

Understanding local attitudes about water

A balancing act

People use water every day-for survival, for work, and for recreation. Because we use it so much, we play an important role in managing water resources without even knowing it. Most of the drinking water in southwest Florida comes from underground aquifers, which are refilled by rain. Holding water on the land to allow it to soak into aquifers is important, as is the need to keep excessive water away from communities to prevent flooding. Estuaries also need the right amount of fresh water from land to stay healthy. The biggest challenge to water managers is to maintain estuarine health while balancing the need to prevent flooding and recharge aquifers.

Understanding water use in southwest Florida

To understand how water is used and appreciated in southwest Florida, the Rookery Bay National Estuarine Research Reserve partnered with Nova Southeastern University to research water attitudes. beliefs, and behaviors and interview local stakeholders. The primary goals were to understand attitudes, beliefs, and behaviors; explore community members' interests and experiences in engaging in water-related decision-making in personal and professional contexts; and to describe community members' experiences when receiving and responding to information about water-related issues. Results from this study can help water managers proactively resolve problems and implement collaborations with local experts based on what is important to the community.

Top left: Commercial and recreational fishing are two large industries in the Rookery Bay estuary. Top right and bottom: Lawn maintenance and recreational activities use water that is diverted from above-ground retention ponds or drawn from underground aquifers. Photos courtesy Rookery Bay Reserve.



Research findings

Participants consider economic factors when making decisions about water use.

Water is a primary draw for the community.

There are perceived tensions between stakeholders.

Participants percieve unequal enforcement of water-related regulations.

Lack of understanding of water management practices contributes to conflict.

Water-related decisions seem to be based on belief systems.

Participants link scientific data to water-related decision-making.

Participants would like more inclusive water management and believe better communication would foster collaboration related to water management.

Conservation-related professional behavior seems to positively impact personal conservation-related behavior.

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Management recommendations

Based on the best-available science, the following recommendations will support the restoration and continued health of the Rookery Bay watershed and estuary:

Economic information about various water uses and issues can help the community make more informed decisions about water use.

Water issues are important to the community. Active water management can support and maintain its appeal.

Tensions and differences can create conflict and ill will among community members. A proactive approach through stakeholder collaborations and inclusion in water management decisions can resolve tensions.

Inequalities may also create tensions. The perception of fairness better supports collaboration and positive experiences.

Water resource managers need to engage in education programs and knowledge sharing.

Understanding community values and beliefs can help water managers make better decisions.

Scientific data is important to collect and disseminate to the community.

Water managers should look for ways to increase communication and encourage participation in water management decision-making.

Professionals with water conservation expertise may be influential in educating other community members.









Top to bottom: Involvement of stakeholders in water management decisions; field monitoring of freshwater flow; educating community members about altered water flows.

Restoring the Rookery Bay Estuary Project

The Restoring the Rookery Bay Estuary Project focused on collaborative watershed management through hydrologic, ecologic, and social science research, education, and partnerships. Guided by a diverse stakeholder group, the effort was coordinated by the Rookery Bay National Estuarine Research Reserve in Naples, Florida, and resulted in a wide range of management recommendations.

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