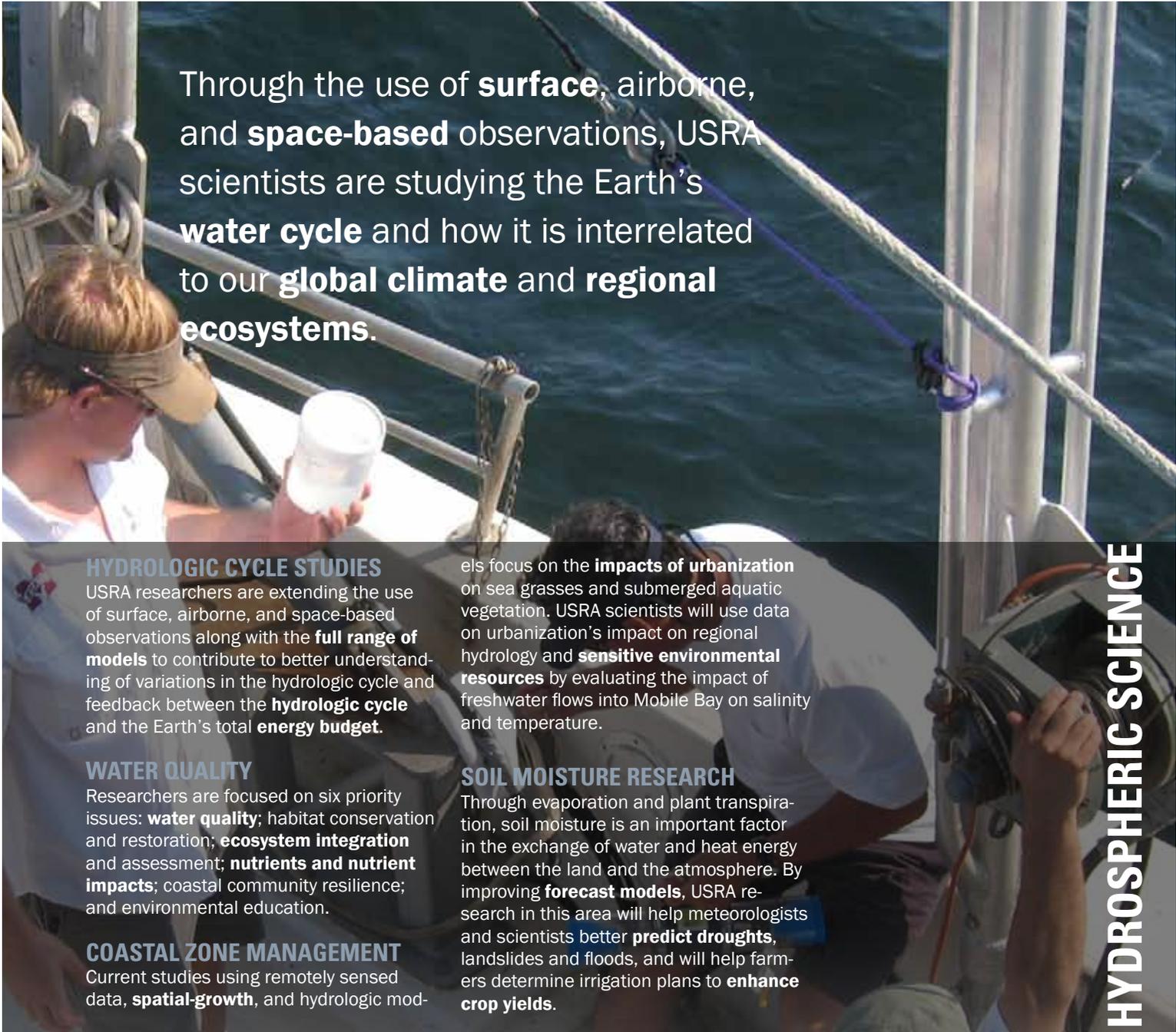




Fathom.

Discovering the vision since 1969.



Through the use of **surface**, airborne, and **space-based** observations, USRA scientists are studying the Earth's **water cycle** and how it is interrelated to our **global climate** and **regional ecosystems**.

HYDROLOGIC CYCLE STUDIES

USRA researchers are extending the use of surface, airborne, and space-based observations along with the **full range of models** to contribute to better understanding of variations in the hydrologic cycle and feedback between the **hydrologic cycle** and the Earth's total **energy budget**.

WATER QUALITY

Researchers are focused on six priority issues: **water quality**; habitat conservation and restoration; **ecosystem integration** and assessment; **nutrients and nutrient impacts**; coastal community resilience; and environmental education.

COASTAL ZONE MANAGEMENT

Current studies using remotely sensed data, **spatial-growth**, and hydrologic mod-

els focus on the **impacts of urbanization** on sea grasses and submerged aquatic vegetation. USRA scientists will use data on urbanization's impact on regional hydrology and **sensitive environmental resources** by evaluating the impact of freshwater flows into Mobile Bay on salinity and temperature.

SOIL MOISTURE RESEARCH

Through evaporation and plant transpiration, soil moisture is an important factor in the exchange of water and heat energy between the land and the atmosphere. By improving **forecast models**, USRA research in this area will help meteorologists and scientists better **predict droughts**, landslides and floods, and will help farmers determine irrigation plans to **enhance crop yields**.

HYDROSPHERIC SCIENCE

WHO ARE WE?

USRA is an independent, nonprofit research corporation where the combined efforts of in-house talent and university-based expertise merge to advance space science and technology. USRA works across disciplines including **biomedicine**, **astrophysics**, and **engineering** and integrates those competencies into applications ranging from **fundamental research** to **facility management** and **operations**. USRA engages the creativity and authoritative expertise of the research community to develop and deliver sophisticated, **forward-looking solutions** to Federal agencies and other customers - on schedule and within budget.

