abandoned mine lands (AMLs)
   - Removal of mercury from sediment trapped behind in-stream barriers
   - Rehabilitation of the radically altered Lower Yuba River

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Restoration Priorities

2. Reforming Water Management
   - Improve Timing and amount of in-stream flows in regulated rivers and streams
   - Remove barriers where appropriate and most beneficial

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Restoration Priorities

3. Restoring Ecosystem *Function*
   - Forest Management to support soil rehabilitation
   - Meadows Restoration to support water "storage" and water quality
   - Floodplain Restoration, supporting groundwater recharge and salmon habitat in the Lower Yuba River

Lower Yuba, with artists concept of floodplain restoration

21st Century Assessment of the Yuba River Watershed
Toward A Regenerative Future

The Englebright Dam Question:
The Yuba River as a Solution to
California's Salmon Crisis?

- The Yuba River historically provided strong salmon runs (~15% of 1-2 million annual spawners of the Sacramento River system), to some of the highest elevations in the Sierra (e.g. Salmon Creek above Bassetts on the North Yuba).
- Precipitous decline in Sacramento River salmon runs in recent years (800,000 in 2002; down to 39,500 in 2009).
- Scientific consensus that threatened salmon species will go extinct without passage above the foothill "rim dams" along the Sierra.
- Salmon passage at Englebright would provide the greatest increase in new salmon habitat with the least cost to the public than any barrier in the San Francisco Bay Watershed.

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Toward A Regenerative Future

The Englebright Dam Question:

The Yuba River as a Solution to California's Salmon Crisis?

"Over the next 5 year, action or in-action on the Yuba River…will determine the course of California's ecological future."

21st Century Assessment of the Yuba River Watershed
Toward A Regenerative Future

Organizing Watershed Democracy

1. Thinking (and planning) Like a Watershed
   - Integrated, comprehensive ecosystem management must take place at the localized, watershed scale.
2. Re-purposing Watershed Councils
   - Advancing from informal information sharing to coordinated and collaborative planning and implementation of priority restoration actions.
3. Establishing and Organizing "Watershed Guilds"
   - Tributary-scale association of landowners, public agencies and interested parties voluntarily sharing resources, local ecological knowledge, skills, and definitions of "watershed health" that bring immediacy and shared purpose to land and water stewardship.
   - Examples in the Yuba include the 'Inimim Forest, the Round Mountain Firesafe Plan and the emergent Owl Creek Watershed Guild.

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Toward A Regenerative Future

Culture, Indigenous Identity and Becoming Native to the Greater Yuba Watershed.

> "We are unlikely to achieve anything close to sustainability in any area unless we work for the broader goal of becoming native in the modern world, and that means becoming native to our places in a coherent community that is in turn embedded in the ecological realities of its surrounding landscape."
>
> -Wes Jackson, Kansas Farmer

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Toward A Regenerative Future

Coming Full Circle through the Yuba River Watershed

A 2050 Vision for the Yuba River Watershed: 200 Years After the Gold Rush

Provocative prescriptions for catalyzing rural development and ecological resiliency in changing times based on a Restoration Economy, Watershed Governance, and Wild Salmon Regeneration.

For more information and to order the Yuba Watershed Assessment

www.YubaRiver.org

and

www.YubaShed.org