## WGI: SRA THINKING

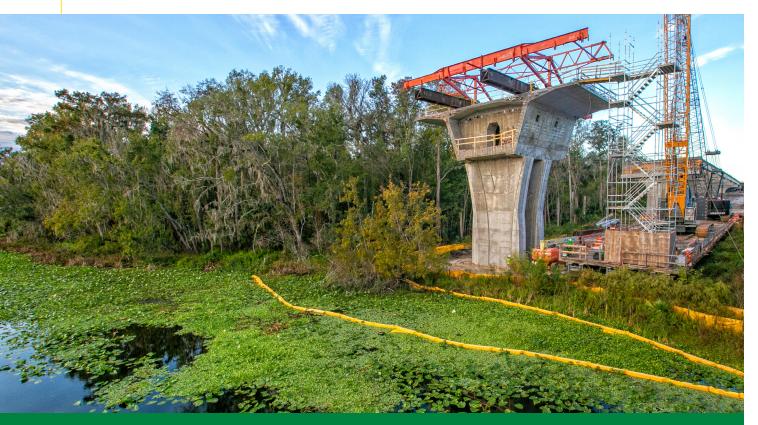
Achieving Better Futures Through a Comprehensive Lens of Sustainability, Resilience, and Adaptation (SRA)





WGI is in the business of helping our clients and their stakeholders effectively achieve objectives - using 50 years of experience deploying innovation and technology. We provide solutions that are technically feasible, economically viable, environmentally sound, and socio-politically acceptable. A project's true test is achieving the right balance for both our clients and the affected communities often a moving target. Current and future opportunities and challenges require we ask questions that lead to solutions optimizing success through Sustainability, Resilience, and Adaptation.

While often addressed separately, WGI's SRA Thinking paradigm synthesizes these core ideas to achieve improved, multi-disciplinary outcomes. We help clients ask questions designed to look forward, not the rear-view mirror. Through these questions and answers, we prepare, accommodate, and understand the rate of disruptive change. The WGI SRA lens tightens the focus on perspectives necessary to develop realistic solutions with a chance of also achieving client goals and addressing challenges.



Wekiva Parkway Segment 6 Design-Build | Lake and Seminole Counties, FL





**Sustainability** is the objective — optimize conditions for human development now and don't foreclose on better options for future generations. Focusing on progress made at the intersection of economics, ecosystems, and societies, we believe there can be no sustainability without all three elements, including environmental justice: fair treatment and meaningful involvement of all.

**Resiliency** recognizes that nature inevitably prevails. Preparation and management are paramount as trends show substantial increases in flooding, wind-related storms, fire, and heat. Many prior decisions won't withstand these weather-driven events, requiring us to examine the risks to health and safety, vulnerable assets, and the economy.

**Emergency management strategies require forward-thinking** approaches over measuring against past events. It ensures better react-and-recover preparation when replacement cost/ benefits and their risks are both too high. Where past decisions created inequitable risks for certain communities, future strategies must mitigate them. Effective resilience strategies bring new disciplines into the conversation, including political scientists, psychologists, and sociologists — helping overcome denial about the past and achieving future success.





Delray Beach City Marina Seawall and Boat Dock | Delray Beach, FL

**Adaptation** recognizes that change — not stasis — is the status quo. We account for disruptions of all types as we plan, design, and manage the future. The U.S. is poised for unprecedented investments in water, transportation, and social infrastructure. As we evaluate alternatives, we take an eyes-wide-open approach to forces that will likely affect the health, safety, and economic wellbeing of communities today - and for generations to come.

SRA calls for multi-disciplinary tactics so improvements in one system create improvements in nested or adjacent systems. With limited resources — natural, financial, and intellectual capital — everyone must maximize the co-benefits created alongside direct benefits. Some ideas can — and in some instances should — be addressed separately. We believe they are more powerful in combination, achieving the broader spectrum of risk, greater value creation, and more rapid social betterment.

Of all Earth's natural assets, we see the one most-improved by use is human intelligence. SRA is our mission to apply collective intelligence to create better conversations and actions — internal and external — that produce better outcomes for all.



## WE LIVE IN A WORLD OF ACCELERATING CHANGE

Change is the dominant force governing our present condition, and future risks and opportunities. Yet even change is evolving, accelerating its pace and magnifying its impacts. Many issues are familiar — storms, droughts, floods, heat, disease, and other disruptive sources. It is the amplification and frequency of disruptions and their consequences, especially natural phenomena, that conventional approaches cannot effectively address.

Every change has consequences intended and unintended, positive and negative, minor and major. Many require answers challenging past impulses and addressing "situational amnesia" shaping individual, community, and regional identity after a disruption. Environmental, social, and technological change require experienced people

re-evaluating both questions and answers — how problems are defined and solutions recommended - as conventional wisdom and practice are cast into doubt.

