

SCCWRP Transitions Science into Application

How is SCCWRP uniquely positioned to transition technology?

SCCWRP is formed by a unique partnership among fourteen agencies from the water regulation, stormwater management, and wastewater treatment communities. Thus, SCCWRP's connection to the policy sector is much more direct and streamlined than other research entities, which simply communicate findings to fellow scientists.



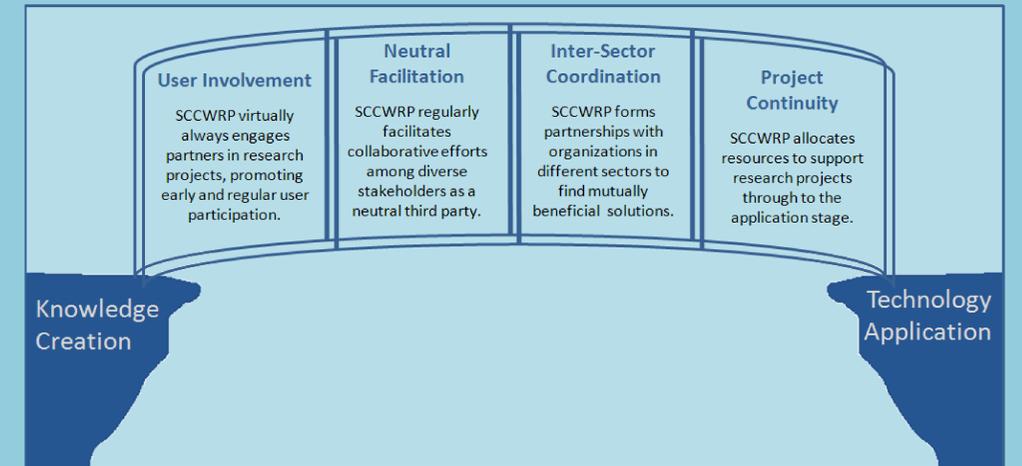
The SCCWRP Commission is a regular and trusted conduit for scientific findings. This group serves as a neutral forum for building consensus on the implications and applications of new research and technology among California's environmental management community.

Why is transitioning technology important?

- Research can have many societal benefits, such as new pharmaceuticals or better pollution control techniques.
- Failure to apply new findings in a timely manner has many opportunity costs, like money, time, ecological integrity, public health, and even life.
- Funders want to see that research dollars are spent where scientific findings will achieve a usable endpoint.

Meeting the challenge

The divide between the creation of new knowledge and the widespread use of that knowledge is universally challenging, having been termed the "valley of death". While a great deal of funding exists for research, very little attention goes toward supporting transition to usable research applications. There are several factors that help SCCWRP to bridge this divide.



Steps in Technology Development and Transition

Problem Definition

Identify and clarify the need

Evaluate Alternate Solutions

Conceptualize potential pathways to a solution

Knowledge Capture

Conduct research to fill information gaps

Knowledge Synthesis

Formulate and build consensus around a solution

Technology Assessment & Demonstration

Begin spreading awareness of the new technology by including select "early adopters" in validation and intercalibration exercises

Market Assessment & Demonstration

Make arrangements with suppliers and begin promoting the technology to a wider audience

Adoption Strategy Development

Determine how to best integrate the new technology into existing practices

Transfer & Adoption

Proactively work to transmit knowledge and capabilities to end users

Ongoing Evaluation & Refinement

Maintain and update the technology to correct deficiencies, retain relevance, and meet new needs

Contaminants of Emerging Concern

SCCWRP co-sponsored a workshop in April 2009 to clarify the state of knowledge on CECs and begin strategizing solutions for CEC management. Within the next year, SCCWRP formed and undertook facilitation of two expert panels to provide guidance for State regulators on how to begin addressing CECs in California waters.



SQO Assessment Tools

The State Water Resources Control Board adopted an approved set of sediment quality objectives (SQOs) in September 2008, based on public input and extensive technical guidance from SCCWRP.



Algae Bioassessment

Beyond researching new algal bioassessment tools, SCCWRP has also worked closely with the State to develop a long-term vision for use of algae in stream bioassessment, and prepared a plan to help them incorporate the new protocols into California's Surface Water Ambient Monitoring Program (SWAMP).



Rapid Methods Task Force



To speed the implementation of rapid microbiological methods for beach monitoring, the SCCWRP Commission formed a Task Force to evaluate current knowledge, conduct additional studies, and determine a strategy for rolling out a rapid method in southern California as a pilot for statewide changes.

Beach Sand Monitoring Method

SCCWRP worked with a variety of stakeholders from across North America to develop and validate a scientifically-defensible method for measuring bacteria in beach sand. SCCWRP developed a training program to transfer the knowledge to other laboratories, including intercalibration workshops and an online training video.