**SRA Thinking drives considerations** resulting in the most robust riskmanagement frameworks for planning, design, and development of the built environment, and the valuable services it provides to communities and our economy. It is a change-management concept, increasing opportunity and reducing risk at the intersection of what is knowable, and what is uncertain but highly probable. WGI's vision is that SRA Thinking becomes a fundamental part of conversations with our clients and their stakeholders — so the future is planned and designed to create more value for everyone.



Hardened SWMD S-140 Pump Station | Broward County, FL







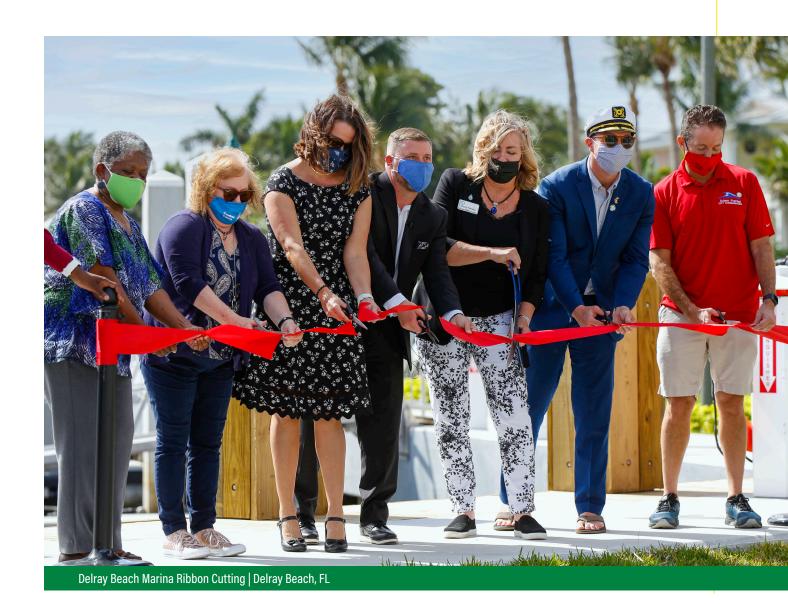
SRA spotlights WGI's commitment to multidisciplinary thinking. We blend our associates' perspectives and talents, unlocking their applied skills and imaginations to help communities succeed while addressing natural resource limitations and technological disruptions.

SRA helps clients and communities challenge our associates with better strategy and action questions; questions that open new paths to costeffective application of multi-disciplinary thinking. We believe achieving a better future is inevitable in this way, versus a myopic single-discipline approach.

Change-drivers see a future of abundant opportunities for innovation and technological advancements responding to environmental, economic, and social disruptions. It's happening as these disruptions play out at the nexus of money, science, technology, natural resources (natural capital), and human desire. At WGI, innovation and technology are drivers of our success, and they are fundamental to our strategic growth.



WGI is a family driven by a shared Vision and Core Values. We apply science, engineering, strategic thinking, planning, and technology within an SRA context to help our clients and their stakeholders - communities of place, communities of interest, and future communities. Richard Feynman, Nobel Laureate Physicist, said, "...the essence of science is doubt. Without doubt, there is reduced obligation and willingness to learn how we can be better." SRA harnesses the power of doubt, intensifying applied learning, and improving the formulation of solutions — always striving to better help solve the problems that matter, in ways that maximize value.





It is often very difficult to identify solutions at the macro system level. We develop a more specific approach to ensure the right questions are asked. For example:

- "What needs to be accomplished in established communities when previously rare weather becomes normal, fundamentally changing life/safety and property risk factors?"
- "What does global climate change mean for future local heat islands that drive energy demands for cooling and associated public-health risks for the vulnerable?"
- "What does it mean for surface water management agencies who now have to consider increasing rain microbursts that might impact their flood-control systems?"
- "Should those responsible for the design and operation of systems to manage stormwater run-off, energy demand, and public health have a role in parks and arboreal interests — rethinking the utility/ application of urban forests — far beyond the ecological and aesthetic?"
- "Can urban forests be thought of collectively as aesthetic elements, ecosystems and habitat, public-heath tools, and part of an engineered surface water management system? If so, who or what is most important?"





## WGI'S SRA APPROACH IS AN ACTUALIZATION **OF OUR CORE VALUES**

WGI lives its CORE VALUES every day. Our Passion for People, the challenge for each to Be the Change You Seek, and as individuals and collectively, we Commit to Greatness.

Sustaining and improving our society is one way we express our passion for people. Being the change we seek is becoming more resilient in the face of changing circumstances. Committing to greatness is required as we meet, with purpose and resolve, the challenges and opportunities presented today and in the future.

## LET'S TALK.

For more information about this study or to have a conversation with one of our experts, please contact Michael Davis or Gary Lawrence today:



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